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U. S. DEPARTMENT OF COMMERCE
JOHN T. CONNOR, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

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NATIONAL SUMMARY

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JANUARY 1966
Volume 17 No. 1

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 1 **JANUARY 1966**

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Cold month, except mild in Pacific Northwest and Maine.
2. Severe blizzard at end of month in East.
3. Heavy precipitation southeast coastal areas.

TEMPERATURE.--Temperatures for January 1966 averaged below normal everywhere in the 48 states, except above normal in northern sections west of the Continental Divide, in Maine, and the southern tip of Florida. The coldest section, relative to normal, was the northern Great Plains where Arctic air dominated the weather virtually the entire month and temperatures averaged 9° to 12° below normal. This was the sixth consecutive cold January in the Southeast and the third consecutive January with above normal temperatures in the Pacific Northwest. For the week ending January 23, temperatures averaged below normal in nearly all areas, except New York and New England. In much of the midcontinent area and parts of the Southeast, this January was among the 10 coldest of record. It was the fourth coldest on record at Minneapolis, Minn., and Amarillo, Tex., third coldest at Macon, Ga., the coldest since 1948 in the lower Appalachian region, and since 1950 in the extreme northern Great Plains. Fuel consumption, owing to the cold weather, was 25 to 40 percent above normal for the month in midcontinent areas.

The second half of the month was extremely cold in the midcontinent area and Southeast. Temperatures for the last 2 weeks of the month in this region averaged from 12° to 20° or more below normal. Subzero minima reached all the Southern States, except Louisiana and Florida, and only the southern tips of Florida and Texas and parts of the California coast escaped freezing.

Lowest temperatures in most areas east of the Rockies occurred during a great cold wave the closing days of the month. The lowest temperature in the 48 states was -50° recorded at Baudette, Minn., on the 28th. On the 30th Russellville, Ala., reported -24°, the lowest temperature ever recorded in Alabama. The maximum temperature was -26° at International Falls, Minn., on the 28th and 2° at Knoxville, Tenn., on the 30th. At Corpus Christi, Tex., temperatures were below freezing for 11 to 12 hours during the night of the 29th-30th and 1/2 to 3/4 inch of ice was reported in the city. In Florida, lowest temperatures ranged from 11° at Pensacola to 47° at Key West; Miami had 35°.

PRECIPITATION.--Precipitation was above normal from southeast Texas through Florida and northward through the Atlantic Coastal States, except slightly below in New Jersey, southeastern New York, and much of New England. There were a few other areas in the Midwest and West with above normal amounts. In most of the area west of the Appalachians, however, amounts were below normal, and central Missouri, eastern Kansas, and a large part of the Great Basin had less than 25 percent of normal. Precipitation in the Northeast was sufficient to greatly help the drought situation; moisture was adequate from an agricultural basis, but more moisture was needed to replenish reservoirs and restore ground water to normal.

Frequent storms moved across the Gulf States and up the Atlantic coast. Several other storms crossed the northern tier of states. The main storms in the East occurred on the 5th and 6th; about midmonth, 23d and 24th, 26th, and 29th and 30th. Precipitation from these storms totaled over 4 inches from southeast Texas to Florida and up the coast to Delaware. Baton Rouge, La., reported the wettest January since 1925, and totals exceeding 12 inches were reported in the southeastern part of that State. On the West Coast monthly totals ranged from an inch in the south to over 12 inches in the north.

At the end of the month seasonal rainfall at San Diego, Calif., was the second greatest of record.

SNOW.--At the beginning of the year snow covered most interior sections of the Far West but only extreme northern areas east of the Rockies. Frequent, widespread snowstorms during the month added a few inches, to more than 2 feet, to the existing cover and greatly expanded the cover east of the Rockies. At the end of January, depths ranged up to 46 inches in Maine, 32 inches in Upper Michigan and northern Minnesota, and 172 inches in the northern Cascades.

Total snowfalls for the month set new records at several locations in the East. Among these were Worcester, Mass., 44 inches; Syracuse and Rochester, N. Y., 71 and 60.2 inches, respectively; Burlington, Vt., 41.3 inches; Lynchburg, Norfolk, and Roanoke, Va., 31.8, 14.2, and 41.2 inches, respectively. On the 26th occurred the heaviest continuous falls in North Carolina in 30 years, and depths reached a foot in some parts of the Piedmont, over 2 feet in the northern mountains, and 1 to 2 inches in the coastal plains.

SEVERE STORMS AND OTHER ADVERSE WEATHER CONDITIONS.--During a storm in the Northeast on the 8th, most of New England received 5 to 15 inches of snow with heaviest amounts in eastern Massachusetts; blizzard conditions prevailed in parts of eastern New England in the afternoon.

In western Washington during the first week, highway passes in the Cascades were blocked several times by snowslides, and mudslides caused property damage in the Puget Sound area.

During another storm in the Northeast on the 23d and 24th, 5 to 20 inches of snow fell over most of New England where a combination of high winds and wet snow caused widespread power failures. In New York State, snowfalls ranged from 8 to over 12 inches, except 1 to 3 inches on coast. High tides along the north Atlantic coast during this storm caused considerable damage.

The stormiest conditions east of the Rockies occurred during the closing days of the month. A combination of high winds, heavy snowfall, and low temperatures produced blizzard conditions as far south as Arkansas in the Midwest on the 28th and 29th and over the Northeast and Middle Atlantic Coastal States on the 29th, 30th, and 31st. Blizzard conditions, the worst since February 16, 1958, occurred from northern Virginia and the lower Appalachians northward. Eight to over 20 inches of snow covered the ground throughout the area. With huge drifts blocking highways, transportation almost came to a halt. In the Nation's Capitol, 16 inches of snow covered the ground after the storm; impassable side streets in the city prevented fuel deliveries, and blocked roads in surrounding areas caused considerable dumping of milk, and offices and business were closed on the 31st.

CONDENSED CLIMATOLOGICAL SUMMARY

JANUARY 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Brewton 3SSE	81	2	Russellville 2	-24	31+	Phenix City 2NNW	9.06	Bridgeport 2W	D 3.58
Alaska	Data Delayed									
Arizona	Sahuarita	82	8	Maverick	-19	22	Kitt Peak	4.36	2 Stations	.00
Arkansas	2 Stations	74	2+	2 Stations	-10	30	Paragould Radio KDRS	12.22	Greenwood	1.14
California	Death Valley	86	28	Boca	-25	2	Honeydew 2WSW	30.99	5 Stations	.00
Colorado	Longmont 2ESE	70	9	2 Stations	-38	21+	Benham Reservoir	1.70	4 Stations	T
Connecticut	Mansfield Hollow Dam	66	1	Falls Village	-11	28	Groton	4.32	Baltic	1.86
Delaware	Selbyville	69	1	Georgetown 5SW	-6	29	Wilmington Porter Resvr	4.25	2 Stations	2.48
Florida	Arcadia	86	6	2 Stations	7	30	Wewahitchka	12.88	Fort Lauderdale Baha Mar	2.00
Georgia	2 Stations	80	3	Blairsville Exp Sta	-11	30	Atlanta Bolton	9.41	Stillmore	2.90
Hawaii	Data Delayed									
Idaho	2 Stations	61	6	Stanley	-36	20	Burke 2ENE	7.96	Howe	T
Illinois	Harrisburg	66	1	Stockton	-23	29	Brookport Dam 52	6.36	Rantoul	.07
Indiana	Saint Meinrad	69	1	Gary Disposal Plant	-22	30	Leavenworth Dam 44	6.34	Fowler	.05
Iowa	Keokuk Lock and Dam 19	53	9	Inwood 2W	-32	29	Logan	2.00	Eddyville 2S	.04
Kansas	Hugoton	67	8	Oberlin	-21	22	Deerfield 10NNW	1.55	4 Stations	.00
Kentucky	Jackson	75	2+	Barbourville	-20	31	Mayfield	D 11.69	Jeremiah	1.42
Louisiana	3 Stations	81	2+	Homer Exp Station	8	30	Reserve	17.08	Rodessa	3.29
Maine	Saco	60	1	Clayton Lake 2	-24	27	Saco	5.87	Grand Lake Stream	2.01
Maryland	Upper Marlboro 3NNW	71	1	Sines Deep Creek 2	-16	29	U. S. Soldiers Home, D.C.	5.60	Chewsville Bridgeport	2.35
Massachusetts	2 Stations	65	1	3 Stations	-9	16	Franklin	6.96	Amherst	1.72
Michigan	Bay City Sewage Plant	62	1	Ironwood	-32	28	Ludington 4SE	4.52	Three Rivers	.32
Minnesota	2 Stations	45	1	Baudette 22S	-50	28	Grand Portage RS	2.14	Madison Sewage Plant	.08
Mississippi	Wiggins	80	3+	Corinth 4SW	-19	30	Picayune	11.61	Lake Cormorant 1W	1.72
Missouri	Birch Tree	71	1	Unionville	-19	29	Kennett Radio KBOA	12.56	Harrisonville	.00
Montana	Wyola	69	8	Loma 1WNW	-40	20	Heron 2NW	6.23	Ridgway 1S	T
Nebraska	Benkelman	61	6	3 Stations	-32	21	Plattsmouth	1.12	Valparaiso	.03
Nevada	Amargosa Ranch	70	14	Charleston	-27	2	North Fork Mntc Sta	1.74	6 Stations	.00
New Hampshire	Windham	60	1	First Conn Lake	-28	27	Mount Washington	9.35	Woodstock	1.58
New Jersey	Belleplain St Forest	69	1	High Point Park	-9	28	New Monmouth	5.54	Seabrook Farms	1.83
New Mexico	Carlsbad FAA AP	72	9	Gavilan	-35	22	Lake Maloya	1.93	2 Stations	T
New York	Glenham	65	1	Canton 3SE	-35	26	South Edwards 1E	D 7.61	Suffern Water Works	D 1.07
North Carolina	Lincolnton 4W	78	3	Grandfather Mountain	-26	30	Cape Hatteras WB	9.07	Swannanoa 2E	2.18
North Dakota	2 Stations	49	15+	Hebron	-47	29	Golden Valley 10S	2.50	2 Stations	.00
Ohio	do	70	1	2 Stations	-19	29+	Chilo Meldahl Dam	5.81	Toledo Sewage	.31
Oklahoma	Smithville 3NNW	74	1	Beaver	-13	22	Kiamichi Tower	4.89	Meeker	.00
Oregon	3 Stations	64	29+	Seneca	-18	20	Illahe 2N	28.34	Harper	.05
Pennsylvania	Burnt Cabins 2NE	73	1	Clermont 4NW	-25	29	Johnstown	D 7.28	Scranton	1.54
Puerto Rico	2 Stations	93	26+	Cayey 1E	52	24	Jajome Alta	9.22	Puerto Real	.35
Rhode Island	do	62	1	Greenville	1	16	Woonsocket	4.29	Kingston	2.72
South Carolina	do	79	2	Caesars Head	-10	30	McClellanville	7.86	Wateree Dam	3.78
South Dakota	Rapid City WBAP	64	8	2 Stations	-40	29	Pollock	.83	Kyle 2NNW	T
Tennessee	3 Stations	71	2+	Coldwater	-27	30	Samburg Wildlife Ref	10.10	Newcomb	2.31
Texas	Mission	83	2	Lipscomb	-12	23	Port O'Connor	8.92	Pandale	.07
Utah	Saint George Pwr House	63	11	Strawberry Hwy Station	-33	20	Alta	6.11	4 Stations	.00
Vermont	2 Stations	60	1	Enosburg Falls	-29	26	Somerset	4.11	McIndoe Falls	1.13
Virginia	do	76	2+	Chilhowie 1S	-18	31	Lafayette 1NE	7.04	Tangier Island	D 2.05
Washington	do	64	27+	Winthrop 1WSW	-10	21+	Aberdeen 20NNE	23.21	Connell 4NNW	.47
West Virginia	Wardensville RM Farm	73	1	Terra Alta No 1	-23	31	Canaan Valley	6.04	Flat Top	1.56
Wisconsin	Burlington	55	1	Gordon 2ESE	-40	28	Shorewood	2.43	Spooner Exp Farm	.39
Wyoming	2 Stations	67	8	Bondurant 3NW	-38	25	Moran 5WNW	2.96	14 Stations	T

+ And also on an earlier date or dates.

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

JANUARY 1966

State and Station		Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
	Elevation (ground)	Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	998.3	1021.3	47	29	37.7	- 8.8	70	2	- 4	30	0	21	29	73	4.74	- 0.29	1.57	12	1	1.2	1	2.6	2	24	NW	29	7	4	20	7.2	38
HUNTSVILLE	600	998.0	1021.8	44	27	35.3	- 7.6	69	1	-11	30	0	21	27	72	4.29	- 0.93	1.21	12	0	8.0	7	3.5	1	22	36	29	8	3	20	7.1	
MOBILE	211	1012.2	1020.3	55	40	47.2	- 5.8	76	2+	13	30	0	7	39	75	5.52	0.88	1.04	14	0	T	0	6.2	4	29	36	29	5	7	19	7.5	
MONTGOMERY	194	1013.5	1020.9	50	33	41.9	- 6.2	75	2	5	30	0	14	32	72	6.20	2.14	1.55	16	0	T	0	3.3	2	27	E	29	7	2	22	7.2	35
ALASKA												B																				
ANCHORAGE PRK STRIP	85			16	3	9.5	- 2.9	40	31	-18	13	0	31			0.32	- 0.48	0.15	4		5.0	26										
ANCHORAGE	141	1003.7	1009.0	17	2	9.7		42	31	-19	13	0	31	2	69	0.63		0.30	4	0	9.7	25	3.7	1	32	17	31	11	2	18	6.3	39
ANNETTE	110	1004.1	1008.3	34	24	28.9	- 5.5	44	16+	6	4+	0	25	21	71	11.19	- 0.17	3.64	17	0	9.9	4	5.9	8	29	17	16+	3	6	22	8.3	
BARROW	22	1020.3	1021.0	- 9	-22	-15.7	0.5	16	2	-40	14+	0	31	-24	68	0.12	- 0.06	0.11	3	0	1.6	17	9.3	10	30	11	28	V	V	V		
BARTER ISLAND	39	1019.6	1021.7	-11	-25	-18.1	- 1.3	24	3	-42	13+	0	31	-23	76	0.05	- 0.35	0.03	3	0	1.7	21	8.4	11	43	10	28	X	X	X		
BETHEL	125	997.3	1003.0	12	0	5.6	2.0	39	22	-24	1	0	30	- 3	71	0.06	- 1.06	0.03	5	0	1.0	9	13.2	4	31	10	22	5	3	23	7.7	
COLD BAY	94	990.9	994.5	35	30	32.8	5.0	43	21	21	26+	0	20	30	88	2.21	- 0.11	0.48	23	0	9.3	4	9.5	15	50	15	22	0	2	29	9.5	
FAIRBANKS	436	999.0	1017.9	-19	-36	-27.4	-16.3	5	26	-52	30	0	31	-33	77	0.01	- 0.88	0.01	1	0	0.7	35	1.5	36	10	35	21	23	3	5	2.2	
JUNEAU	12	1011.9	1012.6	17	0	8.6	-16.5	33	16	-20	28	0	31	3	77	4.34	0.34	2.11	9	0	54.8	38	4.7	8	29	13	4+	14	4	13	4.9	60
KING SALMON	43	999.3	1001.4	26	14	20.1	6.7	39	27	-29	2	0	27	15	79	0.43	- 0.64	0.23	9	0	1.4	16	8.3	7	41	9	22	4	6	21	7.5	
KOTZEBUE	10	1012.9	1013.4	3	-10	- 3.6	2.1	23	27	-31	31	0	31	-14	62	T	- 0.39	T	0	0	T	23	15.5	10	46	12	1	15	4	12	4.5	
MC GRATH	349	999.0	1013.1	-11	-30	-20.4	-11.4	19	23	-48	12	0	31	-30	61	0.48	- 0.78	0.38	4	0	15.2	35	0.6	33	12	8	30	14	7	10	4.8	
NOME	13	1006.8	1007.7	14	- 1	6.7	2.3	33	26	-22	31	0	31	- 1	72	0.31	- 0.71	0.10	9	0	3.1	18	12.8	7	48	4	30	9	9	13	5.7	45
ST. PAUL ISLAND	22	991.5	992.4	36	30	32.5	7.1	39	21	16	25+	0	18	31	94	2.87	1.06	0.68	25	0	5.7	1	9.2	10	43	4	18	0	2	29	9.5	
SHEMYA	122	985.4	989.1	34	28	31.2	- 0.1	40	1	18	26	0	28	28	86	2.14	- 0.36	0.36	26	0	12.2	3	3.4	21	61	15	27	1	7	23	8.3	
YAKUTAT	28	1007.1	1008.1	24	2	13.0	-14.3	38	31+	-19	8	0	31	8	77	2.40	- 8.46	0.74	11	0	24.3	31	6.6	10	32	7	2	8	6	17	6.4	
ARIZONA																																
FLAGSTAFF	6993	785.3	1020.2	39	8	23.5	- 3.8	54	9	-12	3	0	31	11	63	1.10	- 0.73	0.32	8	0	14.5	11	1.2	6	23	3	13	14	8	9	4.7	
PHOENIX	1117	977.7	1017.2	62	35	48.2	- 1.5	75	7	28	25+	0	11	34	64	0.35	- 0.38	0.34	3	0	0.0	0	1.7	10	29Y	E	17	16	5	10	4.1	79
TUCSON	2584	926.9	1016.1	60	36	47.7	- 2.1	75	10	27	25	0	10	28	55	1.74	0.92	0.82	6	1	T	0	4.1	13	32	SE	17	15	11	5	3.6	85
WINSLOW	4895	852.7	1023.4	37	11	24.0	- 7.0	56	11+	- 8	22	0	31	14	71	0.68	0.25	0.37	5	0	9.6	7	2.4	23	24	21	30	15	7	9	4.6	
YUMA	194	1010.2	1017.6	64	41	52.2	- 1.2	73	7	32	24+	0	2	32	52	0.41	0.02	0.37	3	0	0.0	0	5.8	1	27	N	12	17	4	10	3.9	80
ARKANSAS																																
FORT SMITH	449	1005.4	1022.8	45	24	34.6	- 5.2	66	1	0	30	0	26	25	70	2.23	- 0.43	1.62	7	0	5.8	4	1.9	2	26	SW	12	8	7	16	6.5	51
LITTLE ROCK	257	1013.2	1023.1	44	27	35.4	- 5.2	70	1	2	30	0	25	27	72	3.03	- 2.19	1.08	13	2	12.0	7	3.2	3	26	N	29+	9	3	19	6.7	39
TEXARKANA	372	1008.5	1022.1	49	32	40.7	- 4.4	69	1	9	30	0	15	31	73	4.03	- 0.81	1.32	10	2	6.4	2	1.8	6				8	3	20	6.8	
CALIFORNIA																																
BAKERSFIELD	494	1002.4	1020.5	57	37	46.8	- 0.6	68	26	31	17	0	5	35	70	0.70	- 0.47	0.70	1	0	0.0	0	1.6	8	25	12	26	10	12	9	5.2	
BISHOP	4108			49	21	34.9	- 1.9	60	14	12	22	0	31			0.00	- 0.99	0.00	0		0.0	0						11	11	9	4.8	
BLUE CANYON	5280			41	28	34.9	- 2.2	54	13+	15	1	0	23			6.74	- 4.96	2.79	7		36.2	67			33	5	15	9	4	18	6.3	
BURBANK	724	991.2	1017.1	66	41	53.2	- 0.4	79	7	33	24+	0	0	31	50	1.32	- 1.82	1.32	1	1	0.1	T	1.4	4	32	4	16	19	9	3	3.1	
EUREKA U	43			54	41	47.7	0.3	64	6	32	20+	0	2			9.44	2.74	2.10	17		0.0	0			33	S	4	6	2	23	7.4	50
FRESNO	328	1008.5	1020.6	54	32	43.4	- 2.7	65	28+	25	25+	0	17	37	83	0.53	- 1.50	0.53	2	0	0.0	0	1.5	11	21	S	30	5	15	11	6.3	69
LONG BEACH	34	1016.6	1018.0	65	42	53.4	0.3	82	7	36	22+	0	0	41	67	1.19	- 0.80	1.19	1	1	0.0	0	0.6	35	28	9	16	18	7	6	3.5	
LOS ANGELES	97	1013.9	1017.5	63	44	53.6	- 0.8	81	7	37	21	0	0	37	57	0.84	- 1.82	0.73	2	1	0.0	0	0.9	2	30Y	SW	30	19	8	4	3.3	
LOS ANGELES U	270			67	45	55.7	- 0.1	82	7	39	23+	0	0			0.96	- 2.11	0.95	2		0.0	0			17	SW	30	20	8	3	2.8	72
MT SHASTA R	3544			41	25	32.9	- 0.4	51	13	6	1	0	29			8.95	2.59	3.40	12		72.5	60										
OAKLAND	6	1019.6	1019.7	56	43	49.5	1.5	69	15	35	20+	0	0	41	75	2.15	- 1.68	1.38	5	0	0.0	0	1.2	15	26	15	29+	10	6	15	5.9	
RED BLUFF	341	1007.1	1020.0	55	34	44.4	- 1.1	67	15	24	21	0	14	33	72	3.58	- 0.71	2.26	8	0	0.0	0	0.9	28	40	S	3	7	5	19	6.9	56
SACRAMENTO	17	1019.3	1020.2	55	36	45.7	0.5	67	15	28	21+	0	7	37	77	1.91	- 1.27	1.38	5	0	0.0	0	0.8	9	26	N	15	9	6	16	6.2	63
SANDBERG R	4517			44	32	37.8	- 2.1	62	8	23	1	0	19			0.68	- 1.87	0.58	2		8.0	7			51	7	15	15	12	4	3.6	
SAN DIEGO	13	1016.3	1017.3	64	44	53.9	- 1.1	77	7	39	22+	0	0	41	65	1.29	- 0.72	0.81	5	0	0.0	0	0.8	36	26	W	30	19	5	7	3.5	86
SAN FRANCISCO	8	1019.6	1020.2	55	40	47.6	- 1.0	64	15	30	2	0	4	40	77	2.70	- 1.31	1.59	6	0	0.0	0	1.0	18	39	S	29	10	8	13	6.0	
SAN FRANCISCO U	52			58	47	52.1	1.4	68	15	41	2	0	0			3.27	- 1.28	1.58	7		0.0	0			26	S	29					68
SANTA CATALINA	1568			58	47	52.7	- 0.9	75	7	43	20+	0	0			1.79	- 0.87	0.78	6	0	0.0	0						15	11	5	3.6	
SANTA MARIA	236			62	35	48.1	- 2.1	74	6	27	2	0	13			1.05	- 1.79	0.98	4		0.0	0						19	8	4	3.2	
STOCKTON	22	1019.6	1020.8	54	34	44.1	- 0.6	62	29	26	21	0	16	37	82	1.60	- 0.95	1.26	5	1	0.0	0	1.4	16	28	16	29	7	7	17	6.5	
COLORADO																																
ALAMOSA	7536			31	- 5	13.0	- 4.4	46	11	-25	25+	0	31			0.28	0.02	0.26	3		4.7	4						15	9	7	4.3	
COLORADO SPRINGS	6145	808.0	1019.0	37	13	25.1	- 3.5	55	11+	-10	21	0	31	7	51	0.39	0.10	0.12	5	0	6.0	3	4.7	2	35	33	31	10	7	14	6.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h							%
COLORADO																																
DENVER	5283	834.1	1016.8	44	13	28.6	0.1	65	8	-13	21	0	30	7	46	0.30	- 0.25	0.17	6	0	3.6	2	1.7	18	30	NW	9	7	9	15	6.4	77
GRAND JUNCTION	4855	854.0	1023.2	37	12	24.5	- 1.5	46	11	- 5	21	0	31	14	68	0.65	0.01	0.28	6	0	11.0	7	1.5	4	22	NW	11	12	6	13	5.4	75
PUEBLO	4684	854.4	1019.3	42	9	25.5	- 4.5	63	6+	-13	22	0	31	7	51	0.31	0.00	0.11	7	0	9.9	6	0.9	33	34	N	1	13	5	13	5.4	73
CONNECTICUT																																
BRIDGEPORT	7	1015.2	1015.7	37	23	30.1	- 0.1	62	1	4	29+	0	26	20	68	2.53	- 1.16	0.69	7	0	10.6	6	11.0	32	61	29	30	7	11	13	6.2	
HARTFORD	169	1007.8	1014.6	33	19	26.4	0.4	61	1	2	16	0	28	15	63	3.05	- 0.53	0.95	12	0	18.4	10	7.0	31	33	NW	30	8	4	19	6.8	66
NEW HAVEN	6			36	21	28.5	- 1.1	60	1	6	16	0	28			2.10	- 1.86	0.73	9		10.7	5			45	S	30	8	7	16	6.1	60
DELAWARE																																
WILMINGTON	78	1014.6	1017.7	37	22	29.3	- 4.1	60	1	5	29+	0	26	18	65	2.82	- 0.58	0.80	10	0	17.2	12	7.5	30	32	26	30	10	5	16	6.4	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.9	1018.4	40	25	32.4	- 4.5	68	1	9	31+	0	25	19	60	3.95	0.92	1.09	11	0	21.3	16	7.4	32	37	W	30	9	6	16	6.4	50
FLORIDA																																
APALACHICOLA U	13			57	43	50.0	- 5.1	70	2	14	30	0	5			7.01	3.87	2.05	12	0	0.0	0			31	NW	30	10	4	17	6.5	42
DAYTONA BEACH	31	1017.6	1019.0	66	48	57.0	- 2.2	81	5	24	31	0	3	47	73	2.89	0.93	0.87	9	0	0.0	0	2.7	33	26	31	29+	6	7	18	7.0	
FORT MYERS	15	1017.6	1017.8	72	53	62.5	- 1.0	83	5+	28	31	0	1	56	82	3.39	1.87	1.40	10	1	0.0	0	3.7	4	37	18	22	8	7	16	6.8	
JACKSONVILLE	20	1018.3	1019.2	62	42	51.9	- 4.0	79	3+	20	31+	0	5	42	74	4.56	2.11	1.85	11	0	0.0	0	4.6	33	35	NW	27	7	8	16	6.4	55
KEY WEST	4	1016.3	1017.0	74	64	69.1	- 0.5	81	6+	47	31	0	0	61	76	4.01	2.48	1.40	14	0	0.0	0	6.8	6	41	NW	29	5	11	15	6.7	57
LAKELAND U	214			67	49	57.9	- 3.8	79	2	26	31	0	2			5.60	3.55	1.27	10		0.0	0						7	7	17	6.6	57
MIAMI	7	1017.3	1017.5	74	59	66.0	- 0.9	81	21+	35	31	0	0	57	74	3.97	1.94	2.15	13	0	0.0	0	2.2	6	37	31	29	5	10	16	6.9	
ORLANDO	108	1014.6	1018.6	68	50	58.7	- 1.7	81	3	24	31	0	2	48	73	4.45	2.45	0.86	10	0	0.0	0	2.6	35	31	18	22	7	5	19	6.8	
PENSACOLA	112	1016.3	1020.3	55	39	46.9	- 6.6	77	2	11	30	0	9	40	74	6.02	1.80	1.84	14		0.0	0	4.7	1	35	NW	29					38
TALLAHASSEE	55	1017.6	1019.8	59	39	49.1	- 4.8	77	2	12	30	0	8	40	74	9.25	5.83	2.59	13	2	0.0	0	3.7	35	25	23	15	7	7	17	6.9	
TAMPA	19	1018.6	1018.8	66	48	57.0	- 4.2	81	3	24	31	0	3	47	74	4.05	1.92	1.58	11	0	0.0	0	3.5	3	25	15	22	6	8	17	6.9	58
WEST PALM BEACH	15	1016.9	1017.7	73	56	64.4	- 2.5	84	6	32	31	0	1	56	75	6.23	3.75	2.25	13	1	0.0	0	1.8	3	35	31	29	5	5	21	7.5	
GEORGIA																																
ATHENS	802	990.5	1020.3	47	30	38.3	- 6.3	71	2	- 1	30	0	19	28	72	8.56	3.67	3.25	12	0	4.3	2	2.7	32	24	6	15	10	2	19	6.5	
ATLANTA	1010	982.4	1020.4	45	29	36.6	- 8.1	68	1	- 3	30	0	21	27	72	5.94	1.50	1.77	13	0	0.7	T	3.3	34	31	W	29+	10	3	18	6.5	44
AUGUSTA	143	1014.6	1019.8	51	31	41.1	- 6.5	78	2	6	30	0	18	30	72	7.01	4.02	2.52	14	0	0.4	T	3.5	32	30	28	29	10	2	19	6.5	
COLUMBUS	385			51	33	42.0	- 5.8	73	2	3	30	0	15			7.87	3.81	2.50	11		T	T	2.9	1	27	29	29	7	5	19	7.0	
MACON	354	1007.1	1020.5	51	32	41.4	- 7.8	76	2	3	30	0	17	32	73	7.25	3.88	3.06	12	1	T	0	3.9	34	32	NW	30	8	5	18	6.5	48
ROME	637			46	25	35.5	- 6.6	70	2	- 4	31+	0	22			3.83	- 1.68	0.83	11		1.9	2										
SAVANNAH	46	1017.6	1019.5	56	34	44.9	- 6.8	77	1	9	30	0	16	36	75	6.05	3.27	1.69	12	0	T	T	3.4	33	37	NW	30	8	6	17	6.5	47
HAWAII																																
HILO	31	1015.2	1016.3	77	63	69.7	- 1.1	86	5	59	6	0	0	63	82	12.56	0.74	2.80	26	2	0.0	0	2.1	27	24	35	6	2	9	20	7.8	25
HONOLULU	7	1015.6	1016.1	80	65	72.6	0.1	83	30	59	30+	0	0	60	68	1.39	- 2.37	0.82	7	1	0.0	0	6.9	5	24	NE	21	11	16	4	4.3	71
KAHULUI	48	1013.5		78	62	69.8	- 2.3	82	17	55	14+	0	0			0.91	- 2.23	0.43	10	1	0.0	0	7.7	7	28	NE	2	12	14	5	4.6	70
LIHUE	103	1011.9	1017.2	76	64	69.8	- 1.1	78	31	59	30+	0	0	62	79	1.62	- 3.89	0.91	13	1	0.0	0	6.5	5	23	SW	31	8	18	5	5.3	60
IDAHO																																
BOISE	2838	917.7	1020.3	40	25	32.4	3.3	52	7	9	24	0	24	24	75	0.81	- 0.51	0.29	10	0	3.6	3	4.2	14	32	SE	2	5	3	23	7.9	46
IDAHO FALLS 42NW R	4790			31	8	19.7	6.3	45	6	-17	2	0	31			0.18	- 0.37	0.08	8				0.9	25	33	SW	8+					
IDAHO FALLS 46W R	4932			32	10	20.8	5.4	44	6	-14	1	0	31			0.14	- 0.59	0.09	4		1.4	2	3.1	23	38	SW	8+					
LEWISTON	1413			43	29	36.1	5.4	52	28+	16	20	0	20			1.43	0.33	0.84	11		16.7	12						1	4	26	8.8	
POCATELLO	4454	863.9	1021.3	35	17	25.7	3.4	48	8	- 3	25	0	30	16	69	0.27	- 0.94	0.16	8	0	4.8	5	6.9	20	42	S	2	4	6	21	7.8	47
ILLINOIS																																
CAIRO U	314			38	24	31.1	- 6.3	62	2	0	30	0	26			5.03	0.57	3.03	9		2.6	2			25	N	29+	10	4	17	6.3	49
CHICAGO O HARE	658	997.6	1023.6	25	7	16.3	- 7.9	49	5	-20	29	0	31	7	66	1.09	- 0.73	0.87	10	0	15.5	7	3.5	28	31	27	10	11	7	13	5.7	
CHICAGO MIDWAY	607	1000.0		26	11	18.4	- 7.6	48	5	-16	29	0	31	7	63	1.12	- 0.74	0.82	10	0	9.1	5	4.5	28	32	W	2	11	6	14	6.0	57
MOLINE	582	1001.7	1024.6	23	6	14.3	- 8.3	47	9	-19	29	0	31	6	70	2.01	0.40	1.43	10	1	6.0	3	3.7	29	31	NW	10+	9	10	12	5.9	64
PEORIA	652	999.3	1024.5	28	11	19.5	- 6.2	49	1	-14	29	0	31	9	65	1.49	- 0.39	1.33	4	1	0.6	T	3.2	33	30	W	10	10	6	15	6.2	52
ROCKFORD	724	995.3	1023.7	23	4	13.4	- 8.6	45	9+	-20	29	0	31	5	68	1.39	- 0.59	1.02	6	0	11.0	9	3.9	30	29	26	10	13	8	10	5.0	
SPRINGFIELD	588	1001.0	1024.2	30	14	21.9	- 6.5	54	2	-11	29	0	30	13	69	0.36	- 1.53	0.31	4	0	0.4	T	2.7	32	36	SE	12	12	5	14	6.0	54

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90° F. or above	Temperature: No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1009.1	1023.8	36	17	26.4	-7.8	61	2	-9	30	0	28	17	69	2.89	-1.09	2.02	8	0	2.9	2	2.8	35	23	S	2	8	5	18	6.6	51
FORT WAYNE	791	990.9	1022.5	29	14	21.1	-5.9	52	2	-8	30	0	29	15	77	0.39	-2.28	0.11	8	0	3.1	1	4.8	29	33	E	2	6	6	19	6.9	42
INDIANAPOLIS	793	992.6	1023.2	30	15	22.4	-6.7	57	2	-11	30	0	29	13	68	1.13	-1.92	0.60	8	0	2.5	3	2.9	31	28	NW	10+	9	5	17	6.4	47
SOUTH BEND	773	993.2	1022.5	28	13	20.3	-5.3	50	5	-13	30	0	30	11	65	1.54	-0.66	0.52	16	0	26.9	14	4.7	26	28	26	2	7	7	17	6.8	
IOWA																																
BURLINGTON	694			27	9	18.2	-6.2	51	9+	-19	29	0	31	9	69	1.30	-0.34		2	1	0.3		4.8	34	24	31	12	9	11	11	5.7	
DES MOINES	938	988.5	1025.4	22	6	14.2	-5.7	49	5	-23	29	0	31	6	70	0.96	-0.34	0.56	4	1	3.6	3	3.1	35	28	SW	9	7	6	18	6.7	63
DUBUQUE	1065			20	1	10.4	-8.8	46	5	-24	29	0	31			1.81	-0.02	0.88	6		11.3	8						10	10	11	5.5	
SIOUX CITY	1095	983.4	1025.7	21	2	11.9	-6.8	51	3	-22	29	0	31	3	67	0.52	-0.26	0.19	9	0	5.5	4	2.9	1	35	NW	9	6	12	13	6.3	66
WATERLOO	868	991.2	1025.0	18	-3	7.8	-10.1	44	5+	-26	29	0	31	1	72	1.70	0.55	1.14	8	0	8.1	5	4.2	32	30	31	10+	11	9	11	5.4	
KANSAS																																
CONCORDIA	1470	967.8	1023.2	34	12	22.9	-4.6	55	5	-11	29	0	31	14	71	0.50	-0.20	0.33	5	1	1.7	1	2.3	4	34	S	8	9	8	14	5.8	70
DODGE CITY	2582	927.2	1021.7	36	14	25.3	-5.8	65	8	-10	22	0	31	16	73	0.45	-0.12	0.29	6	0	4.7	4	0.2	24	31	N	12	10	6	15	6.0	68
GOODLAND	3645	888.9	1021.1	34	9	21.7	-5.7	60	8	-14	21	0	31	12	72	0.50	0.11	0.20	8	0	10.8	6	2.9	24	28	19	10	10	9	12	5.8	
TOPEKA	876	990.5	1023.9	36	16	26.0	-2.8	57	9	-9	29	0	30	14	64	0.16	-0.86	0.09	2	0	0.5	1	2.9	2	25	NE	31+	10	8	13	5.9	61
WICHITA	1321	972.9	1022.7	37	19	28.3	-3.7	58	1	-3	29	0	29	19	71	0.23	-0.58	0.14	5	0	4.7	3	1.7	7	36	S	11	9	7	15	5.8	53
KENTUCKY																																
COVINGTON	869	989.5	1022.5	31	16	23.8	-7.8	55	2	-12	30	0	28	16	72	3.84	0.28	1.61	11	0	6.8	5	2.9	32	25	31	7	5	8	18	7.4	
LEXINGTON	966	985.8	1022.7	33	18	25.3	-9.2	59	2	-10	30	0	27	18	74	3.99	-0.95	1.51	8	0	12.4	9	1.4	29	23	23	27+	4	6	21	7.7	
LOUISVILLE	474	1004.7	1023.0	34	20	27.1	-7.9	60	2	-9	30	0	28	16	64	5.73	1.63	2.78	11	0	7.0	6	3.1	35	38	NW	23	6	7	18	7.3	55
LOUISIANA																																
ALEXANDRIA	92	1017.3	1021.6	52	35	43.1	-7.2	72	1	13	30	0	12	37	82	7.90	2.58	1.83	16	0	T	T	4.0	2	29	35	29	6	5	20	7.5	
BATON ROUGE	64	1018.0	1020.8	54	37	45.3	-7.6	79	1	15	30	0	9	38	78	9.93	5.15	2.03	16	1	T	T	4.3	2	30	34	29	5	4	22	7.9	
LAKE CHARLES	14	1019.6	1020.8	55	40	47.9	-5.8	77	1	22	30	0	5	42	82	6.48	2.04	1.50	11	1	0.0	0	5.2	4	26	35	29	5	3	23	8.0	
NEW ORLEANS	3	1019.3	1020.1	55	39	46.9	-7.7	80	2	18	30	0	8	41	81	12.62	8.78	3.07	16	1	0.0	0	5.0	2	33	28	28	6	2	23	7.7	
SHREVEPORT	252	1012.2	1021.5	50	35	42.3	-5.2	71	1	13	30	0	14	34	75	4.22	-0.58	1.22	16	2	0.2	T	3.7	4	32	17	31	7	5	19	7.2	40
MAINE																																
CARIBOU	624			25	9	16.7	6.2	46	1	-7	13	0	31			2.06	-0.05	0.43	17		30.3	32						6	6	19	7.2	
PORTLAND	61	1010.2	1012.4	31	13	22.3	0.5	56	1	-10	12	0	29	14	70	4.97	0.60	2.04	14	0	38.2	24	5.0	32	40	NE	30	10	6	15	6.2	57
MARYLAND																																
BALTIMORE	148	1012.9	1018.7	38	22	29.8	-5.0	64	1	1	29	0	27	15	58	4.15	0.72	1.29	12	0	21.4	17	7.1	31	47	W	30	10	6	15	6.2	50
MASSACHUSETTS																																
BLUE HILL OBS R	629			32	18	24.8	-2.2	58	1	0	16	0	30			5.70	1.21	2.03	14		46.0	21			53	E	23					48
BOSTON	15	1012.2	1013.2	35	23	28.8	-1.1	61	1	6	16	0	23	19	69	5.29	1.35	1.94	14	0	26.4	10	8.9	31	43	S	30+	12	1	18	6.2	53
NANTUCKET	43	1011.9	1012.3	36	23	29.6	-3.4	52	1	10	17+	0	27	23	78	4.27	0.05	1.21	13	0	10.9	3	7.5	31	49	SW	30+	9	6	16	6.5	55
PITTSFIELD	1170			28	11	19.7	-2.1	57	1	-9	16	0	30			2.96	-0.01	0.71	19		33.2	21										
WORCESTER	986	974.9	1013.2	30	15	22.2	-1.8	55	1	-3	16	0	30	13	70	4.22	0.51	1.11	13	0	44.0	36	9.5	30	45	30	28+	9	5	17	6.3	
MICHIGAN																																
ALPENA	689	993.9	1020.5	24	6	14.9	-4.8	44	4	-15	15	0	31	7	70	1.50	-0.45	0.54	17	0	21.1	12	3.8	29	28	SE	2	2	13	16	7.4	35
DETROIT	619	997.3	1021.2	28	15	21.4	-5.5	47	2	-5	28	0	31	13	70	0.68	-1.37	0.23	10	0	6.7	4	7.1	30	40	W	3	5	11	15	6.8	44
DETROIT M WAYNE CO	633	995.9	1021.3	29	12	20.4	-6.1	47	2	-8	28	0	31	11	65	0.61	-1.32	0.21	11	0	8.4	5	5.8	28				5	10	16	7.1	
DETROIT WILLOW RUN	711	992.2	1021.7	27	12	19.5	-7.1	44	1	-6	29+	0	31	10	65	0.49	-1.45	0.20	7	0	4.4	3	6.5	28	30	28	27	5	9	17	7.0	
FLINT	770	991.9	1021.3	27	10	18.5	-3.6	49	5	-11	29	0	31	10	69	0.51	-1.19	0.19	9	1	9.5	4	5.5	27	29	27	10	5	7	19	7.2	
GRAND RAPIDS	784	991.2	1021.7	28	11	19.1	-4.9	51	5	-16	29	0	31	12	74	1.22	-0.69	0.54	13	0	25.9	11	3.7	28	40	W	10	5	7	19	7.1	47
HOUGHTON LAKE	1150	977.0	1021.2	23	2	12.9		43	5	-18	16	0	31	8	79	1.02		0.45	16	0	19.5	10	3.8	28	28	26	3	7	8	16	6.8	
LANSING	841	988.5	1021.8	26	8	16.7	-7.6	47	5	-16	29	0	31	14	85	0.87	-1.09	0.43	14	0	10.7	6	5.3	28	35	NW	27	5	11	15	6.7	53
MARQUETTE U	677			21	9	15.4	-4.1	37	4	-10	27	0	31			1.33	-0.56	0.47	21		20.6	13			28	NW	27	0	7	24	8.6	42
MUSKEGON	627	998.0	1022.1	27	11	18.9	-7.1	43	5+	-12	29	0	31	14	78	1.76	-0.34	0.56	18	0	58.9	17	3.3	32	28	21	9	5	4	22	7.9	
SAULT STE MARIE	721	992.6	1020.6	19	2	10.6	-5.2	37	4	-18	28	0	31	6	79	2.22	0.15	0.66	21	0	35.6	21	2.5	34	40	30	6+	5	4	22	7.7	40
MINNESOTA																																
DULUTH	1428	969.5	1025.0	10	-12	-1.3	-10.0	2[illegible]	5	-37	28	0	31	-10	63	0.98	-0.17	0.29	13	0	11.8	19	6.7	31	39	W	9	11	4	16	5.9	58

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	°F.	°F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	980.0	1027.3	2	-22	-10.4	-13.5	21	19	-43	28	0	31	-17	68	0.74	- 0.10	0.45	10	0	9.8	32	4.5	29	25	29	26+	9	8	14	6.0	
MINNEAPOLIS	834	993.6	1026.4	12	- 6	3.3	- 9.1	37	1	-28	29	0	31	- 5	66	0.95	0.25	0.43	7	0	11.9	8	3.8	34	33	NW	9	11	7	13	5.7	61
ROCHESTER	1297	974.3	1025.6	13	- 6	3.2	-10.4	40	1	-30	29	0	31	- 5	69	0.68	- 0.23	0.41	5	0	10.5	5	4.8	31	36	30	9	12	9	10	4.9	
ST CLOUD	1034	985.8	1026.6	9	-11	- 1.5	-11.6	30	9+	-31	28	0	31		66	0.70	- 0.02	0.30	10		11.2	7						10	8	13	6.0	
MISSISSIPPI																																
JACKSON	310	1009.5	1021.6	50	31	40.8	- 7.1	74	1	7	30	0	16	33	78	8.23	3.05	1.86	16	0	T	T	4.0	2	26	N	29	7	7	17	7.3	39
MERIDIAN	290	1010.2	1021.6	51	30	40.4	- 7.7	73	2+	6	30	0	19	33	79	7.26	2.57	1.77	15	1	T	T	3.9	1	22	31	29	5	7	19	7.2	
VICKSBURG U	234			49	35	42.0	- 7.0	72	1	9	30	0	14			6.35	1.22	1.41	16		T	T			26	N	8	7	4	20	7.0	43
MISSOURI																																
COLUMBIA	778	993.9	1023.5	34	17	25.4	- 4.9	57	9	- 9	29	0	29	14	65	0.21	- 1.50	0.08	3	0	1.5	1	2.0	2	34	SW	12	11	7	13	5.9	68
KANSAS CITY	742	995.6	1023.8	37	19	28.0	- 3.7	57	9+	- 7	29	0	29	15	61	0.21	- 1.20	0.18	3	0	T	T	3.0	3	24	W	12+	13	8	10	5.2	66
SAINT JOSEPH	811			36	16	25.6	- 1.6	54	9	-13	29	0	30	13	61	0.55	- 0.65	0.32	3	1	0.5	T	3.2	1	23	32	12+	11	9	11	5.0	
ST LOUIS	535	1003.1	1024.4	34	16	25.0	- 6.9	58	9	- 8	29	0	29	15	68	0.65	- 1.33	0.24	4	0	2.5	2	2.2	33	29	SW	12	9	7	15	6.2	50
SPRINGFIELD	1268	975.6	1022.9	40	18	29.0	- 4.6	58	9	- 6	29	0	29	18	67	1.59	- 0.37	0.93	5	0	2.0	1	1.1	10	29	SW	9	8	12	11	5.8	57
MONTANA																																
BILLINGS	3567	890.3	1019.9	25	6	15.1	- 8.1	55	8	-19	20	0	28	4	65	0.43	- 0.11	0.17	7	0	6.3	6	4.4	27	45	NW	8	3	5	23	7.9	46
GLASGOW	2284			7	-10	- 1.2	-11.0	36	14	-29	20	0	31			0.51	0.03	0.14	10		8.4	7						1	8	22	8.3	
GREAT FALLS	3662	886.6	1021.1	23	5	13.9	- 8.2	47	8	-23	20	0	29	6	70	1.63	1.02	0.74	14	0	16.9	16	6.2	23	47	SW	8+	4	3	24	8.1	48
HAVRE	2582			9	- 7	1.0	-12.9	41	13	-29	20	0	31			0.68	0.19	0.16	13		11.6	6			32	SW	8	3	6	22	7.9	53
HELENA	3828	879.1	1019.6	31	11	20.6	2.0	55	8	-10	25+	0	31	11	66	0.46	- 0.01	0.16	8	0	6.3	4	3.3	26	54	SW	8	3	1	27	8.5	37
KALISPELL	2965	909.2	1017.1	30	19	24.3	4.5	42	7	- 3	20	0	28	20	84	1.61	0.24	0.39	19	0	22.6	9	1.6	16	37	2	19	1	1	29	9.5	
MILES CITY	2629	924.1	1023.1	16	- 4	6.1	-10.4	43	14	-25	21	0	31	0	75	0.67	0.23		11	0	8.3		1.8	36								
MISSOULA	3190	903.2	1018.4	33	20	26.3	7.1	44	8	0	25	0	30	22	83	1.44	0.52	0.55	12	0	14.3	10	0.7	26	30	NW	8	1	2	28	9.3	28
NEBRASKA																																
GRAND ISLAND	1841	954.3	1024.3	28	6	16.7	- 5.9	52	13+	-16	29	0	31	7	68	0.22	- 0.41	0.15	5	0	3.0	2	1.8	2	22	33	12	7	6	18	6.7	
LINCOLN U	1150			27	9	18.4	- 6.7	50	9	-18	29	0	31			0.65	- 0.27	0.44	8		1.9	1			27	S	9	10	4	17	5.9	64
NORFOLK	1544			22	0	11.2	- 8.2	51	3	-26	29	0	31			0.52	- 0.26	0.38	8		5.7	4						7	8	16	6.6	
NORTH PLATTE	2775	919.4	1022.5	27	4	15.6	- 8.4	53	5	-18	22	0	31	7	73	0.30	- 0.13	0.19	5	0	10.5	7	2.0	5	27	NW	12	7	6	18	7.0	48
OMAHA	978	987.8	1025.1	28	9	18.4	- 3.9	50	9+	-17	29	0	31	10	70	0.81	- 0.01	0.60	7	0	2.8	1	2.9	3	26	NW	12+	7	10	14	6.2	69
SCOTTSBLUFF	3957	879.1	1021.0	33	7	19.6	- 5.7	59	6	-25	21	0	31	9	68	0.46	0.17	0.21	7	0	5.0	3	1.7	1	44	29	6	11	5	15	6.3	
VALENTINE	2587			25	1	12.8	- 7.2	55	8	-23	29+	0	31			0.28	- 0.12	0.11	7		4.4	4			42	NW	8	7	7	17	6.4	70
NEVADA																																
ELKO	5050	846.3	1023.0	35	10	22.5	- 0.1	50	8	-10	2	0	31	14	71	0.24	- 0.92	0.09	6	0	4.8	3	0.6	24	23	17	30+	6	10	15	6.6	
ELY	6253	808.3	1021.6	36	4	20.1	- 2.7	54	7	-15	20	0	31	4	51	0.23	- 0.55	0.16	2	0	3.5	6	5.6	20	31	S	30+	7	9	15	6.4	82
LAS VEGAS	2162	941.8	1019.8	54	31	42.7	- 0.4	65	11	24	23+	0	18	21	47	T	- 0.53	T	0	0	0.0	0	2.8	30	35	NW	1	15	9	7	4.2	85
RENO	4404	867.3	1020.0	48	19	33.4	3.0	62	29	7	21+	0	30	20	63	T	- 1.19	T	0	0	T	T	1.1	18	48	SE	4	5	7	19	6.9	74
WINNEMUCCA	4299	868.9	1020.5	44	18	30.7	3.5	58	29	- 1	20	0	30	19	64	0.04	- 1.01	0.02	3	0	0.4	1	2.3	16	30	S	29	6	5	20	7.0	43
NEW HAMPSHIRE																																
CONCORD	342	1000.7	1013.8	31	9	20.4	- 0.8	59	1	-17	26	0	30	11	66	2.69	- 0.54	1.16	10	0	32.9	23	6.3	32	34	S	30+	13	2	16	5.9	57
MT WASHINGTON OBS	6262			13	- 3	5.4	- 0.9	36	1	-26	15	0	31			9.35	3.91	2.62	21	0	63.9	13			133Y	E	30	2	8	21	8.1	27
NEW JERSEY																																
ATLANTIC CITY	64	1014.6	1017.0	37	20	28.5	- 6.3	65	1	0	29	0	26	18	66	3.45	- 0.11	1.01	11	0	15.1	11	9.1	31	40	27	30	10	8	13	5.9	61
ATLANTIC CITY U	11			39	25	31.8	- 4.2	65	1	7	29	0	26			3.12	- 0.63	0.86	11						60	W	30					
NEWARK	11	1015.2	1016.4	37	24	30.4	- 2.9	62	1	7	29+	0	24	18	62	2.29	- 1.04	0.58	9	0	10.2	7	9.2	30	43	24	31	8	10	13	6.2	
TRENTON U	56			36	24	29.9	- 3.2	58	1	6	29	0	26			3.39	0.29	1.08	12		12.1	8			35	NW	23+	12	7	12	5.7	58
NEW MEXICO																																
ALBUQUERQUE	5310	838.1	1020.0	42	19	30.1	- 4.9	55	9	6	22	0	31	15	57	0.42	0.01	0.35	3	0	5.4	4	2.2	1	33	SE	16	11	10	10	5.0	79
CLAYTON	4969			42	15	28.7	- 4.5	62	5	- 8	21	0	30			0.28	- 0.07	0.12	4		6.1	5						15	7	9	4.8	
RATON	6379			42	8	25.0	- 4.0	61	9+	-11	22	0	31			0.45	0.09	0.20	5		4.4	3						16	6	9	4.3	
ROSWELL	3617			47	15	30.8	- 7.1	69	9	-16	22	0	30			0.53	0.05	0.48	4	0	5.2	3			34	SW	1	13	9	9	4.5	62
SILVER CITY	5373			48	24	35.6	- 3.9	60	30+	13	23+	0	31			0.71	0.08	0.48	4		7.3	5						17	9	5	3.4	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1005.4	1016.6	30	13	21.5	- 1.2	57	1	- 4	26+	0	30	15	76	2.29	- 0.18	0.64	15	0	28.8	15	8.4	31	42	NW	31	4	6	21	7.7	49
BINGHAMTON	1590	955.6	1016.8	25	13	19.1	- 4.7	52	1	- 8	28	0	29	13	77	3.19	0.69	0.78	16	0	36.6	21	7.5	30	47	W	31	4	3	24	8.3	37
BUFFALO	705	991.9	1018.8	28	13	20.4	- 4.1	50	1	- 6	28	0	31	15	78	3.74	0.90	1.62	19	0	48.0	34	6.8	27	41	W	31+	2	3	26	8.6	31
NEW YORK U	132	1012.9	1016.3	39	26	32.2	- 1.0	62	1	8	28	0	22	18	58	2.63	- 0.68	0.73	11	0	11.6	7	6.7	28	40	N	30	9	10	12	5.5	51
J.F. KENNEDY	15	1015.2	1015.9	38	25	31.2	- 0.6	62	1	7	28	0	25	20	64	3.18	- 0.05	1.00	10	0	10.1	7	9.4	32	52	26	31	7	11	13	6.2	
NEW YORK LA GUARDIA	11	1014.2	1016.2	37	27	31.8	- 1.8	60	1	10	28	0	22	18	59	2.36	- 0.95	0.65	10	0	9.3	6	8.7	32	51	W	31	9	9	13	6.1	
ROCHESTER	547	998.0	1019.1	30	16	22.6	- 2.6	55	1	- 4	27	0	31	14	71	4.10	1.70	1.64	14	0	60.2	34	8.2	27	50	SW	31	2	4	25	8.5	27
SYRACUSE	410	1002.0	1017.5	28	10	19.0	- 5.0	57	1	-26	26	0	30	13	76	3.98	0.83	0.98	23	0	71.0	48	6.7	29	55	W	31	1	7	23	8.4	30
NORTH CAROLINA																																
ASHEVILLE	2140	941.1	1019.6	39	21	30.1	- 7.5	61	1	- 7	30	0	27	23	77	3.37	- 0.80	0.87	10	0	17.6	8	6.7	35	35	35	30+	10	4	17	6.4	50
CAPE HATTERAS R	7	1017.3	1017.8	50	36	43.4	- 3.2	72	2	17	30	0	14	35	74	9.07	5.17	2.26	10	0	T	T	7.2	33	40	N	26+	6	11	14	6.5	40
CHARLOTTE	735	991.2	1019.6	44	28	36.0	- 6.7	69	2+	4	31+	0	22	25	67	3.79	0.26	0.94	12	0	9.6	5	2.6	35	23	NE	15	12	4	15	5.8	63
GREENSBORO	897	987.1	1019.7	42	25	33.1	- 6.6	72	1	3	31	0	25	23	69	4.48	1.08	0.99	11	0	22.9	15	3.2	32	30	NW	30	11	5	15	6.0	52
RALEIGH	434	1003.1	1019.2	45	27	35.8	- 5.8	74	1	3	31	0	24	22	61	5.42	2.20	1.55	14	0	12.3	10	4.2	32	30	31	8	11	6	14	5.6	54
WILMINGTON	28	1017.6	1018.9	52	34	43.2	- 4.7	76	3+	17	31	0	19	31	67	6.32	3.47	1.58	11	0	T	T	4.2	33	33	W	30	8	9	14	6.1	55
NORTH DAKOTA																																
BISMARCK	1647	962.8	1027.3	8	-14	- 3.0	-12.9	32	9	-39	29+	0	31	-11	68	0.29	- 0.15	0.11	9	0	4.4	3	3.0	2	50	NW	9	6	9	16	6.8	55
FARGO	896	992.9	1028.7	3	-15	- 6.4	-13.7	23	1	-33	28+	0	31	-15	65	0.40	- 0.13	0.31	3	0	5.0	7	4.5	36	40	NW	9	9	7	15	6.3	62
WILLISTON	1899			9	-14	- 2.7	-11.0	35	14	-40	29	0	31			0.42	- 0.13	0.14	9		4.3	6			49	NW	9	6	6	19	7.2	49
OHIO																																
AKRON	1208	974.6	1021.0	30	14	22.0	- 6.3	54	2	- 8	29	0	29	15	76	2.03	- 0.83	0.54	14	0	16.3	10	4.6	28	29	29	27	1	10	20	8.1	
CINCINNATI OBS	761			32	18	25.2	- 8.5	56	2	-10	30	0	28			3.57	- 0.10	1.64	8		5.0	5			22	N	16					43
CLEVELAND	777	990.5	1021.0	29	15	21.9	- 5.7	54	2	- 6	29	0	29	16	79	1.53	- 1.14	0.41	18	0	15.3	6	5.6	25	32	E	2	1	5	25	8.6	33
COLUMBUS	812	990.9	1022.4	29	15	22.2	- 7.7	54	2	- 9	24	0	28	14	72	2.87	- 0.29	0.89	9	0	7.6	6	3.7	31	30	W	10	2	10	19	7.7	48
DAYTON	1002	984.8	1022.6	30	14	21.8	- 7.8	54	2	-10	30	0	29	13	71	2.33	- 0.85	1.00	10	0	5.2	4	3.6	29	27	W	27	4	8	19	7.6	50
MANSFIELD	1295			28	13	20.3	- 7.0	52	2	- 8	28	0	29			1.55	- 1.67	0.49	10	0	8.0	5						2	9	20	8.0	
TOLEDO	676	995.9	1022.3	28	13	20.2	- 6.1	51	2	- 6	28	0	29	11	65	0.46	- 1.87	0.20	12	0	5.3	3	5.3	28	35	NW	27	5	6	20	7.3	55
YOUNGSTOWN	1178	975.6	1020.4	28	14	20.7	- 6.6	52	1	- 7	29	0	29	14	76	2.73	- 0.43	0.62	20	0	23.4	10	5.0	28	27	29	27	2	4	25	8.3	
OKLAHOMA																																
OKLAHOMA CITY	1280	973.9	1021.8	43	25	33.8	- 3.2	67	9	2	30+	0	24	25	74	1.05	- 0.26	0.50	7	1	5.8	4	1.5	4	31	SW	9	11	5	15	5.6	60
TULSA	650	997.6	1022.8	43	23	32.8	- 3.4	63	9+	1	29	0	28	23	70	0.69	- 1.02	0.17	7	0	4.3	2	0.9	4	30	SW	9	10	6	15	6.0	59
OREGON																																
ASTORIA	8	1014.6	1015.3	48	37	42.3	1.6	55	28+	25	20+	0	8	39	89	8.61	- 3.10	1.20	27	2	0.7	2	4.4	19	36	26	2	2	1	28	9.2	
BURNS U	4151	872.7	1019.4	37	18	27.1	2.3	48	6	- 1	20	0	30	21	78	0.79	- 0.83	0.20	11		8.0	5	2.1	27				4	6	21	7.7	
EUGENE	359	1003.7	1017.6	46	36	41.3	2.2	57	27	25	19	0	7	38	90	10.97	4.64	3.98	20	1	0.1	2	5.6	18	30	17	3	0	4	27	9.2	
MEACHAM	4050			34	24	29.1	3.1	45	8	7	20	0	29			4.23	0.03	0.92	23		36.7	17						2	2	27	9.0	
MEDFORD	1298	971.2	1019.8	46	31	38.2	2.8	57	28	18	21	0	18	33	83	4.80	1.66	2.15	11	0	3.4	3	1.0	16	30	13	29	1	6	24	8.6	
PENDLETON	1482	963.1	1017.7	44	32	38.3	6.1	61	8	19	20	0	16	29	73	2.19	0.77	1.08	14	0	11.5	8	3.2	23	40	22	1	2	2	27	9.1	
PORTLAND	21	1015.6	1016.9	46	35	40.3	1.9	55	13+	24	20	0	10	37	87	5.74	0.37	1.37	20	0	T	0	5.3	16	36	SW	1	0	2	29	9.3	19
SALEM	196	1009.5	1016.8	46	34	39.6	1.1	54	5	22	19	0	15	37	88	6.60	- 0.10	1.58	20	0	1.7	2	7.2	18	40	18	1	0	5	26	9.1	
SEXTON SUMMIT R	3836	883.2	1018.6	38	29	33.6	- 0.5	50	27	19	1	0	21			5.73	0.14	2.00	17		17.4	70			60	17	3	5	2	24	8.2	
PACIFIC AREA																																
CANTON ISLAND	8			88	77	82.7	- 0.4	91	4+	72	28+	9	0			20.49	17.88	5.56	19		0.0	0						0	3	28	9.5	
ENIWETOK	13	1010.5	1011.2	85	75	80.2	- 1.0	87	25	73	30+	0	0	72	76	2.04	1.02	0.33	20		0.0	0	18.8	4								
TAGUAC GUAM R	361			83	71	77.0	- 1.2	84	31+	64	28	0	0			2.13	- 2.50	0.77	16		0.0	0			24	NE	23+					67
JOHNSTON	7	1013.5	1014.1	80	73	76.6	- 0.5	82	13	68	22	0	0	66	71	0.71	- 3.18	0.16	15	1	0.0	0	15.8	8	36	NE	6	9	17	5	5.3	64
KOROR R	94	1007.8	1011.6	85	75	79.6	- 0.7	87	4+	72	22	0	0	73	80	8.23	- 3.50	3.42	23	1	0.0	0	10.1	7	26	NE	23+	0	0	31	10.0	50
KWAJALEIN	8	1009.1	1010.0	86	76	80.7	0.6	87	31+	71	24	0	0	73	78	2.97	- 0.64	0.79	17	0	0.0	0	18.5	6	30	5	12	0	10	21	8.5	
MAJURO	10	1009.1	1009.5	85	77	81.0	0.8	87	20	74	24	0	0	73	78	3.79	- 3.19	1.71	15	0	0.0	0	13.7	7	31	E	23	0	4	27	9.1	63
MARCUS ISLAND	20			77	67	72.3	0.2	83	6	63	18	0	0			1.37	- 2.39	0.68	9		0.0	0			36	E	5	9	14	8	5.2	62
PONAPE R	123	1004.4	1010.0	85	75	80.1	- 0.4	87	31+	70	7	0	0	73	80	15.84	4.77	4.34	23	0	0.0	0	9.5	5	22	E	23	0	3	28	9.2	41
TRUK MOEN ISLAND	5	1009.8	1010.1	84	76	80.1	- 0.6	85	31+	73	17+	0	0	73	79	4.61	- 3.79	1.10	25	0	0.0	0	13.8	7	29	NE	21	0	4	27	8.8	62
WAKE	11	1015.9	1016.1	80	71	75.6	- 1.8	83	6	66	18	0	0	65	72	0.67	- 0.47	0.25	9	0	0.0	0	12.2	4	29	2	11	6	17	8	5.5	
YAP R	55	1009.5	1011.4	84	75	79.6	- 0.9	85	29+	71	1	0	0	72	79	4.98	- 2.89	2.83	17	0	0.0	0	12.2	4	26	NE	15+	0	1	30	9.6	48

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind						No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	F.	°F.	°F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1003.1	1017.4	34	19	26.2	-2.8	54	1	-1	29	0	27	15	65	4.20	1.03	1.20	11	0	24.1	16	8.1	30	46	25	30	7	8	16	6.6	
ERIE	732	992.6	1020.3	29	16	22.8	-4.5	52	3	-6	29	0	30	16	75	2.01	-0.66	0.58	22	0	29.9	14	6.4	28	30	28	31+	1	3	27	8.9	
HARRISBURG	338	1005.4	1018.7	33	20	26.3	-5.0	61	1	0	29	0	26	13	59	3.57	0.81	0.97	9	1	24.8	17	8.2	30	42	NW	30	8	4	19	7.2	55
PHILADELPHIA	5	1016.3	1017.4	36	22	29.1	-3.2	60	1	4	29	0	26	17	62	2.82	-0.50	0.87	11	0	16.0	10	7.9	32	38	W	31	10	6	15	6.3	52
PITTSBURGH	1137	974.6	1020.6	30	16	23.1	-5.8	55	3+	-10	29	0	28	17	77	4.52	1.55	1.42	16	0	24.6	15	5.5	28	35	29	30	1	5	25	8.8	28
READING U	266			35	24	29.5	-3.2	58	1	5	29	0	25			4.18	1.11	1.33	11		22.4	18			54	W	30	8	7	16	6.4	44
SCRANTON	930	982.4	1017.8	30	18	23.8	-3.9	58	1	-1	29	0	26	14	68	1.66	-0.63	0.44	13	0	20.7	13	5.2	30	32	NW	30	4	6	21	7.6	48
WILLIAMSPORT	527	998.6	1018.5	33	19	25.7	-3.1	57	1	-1	29	0	27	13	59	3.32	0.65	1.11	11	0	25.6	20	7.6	29	32	27	30	3	8	20	7.5	
RHODE ISLAND																																
BLOCK ISLAND	110			35	24	29.3	-2.8	52	1	8	16	0	24			3.23	-0.61	1.08	9		8.5	3						8	9	14	6.2	
PROVIDENCE	51	1011.5	1013.7	36	22	28.8	-0.4	62	1	6	16	0	27	17	63	3.40	-0.41	0.93	11	0	16.1	8	8.8	31	40	24	31	10	7	14	5.9	60
SOUTH CAROLINA																																
CHARLESTON	41	1017.3	1019.1	54	34	43.9	-5.9	76	1	11	30	0	15	34	73	6.68	4.14	1.81	11	0	0.8	1	3.8	33	47Y	NW	30	10	2	19	6.5	54
CHARLESTON U	9			53	39	46.3	-5.2	74	3	14	30	0	8			6.94	4.54	1.88	11	0	0.5	1			42	NE	15					
COLUMBIA	217	1011.2	1019.6	50	31	40.3	-6.6	77	2	7	30	0	19	30	71	7.22	4.20	2.32	13	0	1.0	1	2.6	32	31	26	29	10	2	19	6.3	49
GNVLE-SPARTANBURG	957	984.4	1020.1	45	28	36.5	-7.2	68	1	-6	30	0	23	25	67	4.64	0.36	1.58	10	0	9.1	3	3.3	36	29	N	8	11	2	18	6.0	47
SOUTH DAKOTA																																
ABERDEEN	1296	976.6	1027.2	10	-11	-0.1	-10.9	41	9	-30	30+	0	31	-11	60	0.16	-0.50	0.06	8	0	3.3	1	4.7	2	33	32	9	11	8	12	5.6	
HURON	1282	976.6	1026.6	16	-7	4.5	-8.0	46	9	-34	29+	0	31	-5	65	0.32	-0.16	0.12	9	0	6.7	4	2.7	35	42	NW	9	10	5	16	5.8	69
RAPID CITY	3165	905.2	1022.0	26	2	14.2	-7.8	64	8	-22	20	0	31	0	55	0.24	-0.12	0.12	6	0	2.4	1	2.8	1	51	NW	8	5	6	20	7.7	45
SIOUX FALLS	1418	970.9	1025.9	16	-6	5.1	-10.1	47	9	-29	29	0	31	-3	68	0.54	-0.08	0.22	12	0	6.2	3	2.7	2	31	32	9	7	8	16	6.5	
TENNESSEE																																
BRISTOL	1507	965.1	1021.2	39	20	29.5	-8.8	68	2	-15	31	0	25	21	73	3.30	-0.39	0.84	14	0	22.1	13	1.8	30	18	6	22+	5	7	19	7.3	
CHATTANOOGA	670	995.9	1021.5	42	24	33.1	-8.6	64	2	-10	31	0	23	26	76	3.67	-1.94	0.90	11	0	8.4	8	3.2	36	20	NW	29+	9	2	20	6.9	34
KNOXVILLE	980	985.4	1021.7	41	27	34.0	-7.4	68	1	-9	30	0	22	25	70	3.88	-1.00	0.90	11	0	14.2	10	2.6	35	22	SW	2	7	4	20	7.3	34
MEMPHIS	255	1012.5	1023.0	42	27	34.2	-7.3	69	1	2	30	0	23	24	68	2.84	-3.23	1.13	13	0	12.2	4	3.8	3	29	NW	29	10	4	17	6.5	47
NASHVILLE	590	999.7	1022.3	41	23	32.3	-7.6	67	2	-6	30	0	25	24	70	3.93	-1.56	1.07	9	0	11.4	8	3.2	35	26	SW	1	7	6	18	6.9	43
OAK RIDGE	905			42	25	33.1	-6.8	64	2	-9	30	0	22			3.72	-2.22	1.10	11		9.6	7						7	3	21	7.3	
TEXAS																																
ABILENE	1762	957.3	1020.7	50	29	39.3	-5.3	74	11	7	30	0	22	27	64	0.85	-0.03	0.28	7	0	6.6	4	0.7	21	39	W	31	13	5	13	5.2	58
AMARILLO	3604	891.6	1019.1	41	15	27.8	-8.9	65	9	-6	29+	0	30	15	65	0.43	-0.22	0.30	5	0	7.2	6	2.9	25	32	NE	16	13	5	13	5.0	66
AUSTIN	597	998.6	1021.2	55	36	45.3	-5.1	74	1	14	30	0	10	35	72	1.58	-0.77	0.40	10	0	T	0	4.5	1	31	NW	29+	9	6	16	6.3	47
BROWNSVILLE	16	1018.6	1019.2	63	46	54.3	-7.1	78	1	34	27+	0	0	48	84	3.45	2.10	1.79	12	0	0.0	0	4.1	34	35	N	29	9	4	18	7.0	50
CORPUS CHRISTI	41	1018.3	1020.0	59	42	50.5	-6.9	77	1	26	30	0	6	45	83	2.12	0.49	0.94	12	0	0.0	0	5.6	2	40	S	31	5	7	19	7.4	31
DALLAS	481	1004.1	1021.9	49	32	40.7	-5.2	70	1	10	30	0	16	31	71	1.78	-0.54	0.74	7	1	3.1	2	2.7	5	50	W	1	8	9	14	6.2	50
DEL RIO	1026	983.4	1020.5	58	36	46.8	-4.5	71	10	23	30	0	7	36	72	0.94	0.05	0.65	6	0	T	0	1.5	7	21	1	28	11	6	14	5.5	
EL PASO	3918	882.8	1017.6	53	28	40.1	-2.8	67	30	20	26+	0	27	20	48	0.38	-0.08	0.16	5	1	0.4	T	2.1	35	44	W	31	18	5	8	3.4	84
FORT WORTH	537	1001.0	1022.3	49	32	40.3	-5.2	68	11+	9	23	0	14	31	72	1.68	-0.36	0.79	8	1	4.4	3	2.2	2	44	26	1	10	6	15	6.3	
GALVESTON U	7			56	45	50.5	-4.4	71	12	23	30	0	3			5.52	2.06	1.23	13		T	T			32	NW	28					39
HOUSTON U	41			56	43	49.4	-5.2	75	1	21	30	0	4			4.41	0.69	0.88	12		0.0	0										
HOUSTON	50	1018.6	1020.7	57	40	48.4	-5.2	78	1	20	30	0	6	40	77	4.46	0.68	0.94	12	0	0.0	0	4.6	2	30	15	31	6	4	21	7.6	37
LUBBOCK	3254	904.8	1019.2	47	21	34.2	-5.0	72	9	-3	22	0	29	19	60	0.52	-0.16	0.40	4	0	4.9	4	1.8	29	32	26	1	12	8	11	4.9	
MIDLAND	2851	918.1	1018.5	51	25	38.0	-6.0	71	9	2	22	0	28	25	69	0.48	-0.32	0.24	5	0	3.6	3	0.4	16	40	28	31	13	10	8	4.5	
PORT ARTHUR	16	1020.0	1020.7	56	40	48.0	-5.6	78	1	20	30	0	6	43	85	6.22	1.99	1.50	12	1	0.0	0	4.8	3	39	NW	2	4	6	21	7.8	37
SAN ANGELO	1903	951.9	1020.4	52	29	40.7	-6.2	72	11+	12	30	0	23	29	70	0.49	-0.48	0.20	6	1	1.9	1	0.5	21	32	28	31	11	7	13	5.5	
SAN ANTONIO	788	992.6	1021.1	56	35	45.4	-6.6	74	1	16	30	0	11	37	78	1.47	-0.27	0.46	7	0	T	0	4.4	2	28	NW	29+	10	4	17	6.5	49
VICTORIA	104	1016.3	1020.4	58	40	48.9	-6.5	76	1	20	30	0	6	42	81	3.71	1.37	1.05	10	0	0.0	0	5.2	1	38Y	N	29	6	8	17	7.1	
WACO	500	1003.1	1021.5	51	33	42.1	-5.9	70	1	12	30+	0	11	32	71	1.15	-1.12	0.49	7	0	2.6	2	2.9	35	28	34	28	9	7	15	6.1	
WICHITA FALLS	994	983.7	1021.6	46	24	34.8	-8.0	72	9	-5	23	0	25	27	78	1.10	-0.02	0.46	6	0	11.9	7	0.6	4	30	30	31+	12	3	16	5.7	
UTAH																																
MILFORD	5028			38	12	24.9	0.3	50	10	-14	2	0	31			0.57	0.00	0.30	5		9.1	4						15	8	8	4.8	
SALT LAKE CITY	4220	873.4	1021.3	40	21	30.6	3.4	53	8	5	2	0	30	20	68	0.41	-0.94	0.19	7	0	5.9	4	2.0	16	26	S	3	3	10	18	7.3	66
WENDOVER	4237			36	20	27.9	0.9	46	14	10	21	0	31			0.07	-0.25	0.06	3		0.4	T						9	8	14	5.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1003.1	1016.1	23	8	15.5	- 0.7	56	1	-20	26	0	31	8	73	2.02	0.07	0.58	18	0	41.3	22	2.3	33	32	SW	10	4	7	20	7.7	42
VIRGINIA																																
LYNCHBURG	916			40	23	31.3	- 6.3	68	1	5	31+	0	27			3.62	0.33	0.89	14	0	31.8	25			34	SW	31	9	4	18	6.4	58
NORFOLK	26	1017.3	1018.4	43	29	35.8	- 5.4	73	2+	10	31	0	24	24	64	4.86	1.53	1.38	10	0	14.2	12	5.4	32	37	NW	30	8	7	16	6.2	46
RICHMOND	162	1013.2	1019.2	40	22	31.1	- 7.6	71	1	6	17	0	27	19	64	4.58	1.12	1.28	12	0	26.2	15	3.5	34	29	NW	23	10	6	15	6.2	58
ROANOKE	1149	976.0	1019.5	38	23	30.6	- 7.5	64	1	3	30	0	26	18	62	4.26	1.14	1.72	11	0	41.2	20	6.0	29	37	29	30+	7	9	15	6.5	
WASHINGTON																																
OLYMPIA	195	1008.1	1015.4	44	35	39.4	1.3	53	7	23	24	0	13	38	93	7.89	0.04	1.57	20	0	10.7	4	5.8	20	30	19	1	0	1	30	9.7	
SEATTLE TACOMA	400	998.3	1014.9	46	36	41.1	2.8	55	28	27	24	0	8	34	78	5.43	- 0.30	1.59	19	1	2.1	1	5.5	19	33	20	1	0	1	30	9.6	11
SPOKANE	2356	930.6	1016.5	35	25	29.7	4.4	49	8	- 1	24	0	24	26	84	1.94	- 0.50	0.61	14	0	13.9	10	4.7	20	39	S	2	0	6	25	9.0	15
STAMPEDE PASS R	3958			30	22	25.9	2.4	39	13	12	20	0	31			11.99	- 0.04	1.86	26		82.6	98						0	1	30	9.5	
TATOOSH ISLAND R	101	1009.1	1012.1	47	40	43.4	1.4	53	30+	32	4	0	1	39	84	13.66	2.84	3.17	27	2	4.9	1	8.8	16	70	SW	1	1	2	28	9.1	12
WALLA WALLA U	949			45	33	39.0	5.8	64	7	24	25+	0	17			2.22	0.33	0.95	13		10.0	1			49	W	2	1	2	28	9.2	17
YAKIMA	1052	978.0	1017.6	37	22	29.2	1.7	50	14	5	1	0	30	24	82	1.73	0.54	0.67	8	0	14.6	15	3.4	26	26	18	2+	2	4	25	8.8	
WEST INDIES																																
SAN JUAN P.R.	15	1013.2	1015.7	85	70	77.4	3.0	89	27+	67	31+	0	0	69	77	1.34	- 3.36	0.44	11	0	0.0	0	4.8	10	28	E	4	9	15	7	5.3	61
SWAN ISLAND	28			81	73	77.2	- 1.1	84	25+	69	30+	0	0			6.54	3.10	3.21	13	0	0.0	0						6	15	10	5.9	
WEST VIRGINIA																																
BECKLEY	2504	928.5	1021.5	33	16	24.6		62	2	- 9	30	0	27	17	74	3.54		1.02	17	0	25.2	14	3.3	27	29	28	30	3	4	24	8.2	
CHARLESTON	939	985.8	1021.3	35	19	27.1	- 9.5	64	2	3	30+	0	28	18	70	3.57	- 0.75	1.12	10	0	19.8	12	2.4	26	22	24	30	3	7	21	8.0	
ELKINS	1970	946.5	1020.4	34	15	24.2	- 8.3	61	2+	- 9	28	0	28	17	76	3.49	- 0.13	0.94	17	0	21.1	12	5.1	29	33	30	3	3	4	24	8.2	
HUNTINGTON	827	990.5	1021.9	34	19	26.6	-10.0	64	1	- 5	30	0	28	18	71	3.26	- 0.39	1.11	12	0	12.9	9	2.5	29	20	26	30	2	6	23	8.2	
PARKERSBURG U	615			34	19	26.4	- 8.2	64	1	- 2	30	0	28			4.14	0.80	1.25	11		17.3	14			26	W	30					35
WISCONSIN																																
GREEN BAY	682	995.9	1023.3	18	- 2	7.9	- 8.9	35	4	-25	29	0	31	2	76	1.18	0.03	0.58	9	0	14.6	8	5.4	30	29	W	10	15	7	9	4.6	64
LA CROSSE	651	1000.0	1026.3	19	- 3	7.7	- 8.8	42	1	-24	29	0	31	- 2	65	0.77	- 0.42	0.45	7	0	10.9	7	2.9	29	24	32	7	14	9	8	4.7	
MADISON	858	990.5	1023.9	20	0	10.0	- 7.5	43	5	-23	29	0	31	3	70	1.07	- 0.33	0.58	8	0	9.6	8	4.5	31	30	NW	10+	12	7	12	5.1	74
MILWAUKEE	672	997.0	1023.7	22	6	13.9	- 6.7	44	5	-23	29	0	31	8	75	2.06	0.23	1.29	14	0	24.6	16	5.9	30	31	SW	10+	14	6	11	4.9	65
WYOMING																																
CASPER	5338	834.7	1018.1	33	11	21.8	- 1.6	51	7	-16	20	0	30	9	58	0.30	- 0.26	0.11	7	0	5.5	2	12.9	24	39	23	3	4	10	17	7.3	
CHEYENNE	6126	808.7	1017.6	38	13	25.8	0.4	61	8	-19	21	0	29	6	46	0.11	- 0.41	0.08	4	0	1.3	1	10.2	29	51	W	9	8	6	17	6.6	60
LANDER	5563	825.9	1018.2	34	11	22.7	3.4	56	6	-14	21	0	31	9	59	0.27	- 0.19	0.16	5	0	9.3	5	2.2	27	66	SW	8	4	12	15	7.0	70
SHERIDAN	3964	877.4	1020.4	32	5	18.4	- 2.9	67	8	-18	25+	0	31	5	57	0.36	- 0.28	0.13	9	0	8.6	5	4.1	30	47	SW	6	2	6	23	8.1	37

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

V Sun below horizon January 1-23, inclusive.
X Sun below horizon January 1-17, inclusive.

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No of days: Max 32 2 °C or above	No of days: Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1 6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M	Mb	Mb.	C.	C.	C	C.	C		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	998.3	1021.3	8.3	- 1.7	3.2	-4.9	21.1	2	-20.0	30	0	21	- 1.7	73	120	- 7	40	12	1	30	25	1.2	2	10.7	NW	29	7	4	20	7.2	38
HUNTSVILLE	183	998.0	1021.8	6.7	- 2.8	1.8	-4.2	20.6	1	-23.9	30	0	21	- 2.8	72	109	- 24	31	12	0	203	178	1.6	1	9.8	36	29	8	3	20	7.1	
MOBILE	64	1012.2	1020.3	12.8	4.4	8.4	-3.2	24.4	2+	-10.6	30	0	7	3.9	75	140	22	26	14	0	T	0	2.8	4	13.0	36	29	5	7	19	7.5	
MONTGOMERY	59	1013.5	1020.9	10.0	0.6	5.5	-3.4	23.9	2	-15.0	30	0	14	0.0	72	157	54	39	16	0	T	0	1.5	2	12.1	E	29	7	2	22	7.2	35
ALASKA																																
ANCHORAGE PRK STRIP	26			- 8.9	-16.1	-12.5	-1.6	4.4	31	-27.8	13	B 0	31			8	- 12	4	4		127	660										
ANCHORAGE	43	1003.7	1009.0	- 8.3	-16.7	-12.4		5.6	31	-28.3	13	0	31	-16.7	69	16		8	4	0	246	635	1.7	1	14.3	17	31	11	2	18	6.3	39
ANNETTE	34	1004.1	1008.3	1.1	- 4.4	- 1.7	-3.1	6.7	16+	-14.4	4+	0	25	- 6.1	71	284	- 4	92	17	0	251	102	2.6	8	13.0	17	16+	3	6	22	8.3	
BARROW	7	1020.3	1021.0	-22.8	-30.0	-26.5	0.3	- 8.9	2	-40.0	14+	0	31	-31.1	68	3	- 2	3	3	0	41	432	4.2	10	13.4	11	28	V	V	V		
BARTER ISLAND	12	1019.6	1021.7	-23.9	-31.7	-27.8	-0.7	- 4.4	3	-41.1	13+	0	31	-30.6	76	1	- 9	1	3	0	43	533	3.8	11	19.2	10	28	X	X	X		
BETHEL	38	997.3	1003.0	-11.1	-17.8	-14.7	1.1	3.9	22	-31.1	1	0	30	-19.4	71	2	- 27	1	5	0	25	229	5.9	4	13.9	10	22	5	3	23	7.7	
COLD BAY	29	990.9	994.5	1.7	- 1.1	0.4	2.8	6.1	21	- 6.1	26+	0	20	- 1.1	88	56	- 3	12	23	0	236	102	4.2	15	22.4	15	22	0	2	29	9.5	
FAIRBANKS	133	999.0	1017.9	-28.3	-37.8	-33.0	-9.1	-15.0	26	-46.7	30	0	31	-36.1	77	T	- 22	T	1	0	18	889	0.7	36	4.5	35	21	23	3	5	2.2	
JUNEAU	4	1011.9	1012.6	- 8.3	-17.8	-13.0	-9.2	0.6	16	-28.9	28	0	31	-16.1	77	110	9	54	9	0	1392	965	2.1	8	13.0	13	4+	14	4	13	4.9	60
KING SALMON	13	999.3	1001.4	- 3.3	-10.0	- 6.6	3.7	3.9	27	-33.9	2	0	27	- 9.4	79	11	- 16	6	9	0	36	406	3.7	7	18.3	9	22	4	6	21	7.5	
KOTZEBUE	3	1012.9	1013.4	-16.1	-23.3	-19.8	1.2	- 5.0	27	-35.0	31	0	31	-25.6	62	T	- 10	T	0	0	T	584	6.9	10	20.6	12	1	15	4	12	4.5	
MC GRATH	106	999.0	1013.1	-23.9	-34.4	-29.1	-6.3	- 7.2	23	-44.4	12	0	31	-34.4	61	12	- 20	10	4	0	386	889	0.3	33	5.4	8	30	14	7	10	4.8	
NOME	4	1006.8	1007.7	-10.0	-18.3	-14.1	1.3	0.6	26	-30.0	31	0	31	-18.3	72	8	- 18	3	9	0	79	457	5.7	7	21.5	4	30	9	9	13	5.7	45
ST. PAUL ISLAND	7	991.5	992.4	2.2	- 1.1	0.3	3.9	3.9	21	- 8.9	25+	0	18	- 0.6	94	73	27	17	25	0	145	25	4.1	10	19.2	4	18	0	2	29	9.5	
SHEMYA	37	985.4	989.1	1.1	- 2.2	- 0.4	-0.1	4.4	1	- 7.8	26	0	28	- 2.2	86	54	- 9	9	26	0	310	76	1.5	21	27.3	15	27	1	7	23	8.3	
YAKUTAT	9	1007.1	1008.1	- 4.4	-16.7	-10.6	-7.9	3.3	31+	-28.3	8	0	31	-13.3	77	61	-215	19	11	0	617	787	3.0	10	14.3	7	2	8	6	17	6.4	
ARIZONA																																
FLAGSTAFF	2131	785.3	1020.2	3.9	-13.3	- 4.7	-2.1	12.2	9	-24.4	3	0	31	-11.7	63	28	- 19	8	8	0	368	279	0.5	6	10.3	3	13	14	8	9	4.7	
PHOENIX	340	977.7	1017.2	16.7	1.7	9.0	-0.8	23.9	7	- 2.2	25+	0	11	1.1	64	9	- 10	9	3	0	0	0	0.8	10	13.0Y	E	17	16	5	10	4.1	79
TUCSON	788	926.9	1016.1	15.6	2.2	8.7	-1.2	23.9	10	- 2.8	25	0	10	- 2.2	55	44	23	21	6	1	T	0	1.8	13	14.3	SE	17	15	11	5	3.6	85
WINSLOW	1492	852.7	1023.4	2.8	-11.7	- 4.4	-3.9	13.3	11+	-22.2	22	0	31	-10.0	71	17	6	9	5	0	244	178	1.1	23	10.7	21	30	15	7	9	4.6	
YUMA	59	1010.2	1017.6	17.8	5.0	11.2	-0.7	22.8	7	0.0	24+	0	2	0.0	52	10	1	9	3	0	0	0	2.6	1	12.1	N	12	17	4	10	3.9	80
ARKANSAS																																
FORT SMITH	137	1005.4	1022.8	7.2	- 4.4	1.4	-2.9	18.9	1	-17.8	30	0	26	- 3.9	70	57	- 11	41	7	0	147	102	0.8	2	11.6	SW	12	8	7	16	6.5	51
LITTLE ROCK	78	1013.2	1023.1	6.7	- 2.8	1.9	-2.9	21.1	1	-16.7	30	0	25	- 2.8	72	77	- 56	27	13	2	305	178	1.4	3	11.6	N	29+	9	3	19	6.7	39
TEXARKANA	113	1008.5	1022.1	9.4	0.0	4.8	-2.4	20.6	1	-12.8	30	0	15	- 0.6	73	102	- 21	34	10	2	163	51	0.8	6				8	3	20	6.8	
CALIFORNIA																																
BAKERSFIELD	151	1002.4	1020.5	13.9	2.8	8.2	-0.3	20.0	26	- 0.6	17	0	5	1.7	70	18	- 12	18	1	0	0	0	0.7	8	11.2	12	26	10	12	9	5.2	
BISHOP	1252			9.4	- 6.1	1.6	-1.1	15.6	14	-11.1	22	0	31			0	- 25	0	0		0	0						11	11	9	4.8	
BLUE CANYON	1609			5.0	- 2.2	1.6	-1.2	12.2	13+	- 9.4	1	0	23			171	-126	71	7		919	1702			14.8	5	15	9	4	18	6.3	
BURBANK	221	991.2	1017.1	18.9	5.0	11.8	-0.2	26.1	7	0.6	24+	0	0	- 0.6	50	34	- 46	34	1	1	T	T	0.6	4	14.3	4	16	19	9	3	3.1	
EUREKA U	13			12.2	5.0	8.7	0.2	17.8	6	0.0	20+	0	2			240	70	53	17		0	0			14.8	S	4	6	2	23	7.4	50
FRESNO	100	1008.5	1020.6	12.2	0.0	6.3	-1.5	18.3	28+	- 3.9	25+	0	17	2.8	83	13	- 38	13	2	0	0	0	0.7	11	9.4	S	30	5	15	11	6.3	69
LONG BEACH	10	1016.6	1018.0	18.3	5.6	11.9	0.2	27.8	7	2.2	22+	0	0	5.0	67	30	- 20	30	1	1	0	0	0.3	35	12.5	9	16	18	7	6	3.5	
LOS ANGELES	30	1013.9	1017.5	17.2	6.7	12.0	-0.4	27.2	7	2.8	21	0	0	2.8	57	21	- 46	19	2	1	0	0	0.4	2	13.4Y	SW	30	19	8	4	3.3	
LOS ANGELES U	82			19.4	7.2	13.2	-0.1	27.8	7	3.9	23+	0	0			24	- 54	24	2		0	0			7.6	SW	30	20	8	3	2.8	72
MT SHASTA R	1080			5.0	- 3.9	0.5	-0.2	10.6	13	-14.4	1	0	29			227	66	86	12		1842	1524										
OAKLAND	2	1019.6	1019.7	13.3	6.1	9.7	0.8	20.6	15	1.7	20+	0	0	5.0	75	55	- 43	35	5	0	0	0	0.5	15	11.6	15	29+	10	6	15	5.9	
RED BLUFF	104	1007.1	1020.0	12.8	1.1	6.9	-0.6	19.4	15	- 4.4	21	0	14	0.6	72	91	- 18	57	8	0	0	0	0.4	28	17.9	S	3	7	5	19	6.9	56
SACRAMENTO	5	1019.3	1020.2	12.8	2.2	7.6	0.3	19.4	15	- 2.2	21+	0	7	2.8	77	49	- 32	35	5	0	0	0	0.4	9	11.6	N	15	9	6	16	6.2	63
SANDBERG R	1377			6.7	0.0	3.2	-1.2	16.7	8	- 5.0	1	0	19			17	- 47	15	2		203	178			22.8	7	15	15	12	4	3.6	
SAN DIEGO	4	1016.3	1017.3	17.8	6.7	12.2	-0.6	25.0	7	3.9	22+	0	0	5.0	65	33	- 18	21	5	0	0	0	0.4	36	11.6	W	30	19	5	7	3.5	86
SAN FRANCISCO	2	1019.6	1020.2	12.8	4.4	8.7	-0.6	17.8	15	- 1.1	2	0	4	4.4	77	69	- 33	40	6	0	0	0	0.4	18	17.4	S	29	10	8	13	6.0	
SAN FRANCISCO U	16			14.4	8.3	11.2	0.8	20.0	15	5.0	2	0	0			83	- 33	40	7		0	0			11.6	S	29					68
SANTA CATALINA	478			14.4	8.3	11.5	-0.5	23.9	7	6.1	20+	0	0			45	- 22	20	6	0	0	0						15	11	5	3.6	
SANTA MARIA	72			16.7	1.7	8.9	-1.2	23.3	6	- 2.8	2	0	13			27	- 45	25	4		0	0						19	8	4	3.2	
STOCKTON	7	1019.6	1020.8	12.2	1.1	6.7	-0.3	16.7	29	- 3.3	21	0	16	2.8	82	41	- 24	32	5	1	0	0	0.6	16	12.5	16	29	7	7	17	6.5	
COLORADO																																
ALAMOSA	2297			- 0.6	-20.6	-10.6	-2.4	7.8	11	-31.7	25+	0	31			7	1	7	3		119	102						15	9	7	4.3	
COLORADO SPRINGS	1873	808.0	1019.0	2.8	-10.6	- 3.8	-1.9	12.8	11+	-23.3	21	0	31	-13.9	51	10	3	3	5	0	152	76	2.1	2	15.6	33	31	10	7	14	6.0	
DENVER	1610	834.1	1016.8	6.7	-10.6	- 1.9	0.1	18.3	8	-25.0	21	0	30	-13.9	46	8	- 6	4	6	0	91	51	0.8	18	13.4	NW	9	7	9	15	6.4	77
GRAND JUNCTION	1480	854.0	1023.2	2.8	-11.1	- 4.2	-0.8	7.8	11	-20.6	21	0	31	-10.0	68	17	0	7	6	0	279	178	0.7	4	9.8	NW	11	12	6	13	5.4	75
PUEBLO	1428	854.4	1019.3	5.6	-12.8	- 3.6	-2.5	17.2	6+	-25.0	22	0	31	-13.9	51	8	0	3	7	0	251	152	0.4	33	15.2	N	1	13	5	13	5.4	73

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1015.2	1015.7	2.8	- 5.0	- 1.1	-0.1	16.7	1	-15.6	29+	0	26	- 6.7	68	64	- 29	18	7	0	269	152	4.9	32	27.3	29	30	7	11	13	6.2	
HARTFORD	52	1007.8	1014.6	0.6	- 7.2	- 3.1	0.2	16.1	1	-16.7	16	0	28	- 9.4	63	77	- 13	24	12	0	467	254	3.1	31	14.8	NW	30	8	4	19	6.8	66
NEW HAVEN	2			2.2	- 6.1	- 1.9	-0.6	15.6	1	-14.4	16	0	28			53	- 47	19	9		272	127			20.1	S	30	8	7	16	6.1	60
DELAWARE																																
WILMINGTON	24	1014.6	1017.7	2.9	- 5.6	- 1.5	-2.3	15.6	1	-15.0	29+	0	26	- 7.8	65	72	- 15	20	10	0	437	305	3.4	30	14.3	26	30	10	5	16	6.4	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.9	1018.4	4.4	- 3.9	0.2	-2.5	20.0	1	-12.8	31+	0	25	- 7.2	60	100	23	28	11	0	541	406	3.3	32	16.5	W	30	9	6	16	6.4	50
FLORIDA																																
APALACHICOLA U	4			13.9	6.1	10.0	-2.8	21.1	2	-10.0	30	0	5			178	98	52	12	0	0	0			13.9	NW	30	10	4	17	6.5	42
DAYTONA BEACH	9	1017.6	1019.0	18.9	8.9	13.9	-1.2	27.2	5	- 4.4	31	0	3	8.3	73	73	24	22	9	0	0	0	1.2	33	11.6	31	29+	6	7	18	7.0	
FORT MYERS	5	1017.6	1017.8	22.2	11.7	16.9	-0.6	28.3	5+	- 2.2	31	0	1	13.3	82	86	47	36	10	1	0	0	1.7	4	16.5	18	22	8	7	16	6.8	
JACKSONVILLE	6	1018.3	1019.2	16.7	5.6	11.1	-2.2	26.1	3+	- 6.7	31+	0	5	5.6	74	116	54	47	11	0	0	0	2.1	33	15.6	NW	27	7	8	16	6.4	55
KEY WEST	1	1016.3	1017.0	23.3	17.8	20.6	-0.3	27.2	6+	8.3	31	0	0	16.1	76	102	63	36	14	0	0	0	3.0	6	18.3	NW	29	5	11	15	6.7	57
LAKELAND U	65			19.4	9.4	14.4	-2.1	26.1	2	- 3.3	31	0	2			142	90	32	10		0	0						7	7	17	6.6	57
MIAMI	2	1017.3	1017.5	23.3	15.0	18.9	-0.5	27.2	21+	1.7	31	0	0	13.9	74	101	49	55	13	0	0	0	1.0	6	16.5	31	29	5	10	16	6.9	
ORLANDO	33	1014.6	1018.6	20.0	10.0	14.8	-0.9	27.2	3	- 4.4	31	0	2	8.9	73	113	62	22	10	0	0	0	1.2	35	13.9	18	22	7	5	19	6.8	
PENSACOLA	34	1016.3	1020.3	12.8	3.9	8.3	-3.7	25.0	2	-11.7	30	0	9	4.4	74	153	46	47	14		0	0	2.1	1	15.6	NW	29					38
TALLAHASSEE	17	1017.6	1019.8	15.0	3.9	9.5	-2.7	25.0	2	-11.1	30	0	8	4.4	74	235	148	66	13	2	0	0	1.7	35	11.2	23	15	7	7	17	6.9	
TAMPA	6	1018.6	1018.9	18.9	8.9	13.9	-2.3	27.2	3	- 4.4	31	0	3	8.3	74	103	49	40	11	0	0	0	1.6	3	11.2	15	22	6	8	17	6.9	58
WEST PALM BEACH	5	1016.9	1017.7	22.8	13.3	18.0	-1.4	28.9	6	0.0	31	0	1	13.3	75	158	95	57	13	1	0	0	0.8	3	15.6	31	29	5	5	21	7.5	
GEORGIA																																
ATHENS	244	990.5	1020.3	8.3	- 1.1	3.5	-3.5	21.7	2	-18.3	30	0	19	- 2.2	72	217	93	83	12	0	109	51	1.2	32	10.7	6	15	10	2	19	6.5	
ATLANTA	308	982.4	1020.4	7.2	- 1.7	2.6	-4.5	20.0	1	-19.4	30	0	21	- 2.8	72	151	38	45	13	0	18	T	1.5	34	13.9	W	29+	10	3	18	6.5	44
AUGUSTA	44	1014.6	1019.8	10.6	- 0.6	5.1	-3.6	25.6	2	-14.4	30	0	18	- 1.1	72	178	102	64	14	0	10	T	1.6	32	13.4	28	29	10	2	19	6.5	
COLUMBUS	117			10.6	0.6	5.6	-3.2	22.8	2	-16.1	30	0	15			200	97	64	11		T	T	1.3	1	12.1	29	29	7	5	19	7.0	
MACON	108	1007.1	1020.5	10.6	0.0	5.2	-4.3	24.4	2	-16.1	30	0	17	0.0	73	184	99	78	12	1	T	0	1.7	34	14.3	NW	30	8	5	18	6.5	48
ROME	194			7.8	- 3.9	1.9	-3.7	21.1	2	-20.0	31+	0	22			97	- 43	21	11		48	51										
SAVANNAH	14	1017.6	1019.5	13.3	1.1	7.2	-3.8	25.0	1	-12.8	30	0	16	2.2	75	154	83	43	12	0	T	T	1.5	33	16.5	NW	30	8	6	17	6.5	47
HAWAII																																
HILO	9	1015.2	1016.3	25.0	17.2	20.9	-0.6	30.0	5	15.0	6	0	0	17.2	82	319	19	71	26	2	0	0	0.9	27	10.7	35	6	2	9	20	7.8	25
HONOLULU	2	1015.6	1016.1	26.7	18.3	22.6	0.1	28.3	30	15.0	30+	0	0	15.6	68	35	- 60	21	7	1	0	0	3.1	5	10.7	NE	21	11	16	4	4.3	71
KAHULUI	15	1013.5		25.6	16.7	21.0	-1.3	27.8	17	12.8	14+	0	0			23	- 57	11	10	1	0	0	3.4	7	12.5	NE	2	12	14	5	4.6	70
LIHUE	31	1011.9	1017.2	24.4	17.8	21.0	-0.6	25.6	31	15.0	30+	0	0	16.7	79	41	- 99	23	13	1	0	0	2.9	5	10.3	SW	31	8	18	5	5.3	60
IDAHO																																
BOISE	865	917.7	1020.3	4.4	- 3.9	0.2	1.8	11.1	7	-12.8	24	0	24	- 4.4	75	21	- 13	7	10	0	91	76	1.9	14	14.3	SE	2	5	3	23	7.9	46
IDAHO FALLS 42NW R	1460			- 0.6	-13.3	- 6.8	3.5	7.2	6	-27.2	2	0	31			5	- 9	2	8				0.4	25	14.8	SW	8+					
IDAHO FALLS 46W R	1503			0.0	-12.2	- 6.2	3.0	6.7	6	-25.6	1	0	31			4	- 15	2	4		36	51	1.4	23	17.0	SW	8+					
LEWISTON	431			6.1	- 1.7	2.3	3.0	11.1	28+	- 8.9	20	0	20			36	8	21	11		424	305						1	4	26	8.8	
POCATELLO	1358	863.9	1021.3	1.7	- 8.3	- 3.5	1.9	8.9	8	-19.4	25	0	30	- 8.9	69	7	- 24	4	8	0	122	127	3.1	20	18.8	S	2	4	6	21	7.8	47
ILLINOIS																																
CAIRO U	96			3.3	- 4.4	- 0.5	-3.5	16.7	2	-17.8	30	0	26			128	14	77	9		66	51			11.2	N	29+	10	4	17	6.3	49
CHICAGO O HARE	201	997.6	1023.6	- 3.9	-13.9	- 8.7	-4.4	9.4	5	-28.9	29	0	31	-13.9	66	28	- 19	22	10	0	394	178	1.6	28	13.9	27	10	11	7	13	5.7	
CHICAGO MIDWAY	185	1000.0		- 3.3	-11.7	- 7.6	-4.2	8.9	5	-26.7	29	0	31	-13.9	63	28	- 19	21	10	0	231	127	2.0	28	14.3	W	2	11	6	14	6.0	57
MOLINE	177	1001.7	1024.6	- 5.0	-14.4	- 9.8	-4.6	8.3	9	-28.3	29	0	31	-14.4	70	51	10	36	10	1	152	76	1.7	29	13.9	NW	10+	9	10	12	5.9	64
PEORIA	199	999.3	1024.5	- 2.2	-11.7	- 6.9	-3.4	9.4	1	-25.6	29	0	31	-12.8	65	38	- 10	34	4	1	15	T	1.4	33	13.4	W	10	10	6	15	6.2	52
ROCKFORD	221	995.3	1023.7	- 5.0	-15.6	-10.3	-4.8	7.2	9+	-28.9	29	0	31	-15.0	68	35	- 15	26	6	0	279	229	1.7	30	13.0	26	10	13	8	10	5.0	
SPRINGFIELD	179	1001.0	1024.2	- 1.1	-10.0	- 5.6	-3.6	12.2	2	-23.9	29	0	30	-10.6	69	9	- 39	8	4	0	10	T	1.2	32	16.1	SE	12	12	5	14	6.0	54
INDIANA																																
EVANSVILLE	116	1009.1	1023.8	2.2	- 8.3	- 3.1	-4.3	16.1	2	-22.8	30	0	28	- 8.3	69	73	- 28	51	8	0	74	51	1.3	35	10.3	S	2	8	5	13	6.6	51
FORT WAYNE	241	990.9	1022.5	- 1.7	-10.0	- 6.1	-3.3	11.1	2	-22.2	30	0	29	- 9.4	77	10	- 58	3	8	0	79	25	2.1	29	14.8	S	2	6	6	19	6.9	42
INDIANAPOLIS	244	992.6	1023.2	- 1.1	- 9.4	- 5.3	-3.7	13.9	2	-23.9	30	0	29	-10.6	68	29	- 49	15	8	0	64	76	1.3	31	12.5	NW	10+	9	5	17	6.4	47
SOUTH BEND	236	993.2	1022.5	- 2.2	-10.6	- 6.5	-2.9	10.0	5	-25.0	30	0	30	-11.7	65	39	- 17	13	16	0	683	356	2.1	26	12.5	26	2	7	7	17	6.4	
IOWA																																
BURLINGTON	[illegible]			- 2.8	-12.8	- 7.7	-3.4	10.6	9+	-28.3	29	0	31	-12.8	69	33	- 9		2	1	8		[illegible]	34	[illegible]	31	12	9	11	11	5.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
											No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
	Elevation (ground)	Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	988.5	1025.4	- 5.6	-14.4	- 9.9	-3.2	9.4	5	-30.6	29	0	31	-14.4	70	24	- 9	14	4	1	91	76	1.4	35	12.5	SW	9	7	6	18	6.7	63
DUBUQUE	325			- 6.7	-17.2	-12.0	-4.9	7.8	5	-31.1	29	0	31			46	- 1	22	6		287	203						10	10	11	5.5	
SIOUX CITY	334	983.4	1025.7	- 6.1	-16.7	-11.2	-3.8	10.6	3	-30.0	29	0	31	-16.1	67	13	- 7	5	9	0	140	102	1.3	1	15.6	NW	9	6	12	13	6.3	66
WATERLOO	265	991.2	1025.0	- 7.8	-19.4	-13.4	-5.6	6.7	5+	-32.2	29	0	31	-17.2	72	43	14	29	8	0	206	127	1.9	32	13.4	31	10+	11	9	11	5.4	
KANSAS																																
CONCORDIA	448	967.8	1023.2	1.1	-11.1	- 5.1	-2.6	12.8	5	-23.9	29	0	31	-10.0	71	13	- 5	8	5	1	43	25	1.0	4	15.2	S	8	9	8	14	5.8	70
DODGE CITY	787	927.2	1021.7	2.2	-10.0	- 3.7	-3.2	18.3	8	-23.3	22	0	31	- 8.9	73	11	- 3	7	6	0	119	102	0.1	24	13.9	N	12	10	6	15	6.0	68
GOODLAND	1111	888.9	1021.1	1.1	-12.8	- 5.7	-3.2	15.6	8	-25.6	21	0	31	-11.1	72	13	3	5	8	0	274	152	1.3	24	12.5	19	10	10	9	12	5.8	
TOPEKA	267	990.5	1023.9	2.2	- 8.9	- 3.3	-1.6	13.9	9	-22.8	29	0	30	-10.0	64	4	- 22	2	2	0	13	25	1.3	2	11.2	NE	31+	10	8	13	5.9	61
WICHITA	403	972.9	1022.7	2.9	- 7.2	- 2.1	-2.1	14.4	1	-19.4	29	0	29	- 7.2	71	6	- 15	4	5	0	119	76	0.8	7	16.1	S	11	9	7	15	5.8	53
KENTUCKY																																
COVINGTON	265	989.5	1022.5	- 0.6	- 8.9	- 4.6	-4.3	12.8	2	-24.4	30	0	28	- 8.9	72	98	7	41	11	0	173	127	1.3	32	11.2	31	7	5	8	18	7.4	
LEXINGTON	294	985.8	1022.7	0.6	- 7.8	- 3.7	-5.1	15.0	2	-23.3	30	0	27	- 7.8	74	101	- 24	38	8	0	315	229	0.6	29	10.3	23	27+	4	6	21	7.7	
LOUISVILLE	144	1004.7	1023.0	1.1	- 6.7	- 2.7	-4.4	15.6	2	-22.8	30	0	28	- 8.9	64	146	41	71	11	0	178	152	1.4	35	17.0	NW	23	6	7	18	7.3	55
LOUISIANA																																
ALEXANDRIA	28	1017.3	1021.6	11.1	1.7	6.2	-4.0	22.2	1	-10.6	30	0	12	2.8	82	201	66	46	16	0	T	T	1.8	2	13.0	35	29	6	5	20	7.5	
BATON ROUGE	20	1018.0	1020.8	12.2	2.8	7.4	-4.2	26.1	1	- 9.4	30	0	9	3.3	78	252	131	52	16	1	T	T	1.9	2	13.4	34	29	5	4	22	7.9	
LAKE CHARLES	4	1019.6	1020.8	12.8	4.4	8.8	-3.2	25.0	1	- 5.6	30	0	5	5.6	82	165	52	38	11	1	0	0	2.3	4	11.6	35	29	5	3	23	8.0	
NEW ORLEANS	1	1019.3	1020.1	12.8	3.9	8.3	-4.3	26.7	2	- 7.8	30	0	8	5.0	81	321	223	78	16	1	0	0	2.2	2	14.8	28	28	6	2	23	7.7	
SHREVEPORT	77	1012.2	1021.5	10.0	1.7	5.7	-2.9	21.7	1	-10.6	30	0	14	1.1	75	107	- 15	31	16	2	5	T	1.7	4	14.3	17	31	7	5	19	7.2	40
MAINE																																
CARIBOU	190			- 3.9	-12.8	- 8.5	3.4	7.8	1	-21.7	13	0	31			52	- 1	11	17		770	813						6	6	19	7.2	
PORTLAND	19	1010.2	1012.4	- 0.6	-10.6	- 5.4	0.3	13.3	1	-23.3	12	0	29	-10.0	70	126	15	52	14	0	970	610	2.2	32	17.9	NE	30	10	6	15	6.2	57
MARYLAND																																
BALTIMORE	45	1012.9	1018.7	3.3	- 5.6	- 1.2	-2.8	17.8	1	-17.2	29	0	27	- 9.4	58	105	18	33	12	0	544	432	3.2	31	21.0	W	30	10	6	15	6.2	50
MASSACHUSETTS																																
BLUE HILL OBS R	192			0.0	- 7.8	- 4.0	-1.2	14.4	1	-17.8	16	0	30			145	31	52	14		1168	533			23.7	E	23					48
BOSTON	5	1012.2	1013.2	1.7	- 5.0	- 1.8	-0.6	16.1	1	-14.4	16	0	23	- 7.2	69	134	34	49	14	0	671	254	4.0	31	19.2	S	30+	12	1	18	6.2	53
NANTUCKET	13	1011.9	1012.3	2.2	- 5.0	- 1.3	-1.9	11.1	1	-12.2	17+	0	27	- 5.0	78	108	1	31	13	0	277	76	3.4	31	21.9	SW	30+	9	6	16	6.5	55
PITTSFIELD	357			- 2.2	-11.7	- 6.8	-1.2	13.9	1	-22.8	16	0	30			75		18	19		843	533										
WORCESTER	301	974.9	1013.2	- 1.1	- 9.4	- 5.4	-1.0	12.8	1	-19.4	16	0	30	-10.6	70	107	13	28	13	0	1118	914	4.2	30	20.1	30	28+	9	5	17	6.3	
MICHIGAN																																
ALPENA	210	993.9	1020.5	- 4.4	-14.4	- 9.5	-2.7	6.7	4	-26.1	15	0	31	-13.9	70	38	- 11	14	17	0	536	305	1.7	29	12.5	SE	2	2	13	16	7.4	35
DETROIT	189	997.3	1021.2	- 2.2	- 9.4	- 5.9	-3.1	8.3	2	-20.6	28	0	31	-10.6	70	17	- 35	6	10	0	170	102	3.2	30	17.9	W	3	5	11	15	6.8	44
DETROIT M WAYNE CO	193	995.9	1021.3	- 1.7	-11.1	- 6.4	-3.4	8.3	2	-22.2	28	0	31	-11.7	65	15	- 34	5	11	0	213	127	2.6	28				5	10	16	7.1	
DETROIT WILLOW RUN	217	992.2	1021.7	- 2.8	-11.1	- 6.9	-3.9	6.7	1	-21.1	29+	0	31	-12.2	65	12	- 37	5	7	0	112	76	2.9	28	13.4	28	27	5	9	17	7.0	
FLINT	235	991.9	1021.3	- 2.8	-12.2	- 7.5	-2.0	9.4	5	-23.9	29	0	31	-12.2	69	13	- 30	5	9	1	241	102	2.5	27	13.0	27	10	5	7	19	7.2	
GRAND RAPIDS	239	991.2	1021.7	- 2.2	-11.7	- 7.2	-2.7	10.6	5	-26.7	29	0	31	-11.1	74	31	- 18	14	13	0	658	279	1.7	28	17.9	W	10	5	7	19	7.1	47
HOUGHTON LAKE	351	977.0	1021.2	- 5.0	-16.7	-10.6		6.1	5	-27.8	16	0	31	-13.3	79	26		11	16	0	495	254	1.7	28	12.5	26	3	7	8	16	6.8	
LANSING	256	988.5	1021.8	- 3.3	-13.3	- 8.5	-4.2	8.3	5	-26.7	29	0	31	-10.0	85	22	- 28	11	14	0	272	152	2.4	28	15.6	NW	27	5	11	15	6.7	53
MARQUETTE U	206			- 6.1	-12.8	- 9.2	-2.3	2.8	4	-23.3	27	0	31			34	- 14	12	21		523	330			12.5	NW	27	0	7	24	8.6	42
MUSKEGON	191	998.0	1022.1	- 2.8	-11.7	- 7.3	-3.9	6.1	5+	-24.4	29	0	31	-10.0	78	45	- 9	14	18	0	1496	432	1.5	32	12.5	21	9	5	4	22	7.9	
SAULT STE MARIE	220	992.6	1020.6	- 7.2	-16.7	-11.9	-2.9	2.8	4	-27.8	28	0	31	-14.4	79	56	4	17	21	0	904	533	1.1	34	17.9	30	6+	5	4	22	7.7	40
MINNESOTA																																
DULUTH	435	969.5	1025.0	-12.2	-24.4	-18.5	-5.6	- 2.2	5	-38.3	28	0	31	-23.3	63	25	- 4	7	13	0	300	483	3.0	31	17.4	W	9	11	4	16	5.9	58
INTERNATIONAL FALLS	359	980.0	1027.3	-16.7	-30.0	-23.6	-7.5	- 6.1	19	-41.7	28	0	31	-27.2	68	19	- 3	11	10	0	249	813	2.0	29	11.2	29	26+	9	8	14	6.0	
MINNEAPOLIS	254	993.6	1026.4	-11.1	-21.1	-15.9	-5.1	2.8	1	-33.3	29	0	31	-20.6	66	24	6	11	7	0	302	203	1.7	34	14.8	NW	9	11	7	13	5.7	61
ROCHESTER	395	974.3	1025.6	-10.6	-21.1	-16.0	-5.8	4.4	1	-34.4	29	0	31	-20.6	69	17	- 6	10	5	0	267	127	2.1	31	16.1	30	9	12	9	10	4.9	
ST CLOUD	315	985.8	1026.6	-12.8	-23.9	-18.6	-6.4	- 1.1	9+	-35.0	28	0	31		66	18	- 1	8	10		284	178						10	8	13	6.0	
MISSISSIPPI																																
JACKSON	94	1009.5	1021.6	10.0	- 0.6	4.9	-3.9	23.3	1	-13.9	30	0	16	0.6	78	209	77	47	16	0	T	T	1.8	2	11.6	N	29	7	7	17	7.3	39
MERIDIAN	88	1010.2	1021.6	10.6	- 1.1	4.7	-4.3	22.8	2+	-14.4	30	0	19	0.6	79	184	65	45	15	1	T	T	1.7	1	9.8	31	29	5	7	19	7.2	
VICKSBURG U	71			9.4	1.7	5.6	-3.9	22.2	1	-12.8	30	0	14			161	31	36	16		T	T			11.6	N	8	7	4	20	7.0	43

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JANUARY 1966

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	993.9	1023.5	1.1	- 8.3	- 3.7	-2.7	13.9	9	-22.8	29	0	29	-10.0	65	5	- 38	2	3	0	38	25	0.9	2	15.2	SW	12	11	7	13	5.9	68
KANSAS CITY	226	995.6	1023.8	2.8	- 7.2	- 2.2	-2.1	13.9	9+	-21.7	29	0	29	- 9.4	61	5	- 30	5	3	0	T	T	1.3	3	10.7	W	12+	13	8	10	5.2	66
SAINT JOSEPH	247			2.2	- 8.9	- 3.6	-0.9	12.2	9	-25.0	29	0	30	-10.6	61	14	- 17	8	3	1	13	T	1.4	1	10.3	32	12+	11	9	11	5.0	
ST LOUIS	163	1003.1	1024.4	1.1	- 8.9	- 3.9	-3.8	14.4	9	-22.2	29	0	29	- 9.4	68	17	- 34	6	4	0	64	51	1.0	33	13.0	SW	12	9	7	15	6.2	50
SPRINGFIELD	386	975.6	1022.9	4.4	- 7.8	- 1.7	-2.6	14.4	9	-21.1	29	0	29	- 7.8	67	40	- 9	24	5	0	51	25	0.5	10	13.0	SW	9	8	12	11	5.8	57
MONTANA																																
BILLINGS	1087	890.3	1019.9	- 3.9	-14.4	- 9.4	-4.5	12.8	8	-28.3	20	0	28	-15.6	65	11	- 3	4	7	0	160	152	2.0	27	20.1	NW	8	3	5	23	7.9	46
GLASGOW	696			-13.9	-23.3	-18.4	-6.1	2.2	14	-33.9	20	0	31			13	1	4	10		213	178						1	8	22	8.3	
GREAT FALLS	1116	886.6	1021.1	- 5.0	-15.0	-10.1	-4.6	8.3	8	-30.6	20	0	29	-14.4	70	41	26	19	14	0	429	406	2.8	23	21.0	SW	8+	4	3	24	8.1	48
HAVRE	787			-12.8	-21.7	-17.2	-7.2	5.0	13	-33.9	20	0	31			17	5	4	13		295	152			14.3	SW	8	3	6	22	7.9	53
HELENA	1167	879.1	1019.6	- 0.6	-11.7	- 6.3	1.1	12.8	8	-23.3	25+	0	31	-11.7	66	12		4	8	0	160	102	1.5	26	24.1	SW	8	3	1	27	8.5	37
KALISPELL	904	909.2	1017.1	- 1.1	- 7.2	- 4.3	2.5	5.6	7	-19.4	20	0	28	- 6.7	84	41	6	10	19	0	574	229	0.7	16	16.5	2	19	1	1	29	9.5	
MILES CITY	801	924.1	1023.1	- 8.9	-20.0	-14.4	-5.8	6.1	14	-31.7	21	0	31	-17.8	75	17	6		11	0	211		0.8	36								
MISSOULA	972	903.2	1018.4	0.6	- 6.7	- 3.2	3.9	6.7	8	-17.8	25	0	30	- 5.6	83	37	13	14	12	0	363	254	0.3	26	13.4	NW	8	1	2	28	9.3	28
NEBRASKA																																
GRAND ISLAND	561	954.3	1024.3	- 2.2	-14.4	- 8.5	-3.3	11.1	13+	-26.7	29	0	31	-13.9	68	6	- 10	4	5	0	76	51	0.8	2	9.8	33	12	7	6	18	6.7	
LINCOLN U	351			- 2.8	-12.8	- 7.6	-3.7	10.0	9	-27.8	29	0	31			17	- 7	11	8		48	25			12.1	S	9	10	4	17	5.9	64
NORFOLK	471			- 5.6	-17.8	-11.6	-4.6	10.6	3	-32.2	29	0	31			13	- 7	10	8		145	102						7	8	16	6.6	
NORTH PLATTE	846	919.4	1022.5	- 2.8	-15.6	- 9.1	-4.7	11.7	5	-27.8	22	0	31	-13.9	73	8	- 3	5	5	0	267	178	0.9	5	12.1	NW	12	7	6	18	7.0	48
OMAHA	298	987.8	1025.1	- 2.2	-12.8	- 7.6	-2.2	10.0	9+	-27.2	29	0	31	-12.2	70	21		15	7	0	71	25	1.3	3	11.6	NW	12+	7	10	14	6.2	69
SCOTTSBLUFF	1206	879.1	1021.0	0.6	-13.9	- 6.9	-3.2	15.0	6	-31.7	21	0	31	-12.8	68	12	4	5	7	0	127	76	0.8	1	19.7	29	6	11	5	15	6.3	
VALENTINE	789			- 3.9	-17.2	-10.7	-4.0	12.8	8	-30.6	29+	0	31			7	- 3	3	7		112	102			18.8	NW	8	7	7	17	6.4	70
NEVADA																																
ELKO	1539	846.3	1023.0	1.7	-12.2	- 5.3	-0.1	10.0	8	-23.3	2	0	31	-10.0	71	6	- 23	2	6	0	122	76	0.3	24	10.3	17	30+	6	10	15	6.6	
ELY	1906	808.3	1021.6	2.2	-15.6	- 6.6	-1.5	12.2	7	-26.1	20	0	31	-15.6	51	6	- 14	4	2	0	89	152	2.5	20	13.9	S	30+	7	9	15	6.4	82
LAS VEGAS	659	941.8	1019.8	12.2	- 0.6	5.9	-0.2	18.3	11	- 4.4	23+	0	18	- 6.1	47	T	- 13	T	0	0	0	0	1.3	30	15.6	NW	1	15	9	7	4.2	85
RENO	1342	867.3	1020.0	8.9	- 7.2	0.8	1.7	16.7	29	-13.9	21+	0	30	- 6.7	63	T	- 30	T	0	0	T	T	0.5	18	21.5	SE	4	5	7	19	6.9	74
WINNEMUCCA	1310	868.9	1021.5	6.7	- 7.8	- 0.7	1.9	14.4	29	-18.3	20	0	30	- 7.2	64	1	- 26	1	3	0	10	25	1.0	16	13.4	S	29	6	5	20	7.0	43
NEW HAMPSHIRE																																
CONCORD	104	1000.7	1013.8	- 0.6	-12.8	- 6.4	-0.4	15.0	1	-27.2	26	0	30	-11.7	66	68	- 14	29	10	0	836	584	2.8	32	15.2	S	30+	13	2	16	5.9	57
MT WASHINGTON OBS	1909			-10.6	-19.4	-14.8	-0.5	2.2	1	-32.2	15	0	31			237	99	67	21	0	1623	330			59.5Y	E	30	2	8	21	8.1	27
NEW JERSEY																																
ATLANTIC CITY	20	1014.6	1017.0	2.8	- 6.7	- 1.9	-3.5	18.3	1	-17.8	29	0	26	- 7.8	66	88	- 3	26	11	0	284	279	4.1	31	17.9	27	30	10	8	13	5.9	61
ATLANTIC CITY C	3			3.9	- 3.9	- 0.1	-2.3	18.3	1	-13.9	29	0	26			79	- 16	22	11						26.8	W	30					
NEWARK	3	1015.2	1016.4	2.8	- 4.4	- 0.9	-1.6	16.7	1	-13.9	29+	0	24	- 7.8	62	58	- 26	15	9	0	259	178	4.1	30	19.2	24	31	8	10	13	6.2	
TRENTON U	17			2.2	- 4.4	- 1.2	-1.8	14.4	1	-14.4	29	0	26			86	7	27	12		307	203			15.6	NW	23+	12	7	12	5.7	58
NEW MEXICO																																
ALBUQUERQUE	1618	838.1	1020.0	5.6	- 7.2	- 1.1	-2.7	12.8	9	-14.4	22	0	31	- 9.4	57	11	0	9	3	0	137	102	1.[illegible]	1	14.8	SE	16	11	10	10	5.0	79
CLAYTON	1515			5.6	- 9.4	- 1.8	-2.5	16.7	5	-22.2	21	0	30			7	- [illegible]	3	4		155	127						15	7	9	4.6	
RATON	1944			5.6	-13.3	- 3.9	-2.2	16.1	9+	-23.9	22	0	31			11	2	5	5		112	76						16	6	9	4.3	
ROSWELL	1102			8.3	- 9.4	- 0.7	-3.9	20.6	9	-26.7	22	0	30			13	1	12	4		132	76			15.2	SW	1	13	9	9	4.5	6[illegible]
SILVER CITY	1638			8.9	- 4.4	2.0	-2.2	15.6	30+	-10.6	23+	0	31			18	2	12	4		185	127						17	9	5	3.4	
NEW YORK																																
ALBANY	84	1005.4	1016.6	- 1.1	-10.6	- 5.8	-0.7	13.9	1	-20.0	26+	0	30	- 9.4	76	58	- 5	16	15	0	732	381	3.8	31	18.8	NW	31	4	6	21	7.7	49
BINGHAMTON	485	955.6	1016.8	- 3.9	-10.6	- 7.2	-2.6	11.1	1	-22.2	28	0	29	-10.6	77	81	18	20	16	0	[illegible]	533	4.4	3	21.0	W	31	4	3	24	8.3	37
BUFFALO	215	991.9	1018.8	- 2.2	-10.6	- 6.4	-2.3	10.0	1	-21.1	28	0	31	- 9.4	78	95	23	41	17	0	1219	864	3.[illegible]	27	18.3	W	31+	2	3	26	8.6	31
NEW YORK C	40	1012.9	1016.3	3.9	- 3.3	0.1	-0.6	16.7	1	-13.3	28	0	22	- 7.8	58	67	- 17	19	11	0	295	178	3.[illegible]	28	17.9	N	3	9	10	1[illegible]	5.5	51
J.F. KENNEDY	5	1015.2	1015.9	3.3	- 3.9	- 0.4	-0.3	16.7	1	-13.9	28	0	25	- 6.7	64	81	- 1	25	13	0	257	178	4.2	32	23.2	[illegible]	31	7	11	13	6.[illegible]	
NEW YORK LA GUARDIA	3	1014.2	1016.2	2.8	- 2.8	- 0.1	-1.0	15.6	1	-12.2	28	0	22	- 7.8	59	60	- 24	17	1[illegible]	0	[illegible]	1[illegible]	3.9	32	22.8	W	31	9	9	13	6.1	
ROCHESTER	167	[illegible]	1018.1	- 1.1	- 8.9	- 5.[illegible]	-1.4	12.8	1	-20.0	27	0	31	-10.0	71	104	43	42	14	0	15[illegible]	864	3.7	27	22.4	SW	31	2	4	25	9.5	27
SYRACUSE	125	1002.[illegible]	1017.5	2.2	-12.2	- 7.2	-2.8	13.9	1	-32.2	26	0	30	-10.6	76	111	21	25	23	0	18[illegible]	1219	3.[illegible]	29	24.6	W	31	1	7	23	8.4	3[illegible]
NORTH CAROLINA																																
ASHEVILLE	6[illegible]	941.1	1017.6	3.9	- 6.1	- 1.1	-4.2	16.1	1	-21.7	30	0	27	- 5.0	77	86	- 2[illegible]	2[illegible]	1[illegible]	0	447	[illegible]	3.[illegible]	[illegible]	15.[illegible]	[illegible]	3[illegible]+	10	4	17	6.4	5[illegible]
CAPE HATTERAS R	2	1017.3	1017.9	10.[illegible]	2.2	6.3	-1.8	22.2	2	- 8.3	30	0	14	1.7	74	230	131	57	10	0	T	1	3.[illegible]	[illegible]	17.9	N	26+	6	11	14	6.[illegible]	4[illegible]
CHARLOTTE	224	991.[illegible]	101[illegible].6	6.7	- 2.2	2.2	-3.7	20.6	2+	-15.6	31+	0	22	- 3.9	67	96	7	24	1[illegible]	0	244	1[illegible]	1.[illegible]	[illegible]	1[illegible]	[illegible]	15	12	4	15	6.[illegible]	63

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	987.1	1019.7	5.6	- 3.9	0.6	-3.7	22.2	1	-16.1	31	0	25	- 5.0	69	114	27	25	11	0	582	381	1.4	32	13.4	NW	30	11	5	15	6.0	52
RALEIGH	132	1003.1	1019.2	7.2	- 2.8	2.1	-3.2	23.3	1	-16.1	31	0	24	- 5.6	61	138	56	39	14	0	312	254	1.9	32	13.4	31	8	11	6	14	5.6	54
WILMINGTON	9	1017.6	1018.9	11.1	1.1	6.2	-2.6	24.4	3+	- 8.3	31	0	19	- 0.6	67	161	88	40	11	0	T	T	1.9	33	14.8	W	30	8	9	14	6.1	55
NORTH DAKOTA																																
BISMARCK	502	962.8	1027.3	-13.3	-25.6	-19.4	-7.2	0.0	9	-39.4	29+	0	31	-23.9	68	7	- 4	3	9	0	112	76	1.3	2	22.4	NW	9	6	9	16	6.8	55
FARGO	273	992.9	1028.7	-16.1	-26.1	-21.3	-7.6	- 5.0	1	-36.1	28+	0	31	-26.1	65	10	- 3	8	3	0	127	178	2.0	36	17.9	NW	9	9	7	15	6.3	62
WILLISTON	579			-12.8	-25.6	-19.3	-6.1	1.7	14	-40.0	29	0	31			11	- 3	4	9		109	152			21.9	NW	9	6	6	19	7.2	49
OHIO																																
AKRON	368	974.6	1021.0	- 1.1	-10.0	- 5.6	-3.5	12.2	2	-22.2	29	0	29	- 9.4	76	52	- 21	14	14	0	414	254	2.1	28	13.0	29	27	1	10	20	8.1	
CINCINNATI OBS	232			0.0	- 7.8	- 3.8	-4.7	13.3	2	-23.3	30	0	28			91	- 3	42	8		127	127			9.8	N	16					43
CLEVELAND	237	990.5	1021.0	- 1.7	- 9.4	- 5.6	-3.2	12.2	2	-21.1	29	0	29	- 8.9	79	39	- 29	10	18	0	389	152	2.5	25	14.3	E	2	1	5	25	8.6	33
COLUMBUS	247	990.9	1022.4	- 1.7	- 9.4	- 5.4	-4.3	12.2	2	-22.8	24	0	28	-10.0	72	73	- 7	23	9	0	193	152	1.7	31	13.4	W	10	2	10	19	7.7	48
DAYTON	305	984.8	1022.6	- 1.1	-10.0	- 5.7	-4.3	12.2	2	-23.3	30	0	29	-10.6	71	59	- 22	25	10	0	132	102	1.6	29	12.1	W	27	4	8	19	7.6	50
MANSFIELD	395			- 2.2	-10.6	- 6.5	-3.9	11.1	2	-22.2	28	0	29			39	- 42	12	10	0	203	127						2	9	20	8.0	
TOLEDO	206	995.9	1022.3	- 2.2	-10.6	- 6.6	-3.4	10.6	2	-21.1	28	0	29	-11.7	65	12	- 47	5	12	0	135	76	2.4	28	15.6	NW	27	5	6	20	7.3	55
YOUNGSTOWN	359	975.6	1020.4	- 2.2	-10.0	- 6.3	-3.7	11.1	1	-21.7	29	0	29	-10.0	76	69	- 11	16	20	0	594	254	2.2	28	12.1	29	27	2	4	25	9.3	
OKLAHOMA																																
OKLAHOMA CITY	390	973.9	1021.8	6.1	- 3.9	1.0	-1.8	19.4	9	-16.7	30+	0	24	- 3.9	74	27	- 7	13	7	1	147	102	0.7	4	13.9	SW	9	11	5	15	5.6	60
TULSA	198	997.6	1022.8	6.1	- 5.0	0.4	-1.9	17.2	9+	-17.2	29	0	28	- 5.0	70	18	- 26	4	7	0	109	51	0.4	4	13.4	SW	9	10	6	15	6.0	59
OREGON																																
ASTORIA	2	1014.6	1015.3	8.9	2.8	5.7	0.9	12.8	28+	- 3.9	20+	0	8	3.9	89	219	- 79	30	27	2	18	51	2.0	19	16.1	26	2	2	1	28	9.2	
BURNS U	1265	872.7	1019.4	2.8	- 7.8	- 2.7	1.3	8.9	6	-18.3	20	0	30	- 6.1	78	20	- 21	5	11		203	127	0.9	27				4	6	21	7.7	
EUGENE	109	1003.7	1017.6	7.8	2.2	5.2	1.2	13.9	27	- 3.9	19	0	7	3.3	90	279	118	101	20	1	T	51	2.5	18	13.4	17	3	0	4	27	9.2	
MEACHAM	1234			1.1	- 4.4	- 1.6	1.7	7.2	8	-13.9	20	0	29			107	1	23	23		932	432						2	2	27	9.0	
MEDFORD	396	971.2	1019.8	7.8	- 0.6	3.4	1.6	13.9	28	- 7.8	21	0	18	0.6	83	122	42	55	11	0	86	76	0.4	16	13.4	13	29	1	6	24	8.6	
PENDLETON	452	963.1	1017.7	6.7	0.0	3.5	3.4	16.1	8	- 7.2	20	0	16	- 1.7	73	56	20	27	14	0	292	203	1.4	23	17.9	22	1	2	2	27	9.1	
PORTLAND	6	1015.6	1016.9	7.8	1.7	4.6	1.1	12.8	13+	- 4.4	20	0	10	2.8	87	146	9	35	20	0	T	0	2.4	16	16.1	SW	1	0	2	29	9.3	19
SALEM	60	1009.5	1016.8	7.8	1.1	4.2	0.6	12.2	5	- 5.6	19	0	15	2.8	88	168	- 3	40	20	0	43	51	3.2	18	17.9	18	1	0	5	26	9.1	
SEXTON SUMMIT R	1169	883.2	1018.6	3.3	- 1.7	0.9	-0.3	10.0	27	- 7.2	1	0	21			146	4	51	17		442	1778			26.8	17	3	5	2	24	8.2	
PACIFIC AREA																																
CANTON ISLAND	2			31.1	25.0	28.2	-0.2	32.8	4+	22.2	28+	9	0			520	454	141	19		0	0						0	3	28	9.5	
ENIWETOK	4	1010.5	1011.2	29.4	23.9	26.8	-0.6	30.6	25	22.8	30+	0	0	22.2	76	52	26	8	20		0	0	8.4	4								
TAGUAC GUAM R	110			28.3	21.7	25.0	-0.7	28.9	31+	17.8	28	0	0			54	- 64	20	16		0	0			10.7	NE	23+					67
JOHNSTON	2	1013.5	1014.1	26.7	22.8	24.8	-0.3	27.8	13	20.0	22	0	0	18.9	71	18	- 81	4	15	1	0	0	7.1	8	16.1	NE	6	9	17	5	5.3	64
KOROR R	29	1007.8	1011.6	29.4	23.9	26.4	-0.4	30.6	4+	22.2	22	0	0	22.8	80	209	- 89	87	23	1	0	0	4.5	7	11.6	NE	23+	0	0	31	10.0	50
KWAJALEIN	2	1009.1	1010.0	30.0	24.4	27.1	0.3	30.6	31+	21.7	24	0	0	22.8	78	75	- 16	20	17	0	0	0	8.3	6	13.4	5	12	0	10	21	8.5	
MAJURO	3	1009.1	1009.5	29.4	25.0	27.2	0.4	30.6	20	23.3	24	0	0	22.8	78	96	- 81	43	15	0	0	0	6.1	7	13.9	E	23	0	4	27	9.1	63
MARCUS ISLAND	6			25.0	19.4	22.4	0.1	28.3	6	17.2	18	0	0			35	- 61	17	9		0	0			16.1	E	5	9	14	8	5.2	62
PONAPE R	37	1004.4	1010.0	29.4	23.9	26.7	-0.2	30.6	31+	21.1	7	0	0	22.8	80	402	121	110	23	0	0	0	4.2	5	9.8	E	23	0	3	28	9.2	41
TRUK MOEN ISLAND	2	1009.8	1010.1	28.9	24.4	26.7	-0.3	29.4	31+	22.8	17+	0	0	22.8	79	117	- 96	28	25	0	0	0	6.2	7	13.0	NE	21	0	4	27	8.8	62
WAKE	3	1015.9	1016.1	26.7	21.7	24.2	-1.0	28.3	6	18.9	18	0	0	18.3	72	17	- 12	6	9	0	0	0	5.5	4	13.0	2	11	6	17	8	5.5	
YAP R	17	1009.5	1011.4	28.9	23.9	26.4	-0.5	29.4	29+	21.7	1	0	0	22.2	79	126	- 73	72	17	0	0	0	5.5	4	11.6	NE	15+	0	1	30	9.6	48
PENNSYLVANIA																																
ALLENTOWN	118	1003.1	1017.4	1.1	- 7.2	- 3.2	-1.6	12.2	1	-18.3	29	0	27	- 9.4	65	107	26	30	11	0	612	406	3.6	30	20.6	25	30	7	8	16	6.6	
ERIE	223	992.6	1020.3	- 1.7	- 8.9	- 5.1	-2.5	11.1	3	-21.1	29	0	30	- 8.9	75	51	- 17	15	22	0	759	356	2.9	28	13.4	28	31+	1	3	27	8.9	
HARRISBURG	103	1005.4	1018.7	0.6	- 6.7	- 3.2	-2.8	16.1	1	-17.8	29	0	26	-10.6	59	91	21	25	9	1	630	432	3.7	30	18.8	NW	30	8	4	19	7.2	55
PHILADELPHIA	2	1016.3	1017.4	2.2	- 5.6	- 1.6	-1.8	15.6	1	-15.6	29	0	26	- 8.3	62	72	- 13	22	11	0	406	254	3.5	32	17.0	W	31	10	6	15	6.3	52
PITTSBURGH	347	974.6	1020.6	- 1.1	- 8.9	- 4.9	-3.2	12.8	3+	-23.3	29	0	28	- 8.3	77	115	39	36	16	0	625	381	2.5	28	15.6	29	30	1	5	25	8.8	28
READING U	81			1.7	- 4.4	- 1.4	-1.8	14.4	1	-15.0	29	0	25			106	28	34	11		569	457			24.1	W	30	8	7	16	6.4	44
SCRANTON	283	982.4	1017.8	- 1.1	- 7.8	- 4.6	-2.2	14.4	1	-18.3	29	0	26	-10.0	68	42	- 16	11	13	0	526	330	2.3	30	14.3	NW	30	4	6	21	7.6	48
WILLIAMSPORT	161	998.6	1018.5	0.6	- 7.2	- 3.5	-1.7	13.9	1	-18.3	29	0	27	-10.6	59	84	17	28	11	0	650	508	3.4	29	14.3	27	30	3	8	20	7.5	
RHODE ISLAND																																
BLOCK ISLAND	34			1.7	- 4.4	- 1.5	-1.6	11.1	1	-13.3	16	0	24			82	- 15	27	9		216	76						8	9	14	6.2	
PROVIDENCE	16	1011.5	1013.7	2.2	- 5.6	- 1.8	-0.2	16.7	1	-14.4	16	0	27	- 8.3	63	86	- 10	24	11	0	409	203	3.9	31	17.9	24	31	10	7	14	5.9	60

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1017.3	1019.1	12.2	1.1	6.6	-3.3	24.4	1	-11.7	30	0	15	1.1	73	170	105	46	11	0	20	25	1.7	33	21.0Y	NW	30	10	2	19	6.5	54
CHARLESTON U	3			11.7	3.9	7.9	-2.9	23.3	3	-10.0	30	0	8			176	115	48	11	0	13	25			18.8	NE	15					
COLUMBIA	66	1011.2	1019.6	10.0	- 0.6	4.6	-3.7	25.0	2	-13.9	30	0	19	- 1.1	71	183	107	59	13	0	25	25	1.2	32	13.9	26	29	10	2	19	6.3	49
GNVLE SPARTANBURG	292	984.4	1020.1	7.2	- 2.2	2.5	-4.0	20.0	1	-21.1	30	0	23	- 3.9	67	118	9	40	10	0	231	76	1.5	36	13.0	N	8	11	2	18	6.0	47
SOUTH DAKOTA																																
ABERDEEN	395	976.6	1027.2	-12.2	-23.9	-17.8	-6.1	5.0	9	-34.4	30+	0	31	-23.9	60	4	- 13	2	8	0	84	25	2.1	2	14.8	32	9	11	8	12	5.6	
HURON	391	976.6	1026.6	- 8.9	-21.7	-15.3	-4.4	7.8	9	-36.7	29+	0	31	-20.6	65	8	- 4	3	9	0	170	102	1.2	35	18.8	NW	9	10	5	16	5.8	69
RAPID CITY	965	905.2	1022.0	- 3.3	-16.7	- 9.9	-4.3	17.8	8	-30.0	20	0	31	-17.8	55	6	- 3	3	6	0	61	25	1.3	1	22.8	NW	8	5	6	20	7.7	45
SIOUX FALLS	432	970.9	1025.9	- 8.9	-21.1	-14.9	-5.6	8.3	9	-33.9	29	0	31	-19.4	68	14	- 2	6	12	0	157	76	1.2	2	13.9	32	9	7	8	16	6.5	
TENNESSEE																																
BRISTOL	459	965.1	1021.2	3.9	- 6.7	- 1.4	-4.9	20.0	2	-26.1	31	0	25	- 6.1	73	84	- 10	21	14	0	561	330	0.8	30	8.0	6	22+	5	7	19	7.3	
CHATTANOOGA	204	995.9	1021.5	5.6	- 4.4	0.6	-4.8	17.8	2	-23.3	31	0	23	- 3.3	76	93	- 49	23	11	0	213	203	1.4	36	8.9	NW	29+	9	2	20	6.9	34
KNOXVILLE	299	985.4	1021.7	5.0	- 2.8	1.1	-4.1	20.0	1	-22.8	30	0	22	- 3.9	70	99	- 25	23	11	0	361	254	1.2	35	9.8	SW	2	7	4	20	7.3	34
MEMPHIS	78	1012.5	1023.0	5.6	- 2.8	1.2	-4.1	20.6	1	-16.7	30	0	23	- 4.4	68	72	- 82	29	13	0	310	102	1.7	3	13.0	NW	29	10	4	17	6.5	47
NASHVILLE	180	999.7	1022.3	5.0	- 5.0	0.2	-4.2	19.4	2	-21.1	30	0	25	- 4.4	70	100	- 40	27	9	0	290	203	1.4	35	11.6	SW	1	7	6	18	6.9	43
OAK RIDGE	276			5.6	- 3.9	0.6	-3.8	17.8	2	-22.8	30	0	22			94	- 56	28	11		244	178						7	3	21	7.3	
TEXAS																																
ABILENE	537	957.3	1020.7	10.0	- 1.7	4.1	-2.9	23.3	11	-13.9	30	0	22	- 2.8	64	22	- 1	7	7	0	168	102	0.3	21	17.4	W	31	13	5	13	5.2	58
AMARILLO	1098	891.6	1019.1	5.0	- 9.4	- 2.3	-4.9	18.3	9	-21.1	29+	0	30	- 9.4	65	11	- 6	8	5	0	183	152	1.3	25	14.3	NE	16	13	5	13	5.0	66
AUSTIN	182	998.6	1021.2	12.8	2.2	7.4	-2.8	23.3	1	-10.0	30	0	10	1.7	72	40	- 20	10	10	0	T	0	2.0	1	13.9	NW	29+	9	6	16	6.3	47
BROWNSVILLE	5	1018.6	1019.2	17.2	7.8	12.4	-3.9	25.6	1	1.1	27+	0	0	8.9	84	88	53	45	12	0	0	0	1.8	34	15.6	N	29	9	4	18	7.0	50
CORPUS CHRISTI	12	1018.3	1020.0	15.0	5.6	10.3	-3.8	25.0	1	- 3.3	30	0	6	7.2	83	54	12	24	12	0	0	0	2.5	2	17.9	S	31	5	7	19	7.4	31
DALLAS	147	1004.1	1021.9	9.4	0.0	4.8	-2.9	21.1	1	-12.2	30	0	16	- 0.6	71	45	- 14	19	7	1	79	51	1.2	5	22.4	W	1	8	9	14	6.2	50
DEL RIO	313	983.4	1020.5	14.4	2.2	8.2	-2.5	21.7	10	- 5.0	30	0	7	2.2	72	24	1	17	6	0	T	0	0.7	7	9.4	1	28	11	6	14	5.5	
EL PASO	1194	882.8	1017.6	11.7	- 2.2	4.5	-1.6	19.4	30	- 6.7	26+	0	27	- 6.7	48	10	- 2	4	5	1	10	T	0.9	35	19.7	W	31	18	5	8	3.4	84
FORT WORTH	164	1001.0	1022.3	9.4	0.0	4.6	-2.9	20.0	11+	-12.8	23	0	14	- 0.6	72	43	- 9	20	8	1	112	76	1.0	2	19.7	26	1	10	6	15	6.3	
GALVESTON U	2			13.3	7.2	10.3	-2.4	21.7	12	- 5.0	30	0	3			140	52	31	13		T	T			14.3	NW	28					39
HOUSTON U	12			13.3	6.1	9.7	-2.9	23.9	1	- 6.1	30	0	4			112	18	22	12		0	0										
HOUSTON	15	1018.6	1020.7	13.9	4.4	9.1	-2.9	25.6	1	- 6.7	30	0	6	4.4	77	113	17	24	12	0	0	0	2.1	2	13.4	15	31	6	4	21	7.6	37
LUBBOCK	992	904.8	1019.2	8.3	- 6.1	1.2	-2.8	22.2	9	-19.4	22	0	29	- 7.2	60	13	- 4	10	4	0	124	102	0.8	29	14.3	26	1	12	8	11	4.9	
MIDLAND	869	918.1	1018.5	10.6	- 3.9	3.3	-3.3	21.7	9	-16.7	22	0	28	- 3.9	69	12	- 8	6	5	0	91	76	0.2	16	17.9	28	31	13	10	8	4.5	
PORT ARTHUR	5	1020.0	1020.7	13.3	4.4	8.9	-3.1	25.6	1	- 6.7	30	0	6	6.1	85	158	51	38	12	1	0	0	2.1	3	17.4	NW	2	4	6	21	7.8	37
SAN ANGELO	580	951.9	1020.4	11.1	- 1.7	4.8	-3.4	22.2	11+	-11.1	30	0	23	- 1.7	70	12	- 12	5	6	1	48	25	0.2	21	14.3	28	31	11	7	13	5.5	
SAN ANTONIO	240	992.6	1021.1	13.3	1.7	7.4	-3.7	23.3	1	- 8.9	30	0	11	2.8	78	37	- 7	12	7	0	T	0	2.0	2	12.5	NW	29+	10	4	17	6.5	49
VICTORIA	32	1016.3	1020.4	14.4	4.4	9.4	-3.6	24.4	1	- 6.7	30	0	6	5.6	81	94	35	27	10	0	0	0	2.3	1	17.0Y	N	29	6	8	17	7.1	
WACO	152	1003.1	1021.5	10.6	0.6	5.6	-3.3	21.1	1	-11.1	30+	0	11	0.0	71	29	- 28	12	7	0	66	51	1.3	35	12.5	34	28	9	7	15	6.1	
WICHITA FALLS	303	983.7	1021.6	7.8	- 4.4	1.6	-4.4	22.2	9	-20.6	23	0	25	- 2.8	78	28	- 1	12	6	0	102	178	0.3	4	13.4	[illegible]	31+	12	3	16	5.7	
UTAH																																
MILFORD	1534			3.3	-11.1	- 3.9	0.2	10.0	10	-25.6	[illegible]	0	31			14	0	8	5		231	102						15	8	8	4.8	
SALT LAKE CITY	1286	873.4	1021.3	4.4	- 6.1	- 0.8	1.9	11.7	8	-15.0	2	0	30	- 6.7	68	10	- 24	5	7	0	150	102	[illegible]	16	11.6	[illegible]	3	3	10	18	[illegible]	[illegible]
WENDOVER	1291			2.2	- 6.7	- 2.3	0.5	7.8	14	-12.2	21	0	31			2	- 6	2	3		10	T						9	8	14	5.9	
VERMONT																																
BURLINGTON	101	1003.1	1016.1	- 5.1	-13.3	- 9.2	-0.4	13.3	1	-28.9	26	0	31	-13.3	73	51	2	15	18	0	[illegible]	[illegible]	1.0	33	14.3	SW	[illegible]	4	7	20	7.7	42
VIRGINIA																																
LYNCHBURG	279			4.4	- 5.0	- 0.4	-3.5	20.0	1	-15.0	31+	0	27			92	8	23	14	0	808	635			15.2	SW	31	9	4	18	6.4	58
NORFOLK	8	1017.3	1018.4	5.1	- 1.7	2.1	[illegible]	22.8	2+	-12.2	31	0	24	- 4.4	64	123	39	35	13	0	361	305	2.4	32	15.5	NW	30	8	7	16	6.2	46
RICHMOND	49	1013.2	1019.2	4.4	- 5.6	- 0.5	-4.2	21.7	1	-14.4	17	0	27	- 7.2	64	116	28	33	12	0	465	381	1.6	34	13.0	NW	23	10	6	15	6.2	58
ROANOKE	350	976.0	1017.5	3.3	- 5.0	- 0.8	-4.2	17.8	1	-16.1	30	0	26	- 7.8	62	108	29	44	11	0	1046	508	2.7	29	16.5	29	30+	7	9	15	6.5	
WASHINGTON																																
OLYMPIA	59	1008.1	1015.4	6.7	1.7	4.1	0.7	11.7	7	- 5.0	24	0	13	3.3	93	200	1	40	20	0	272	102	2.6	20	13.4	17	1	0	1	30	9.7	
SEATTLE TACOMA	124	998.3	1014.9	7.8	2.2	5.1	1.6	12.8	28	- 2.8	24	0	8	1.1	79	138	- 8	40	19	1	51	25	1.5	19	14.8	2	1	0	1	30	9.6	11
SPOKANE	719	930.6	1016.5	1.7	- 3.9	- 1.3	2.4	9.4	5	-18.3	24	0	24	- 3.3	84	49	- 13	15	14	0	353	254	2.1	[illegible]	17.4	S	2	0	6	25	9.0	15
STAMPEDE PASS R	1206			- 1.1	- 5.6	- 3.4	1.3	3.9	14	-11.1	20	0	31			305	- 1	47	26		2098	2499						0	1	30	9.5	
TATOOSH ISLAND R	31	1009.1	1012.1	8.3	4.4	6.3	0.8	11.7	3+	1.0	4	0	1	3.9	94	347	72	81	27	0	124	25	3.9	24	31.3	SW	1	1	2	28	9.1	12
WALLA WALLA	289			7.2	0.6	3.9	3.2	17.8	7	- 4.4	25+	0	17			56	8	24	13	0	254	25			21.9	W	2	1	2	28	9.2	17
YAKIMA	321	978.0	1017.6	2.8	- 5.6	- 1.6	0.9	10.0	14	-15.0	1	0	30	- 4.4	82	44	14	17	8	0	371	381	1.5	26	11.6	18	2+	2	4	25	8.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		°C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	5	1013.2	1015.7	29.4	21.1	25.2	1.7	31.7	27+	19.4	31+	0	0	20.6	77	34	- 85	11	11	0	0	0	2.1	10	12.5	E	4	9	15	7	5.3	61
SWAN ISLAND	9			27.2	22.8	25.1	-0.6	28.9	25+	20.6	30+	0	0			166	79	82	13	0	0	0						6	15	10	5.9	
WEST VIRGINIA																																
BECKLEY	763	928.5	1021.5	0.6	- 8.9	- 4.1		16.7	2	-22.8	30	0	27	- 8.3	74	90		26	17	0	640	356	1.5	27	13.0	28	30	3	4	24	8.2	
CHARLESTON	286	985.8	1021.3	1.7	- 7.2	- 2.7	-5.3	17.8	2	-16.1	30+	0	28	- 7.8	70	91	- 19	28	10	0	503	305	1.1	26	9.8	24	30	3	7	21	8.0	
ELKINS	600	946.5	1020.4	1.1	- 9.4	- 4.3	-4.6	16.1	2+	-22.8	28	0	28	- 8.3	76	89	- 3	24	17	0	536	305	2.3	29	14.8	30	3	3	4	24	8.2	
HUNTINGTON	252	990.5	1021.9	1.1	- 7.2	- 3.0	-5.6	17.8	1	-20.6	30	0	28	- 7.8	71	83	- 10	28	12	0	328	229	1.1	29	8.9	26	30	2	6	23	8.2	
PARKERSBURG U	187			1.1	- 7.2	- 3.1	-4.6	17.8	1	-18.9	30	0	28			105	20	32	11		439	356			11.6	W	30					35
WISCONSIN																																
GREEN BAY	208	995.9	1023.3	- 7.8	-18.9	-13.4	-4.9	1.7	4	-31.7	29	0	31	-16.7	76	30	1	15	9	0	371	203	2.4	30	13.0	W	10	15	7	9	4.6	64
LA CROSSE	198	1000.0	1026.3	- 7.2	-19.4	-13.5	-4.9	5.6	1	-31.1	29	0	31	-18.9	65	20	- 11	11	7	0	277	178	1.3	29	10.7	32	7	14	9	8	4.7	
MADISON	262	990.5	1023.9	- 6.7	-17.8	-12.2	-4.2	6.1	5	-30.6	29	0	31	-16.1	70	27	- 8	15	8	0	244	203	2.0	31	13.4	NW	10+	12	7	12	5.1	74
MILWAUKEE	205	997.0	1023.7	- 5.6	-14.4	-10.1	-3.7	6.7	5	-30.6	29	0	31	-13.3	75	52	6	33	14	0	625	406	2.6	30	13.9	SW	10+	14	6	11	4.9	65
WYOMING																																
CASPER	1627	834.7	1018.1	0.6	-11.7	- 5.7	-0.9	10.6	7	-26.7	20	0	30	-12.8	58	8	- 7	3	7	0	140	51	5.8	24	17.4	23	3	4	10	17	7.3	
CHEYENNE	1867	808.7	1017.6	3.3	-10.6	- 3.4	0.2	16.1	8	-28.3	21	0	29	-14.4	46	3	- 10	2	4	0	33	25	4.6	29	22.8	W	9	8	6	17	6.6	60
LANDER	1696	825.9	1018.2	1.1	-11.7	- 5.2	1.9	13.3	6	-25.6	21	0	31	-12.8	59	7	- 5	4	5	0	236	127	1.0	27	29.5	SW	8	4	12	15	7.0	70
SHERIDAN	1208	877.4	1020.4	0.0	-15.0	- 7.6	-1.6	19.4	8	-27.8	25+	0	31	-15.0	57	9	- 7	3	9	0	218	127	1.8	30	21.0	SW	6	2	6	23	9.1	37

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

V Sun below horizon January 1-23, inclusive.
X Sun below horizon January 1-17, inclusive.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	840	1912	1609
HUNTSVILLE	916	1919	1922
MOBILE	554	1042	1007
MONTGOMERY	709	1526	1468
ALASKA			
ANCHORAGE	1713	6471	
ANNETTE	1114	4116	3930
BARROW	2508	10915	11028
BARTER ISLAND	2584	11220	10796
BETHEL	1842	7663	7570
COLD BAY	991	5276	5389
FAIRBANKS	2872	9762	8794
JUNEAU	1746	5651	5140
KING SALMON	1387	6939	6552
KOTZEBUE	2129	8867	8846
MC GRATH	2654	9544	8680
NOME	1806	8145	7918
ST. PAUL ISLAND	1002	5798	6006
SHEMYA	1039	5238	5300
YAKUTAT	1608	6311	5124
ARIZONA			
FLAGSTAFF	1281	3989	3982
PHOENIX	516	1013	1145
TUCSON	532	1079	1133
WINSLOW	1264	2999	3024
YUMA	390	776	679
ARKANSAS			
FORT SMITH	938	1960	2074
LITTLE ROCK	916	1890	2073
TEXARKANA	749	1430	1610
CALIFORNIA			
BAKERSFIELD	557	1488	1367
BISHOP	926	2582	2537
BLUE CANYON	926	2951	2761
BURBANK	361	871	893
EUREKA U	531	2488	2573
FRESNO	664	1726	1561
LONG BEACH	353	809	871
LOS ANGELES	350	803	906
LOS ANGLES U	281	644	708
MT SHASTA R	988	3187	3169
OAKLAND	475	1483	1592
RED BLUFF	631	1761	1531
SACRAMENTO	591	1683	1647
SANDBERG U	837	2446	2181
SAN DIEGO	335	768	745
SAN FRANCISCO	535	1856	1638
SAN FRANCISCO U	393	1647	1648
SANTA CATALINA	378	1101	872
SANTA MARIA	515	1587	1554
STOCKTON	644	1779	1658
COLORADO			
ALAMOSA	1604	4933	5043
COLORADO SPRINGS	1232	3506	3607
DENVER	1122	3302	3546
GRAND JUNCTION	1246	3049	3451
PUEBLO	1218	3129	3201
CONNECTICUT			
BRIDGEPORT	1078	2861	3053
HARTFORD	1186	3472	3516
NEW HAVEN	1124	3196	3202
DELAWARE			
WILMINGTON	1103	2936	2816
DIST.OF COLUMBIA			
WASH NATL AP	1001	2437	2474
FLORIDA			
APALACHICOLA U	456	875	835
DAYTONA BEACH	263	503	534
FORT MYERS	136	195	279
JACKSONVILLE	402	814	798
KEY WEST	27	28	68
LAKELAND U	240	394	416
MIAMI	70	86	139
ORLANDO	215	347	490
PENSACOLA	561	1065	967
TALLAHASSEE	484	973	961
TAMPA	267	469	433
WEST PALM BEACH	103	137	158
GEORGIA			
ATHENS	821	1895	1806
ATLANTA	874	2004	1824
AUGUSTA	733	1671	1512
COLUMBUS	707	1549	1515
MACON	724	1674	1375
ROME	907	2183	2070
SAVANNAH	612	1362	1167
IDAHO			
BOISE	1004	3229	3469
IDAHO FALLS 42NW R	1395	4920	5125
IDAHO FALLS 46W R	1361	4745	4907
LEWISTON	890	2859	3278
POCATELLO	1211	4061	4055
ILLINOIS			
CAIRO U	1043	2218	2360
CHICAGO O HARE	1502	3695	3748
CHICAGO MIDWAY	1437	3474	3482
MOLINE	1568	3728	3712
PEORIA	1406	3536	3509
ROCKFORD	1595	3915	3920
SPRINGFIELD	1329	3114	3217
INDIANA			
EVANSVILLE	1192	2746	2743
FORT WAYNE	1352	3396	3588
INDIANAPOLIS	1312	3165	3293
SOUTH BEND	1377	3574	3612
IOWA			
BURLINGTON	1445	3402	3577
DES MOINES	1568	3676	3937
DUBUQUE	1693	4215	4262
SIOUX CITY	1643	3989	4028
WATERLOO	1776	4251	4262
KANSAS			
CONCORDIA	1297	3063	3224
DODGE CITY	1221	2861	2940
GOODLAND	1337	3589	3517
TOPEKA	1202	2871	3101
WICHITA	1131	2545	2808
KENTUCKY			
COVINGTON	1270	3130	3053
LEXINGTON	1225	2967	2750
LOUISVILLE	1170	2744	2731
LOUISIANA			
ALEXANDRIA	677	1334	1231
BATON ROUGE	606	1112	1025
LAKE CHARLES	528	917	951
NEW ORLEANS	560	1037	896
SHREVEPORT	703	1287	1373
MAINE			
CARIBOU	1489	5558	5480
PORTLAND	1315	4181	4129
MARYLAND			
BALTIMORE	1085	2855	2738
MASSACHUSETTS			
BLUE HILL OBS R	1239	3618	3464
BOSTON	1115	3229	3059
NANTUCKET	1089	3330	2920
PITTSFIELD	1399	4336	4228
WORCESTER	1320	3963	3854
	1320	3963	3854
MICHIGAN			
ALPENA	1544	4738	4610
DETROIT	1346	3441	3454
DETROIT M WAYNE CO	1377	3737	3469
DETROIT WILLOW RUN	1408	3892	3491
FLINT	1435	3783	4065
GRAND RAPIDS	1414	3787	3885
HOUGHTON LAKE	1607	4695	
LANSING	1490	3979	3835
MARQUETTE U	1533	4713	4522
MUSKEGON	1424	3699	3619
SAULT STE MARIE	1684	5200	4903
MINNESOTA			
DULUTH	2053	5925	5599
INTERNATIONAL FALLS	2340	6440	6126
MINNEAPOLIS	1909	4861	4846
ROCHESTER	1914	4814	4755
ST CLOUD	2062	5381	5116
MISSISSIPPI			
JACKSON	747	1539	1398
MERIDIAN	758	1629	1481
VICKSBURG U	708	1282	1306
MISSOURI			
COLUMBIA	1221	2686	2999
KANSAS CITY	1141	2503	2808
ST JOSEPH	1215	2724	3270
ST LOUIS	1233	2781	2900
SPRINGFIELD	1109	2554	2718
MONTANA			
BILLINGS	1545	4372	4022
GLASGOW	2053	5438	5237
GREAT FALLS	1585	4605	4321
HAVRE	1984	5604	4998
HELENA	1370	4565	4590
KALISPELL	1252	4737	4785
MILES CITY	1826	4927	4460
MISSOULA	1194	4404	4804
NEBRASKA			
GRAND ISLAND	1492	3719	3815
LINCOLN U	1439	3409	3411
NORFOLK	1667	4170	4038
NORTH PLATTE	1530	4052	3891
OMAHA	1440	3405	3670
SCOTTSBLUFF	1402	3873	3832
VALENTINE	1615	4328	4253
NEVADA			
ELKO	1312	4402	4264
ELY	1387	4466	4328
LAS VEGAS	685	1598	1770
RENO	974	3493	3724
WINNEMUCCA	1055	3674	3919
NEW HAMPSHIRE			
CONCORD	1376	4349	4158
MT WASHINGTON OBS	1848	7983	7709
NEW JERSEY			
ATLANTIC CITY	1125	3065	2655
ATLANTIC CITY U	1023	2649	2502
NEWARK	1066	2883	2755
TRENTON U	1081	2879	2810
NEW MEXICO			
ALBUQUERQUE	1074	2734	2681
CLAYTON	1121	2896	2966
RATON	1231	3454	3583
ROSWELL	1052	2366	2439
SILVER CITY	903	2282	2234
NEW YORK			
ALBANY	1342	3811	3879
BINGHAMTON	1417	4175	4030
BUFFALO	1374	3774	3826
NEW YORK U	1007	2606	2691
J.F. KENNEDY	1041	2796	2810
NEW YORK LA GUARDIA	1021	2677	2638
ROCHESTER	1307	3687	3687
SYRACUSE	1422	3957	3749
NORTH CAROLINA			
ASHEVILLE	1075	2774	2670
CAPE HATTERAS R	665	1581	1452
CHARLOTTE	892	2139	1950
GREENSBORO	979	2338	2300
RALEIGH	898	2184	2076
WILMINGTON	671	1484	1432
NORTH DAKOTA			
BISMARCK	2106	5531	5115
FARGO	2216	5891	5323
WILLISTON	2098	5737	5329
OHIO			
AKRON	1329	3454	3420
CINCINNATI OBS	1228	2876	2805
CLEVELAND	1328	3409	3508
COLUMBUS	1325	3258	3278
DAYTON	1331	3346	3232
MANSFIELD	1380	3726	3589
TOLEDO	1381	3792	3669
YOUNGSTOWN	1367	3640	3601
OKLAHOMA			
OKLAHOMA CITY	961	1876	2311
TULSA	992	1968	2378
OREGON			
ASTORIA	697	2705	2854
BURNS U	1165	4084	4000
EUGENE	728	2448	2670
MEACHAM	1106	4139	4294
MEDFORD	823	2638	2917
PENDLETON	820	2700	3073
PORTLAND	759	2400	2659
SALEM	781	2653	2662
SEXTON SUMMIT R	967	3371	3274
PENNSYLVANIA			
ALLENTOWN	1197	3395	3297
ERIE	1302	3454	3464
HARRISBURG	1191	3176	3046
PHILADELPHIA	1110	2987	2959
PITTSBURGH	1293	3509	3397
PITTSBURGH U	1230	3062	2879
READING U	1094	2883	2848
SCRANTON	1270	3584	3607
WILLIAMSPORT	1213	3515	3407
RHODE ISLAND			
BLOCK ISLAND	1099	3155	2917
PROVIDENCE	1115	3259	3277
SOUTH CAROLINA			
CHARLESTON	644	1445	1299
CHARLESTON U	576	1179	1112
COLUMBIA	759	1745	1576
GNVLE-SPARTANBURG	877	2059	1878
SOUTH DAKOTA			
ABERDEEN	2017	5249	4941
HURON	1875	4869	4768
RAPID CITY	1573	4151	4082
SIOUX FALLS	1856	4801	4551
TENNESSEE			
BRISTOL	1096	2733	2516
CHATTANOOGA	982	2332	2049
KNOXVILLE	956	2236	2147
MEMPHIS	947	1996	2022
NASHVILLE	1007	2235	2193
OAK RIDGE	984	2471	2312
TEXAS			
ABILENE	791	1403	1693
AMARILLO	1145	2461	2467
AUSTIN	611	1035	1112
BROWNSVILLE	333	425	420
CORPUS CHRISTI	450	611	631
DALLAS	746	1353	1508
DEL RIO	554	877	1081
EL PASO	769	1712	1831
FORT WORTH	760	1301	1539
GALVESTON U	447	616	758
HOUSTON U	485	710	816
HOUSTON	516	773	880
LUBBOCK	946	1848	2249
MIDLAND	831	1638	1711
PORT ARTHUR	529	856	942
SAN ANGELO	747	1383	1489
SAN ANTONIO	607	1036	1026
VICTORIA	499	756	770
WACO	706	1273	1305
WICHITA FALLS	929	1797	1810
UTAH			
MILFORD	1239	3682	3802
SALT LAKE CITY	1058	3267	3603
WENDOVER	1146	3507	3511
VERMONT			
BURLINGTON	1531	4529	4592
VIRGINIA			
LYNCHBURG	1038	2637	2485
NORFOLK	897	2154	1980
RICHMOND	1043	2573	2344
ROANOKE	1058	2634	2488
WASHINGTON			
OLYMPIA	788	2912	2982
SEATTLE TACOMA	732	2471	2882
SPOKANE	1088	3770	3887
STAMPEDE PASS R	1205	4900	5131
TATOOSH ISLAND R	663	3094	3172
WALLA WALLA U	799	2534	2907
YAKIMA	1104	3475	3636
WEST VIRGINIA			
BECKLEY	1243	3311	
CHARLESTON	1166	2958	2653
ELKINS	1258	3479	3298
HUNTINGTON	1182	2817	2641
PARKERSBURG U	1190	2886	2777
WISCONSIN			
GREEN BAY	1763	4573	4487
LA CROSSE	1774	4500	4388
MADISON	1702	4479	4446
MILWAUKEE	1579	4022	4239
WYOMING			
CASPER	1334	4157	4139
CHEYENNE	1208	3835	4056
LANDER	1304	4240	4520
SHERIDAN	1438	4300	4317

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

JANUARY 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama																										10	5	6	6
Alaska										0	0	5	0					0	0	4	0								
Arizona *																													
Arkansas N																													
California										2	0	6	4					0	0	5	0								
Colorado *																													
Connecticut										0	0	3	0					0	0	4	0					0	0	5	0
Delaware																		3	0	0	0								
Florida *																													
Georgia																		0	0	4	0					0	0	5	5
Hawaii *																													
Idaho *																													
Illinois N																													
Indiana *																													
Iowa *																													
Kansas *																													
Kentucky																												5	
Louisiana	1	1	0	0	4													0	0	?	0	0	1	?	0				
Maine										0	0	5	0					1	0	5	0								
Maryland										1	0	3	0					13	0	0	0								
Massachusetts										0	0	5	0					0	0	5	0	0	0	3	0	0	0	R 4	0
Michigan *																													
Minnesota																										0	0	4	0
Mississippi																		4	?	5	4								
Missouri *																													
Montana *																													
Nebraska *																													
Nevada *																													
New Hampshire										0	0	5	0					0	0	5	0								
New Jersey												5								6									
New Mexico *																													
New York												4						6											
North Carolina												4						8	?	5	0	0	0	6	0				
North Dakota *																													
Ohio *																													
Oklahoma														0	0	4	0					0	0	?	?				
Oregon *																													
Pacific Area																										7	?	°6	C
Pennsylvania										0	0	3	0					5	10	6	0								
Puerto Rico *																													
Rhode Island *																													
South Carolina																						1	0	6	0	7	0	0	6
South Dakota *																													
Tennessee																		0	S	°6	C					0	0	L°4	C
Texas										0	0	?	0																
Utah *																													
Vermont										0	0	4	0					0	0	4	0								
U. S. Virgin Is. *																													
Virginia																		20	?	?	0								
Washington N																													
West Virginia																		0	0	3	0	0	1	3	0				
Wisconsin *																													
Wyoming *																													

° Includes crop damage
C Crop damage
R Rain
S Several
L Local flooding
N No report received by printing deadline.

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

JANUARY 1966

Damaging floods occurred along tributary streams in the White Basin in Arkansas during January. Flooding on the Black River was the most severe since 1927. The damages from the flooding Cache River was the greatest in several years. Major flooding occurred along northern California streams. Considerable damage was sustained and many families were evacuated from their homes.

ST. LAWRENCE DRAINAGE

Lake Erie.--Minor flooding began on the St. Joseph River at Montpelier, Ohio, on December 25 and continued until January 4. This flooding was due to heavy rains (over 3 inches) on the 24th-25th. Farmland and park areas in and near Montpelier were affected. A secondary crest of 10.9 feet occurred on January 2 (flood stage 10 feet).

ATLANTIC SLOPE DRAINAGE

Minor flooding occurred on the Savannah River at Clyo, Ga., on the 21st-23d and on the Ogeechee River beginning at Dover, Ga., on the 26th. Light overflow was in progress at Eden, Ga., at the close of the month. Little or no damage resulted.

Light flooding occurred on the Ocmulgee River at Macon, Ga., from the 15th to the 18th. Light flooding began on the Altamaha at Charlotte, Ga., on the 27th and continued into February. The Satilla River at Atkinson, Ga., rose 2 feet above flood stage on the 31st.

EAST GULF OF MEXICO DRAINAGE

Two periods of heavy rain during January 1966 over the Apalachicola River System produced substantial rises but no flooding except at Blountstown, Fla. The first heavy rain occurred from the 4th to the 6th, with accumulated totals of 3 to 3.5 inches in middle streams and over the Chattahoochee headwater area. In lower streams, rainfall totals were generally less than 2 inches. The second period of heavy rain on the 14-15th produced rainfall total of 3 to 4 inches over much of the middle and lower portions. In the Chattahoochee headwater area, rainfall totals ranged from 2 to 2.5 inches. Strong rises resulted from the heavy rains, especially from those of the 14-15th. Considerable acres of wooded but unpopulated areas were inundated, causing a slowdown or temporary stoppage of logging operations, but no damages resulted.

About 3.5 inches of rain during the first week in January caused the Pearl River at Jackson, Bogalusa, and Pearl River, La., to rise slightly above flood stage. Subsequent rains throughout the month maintained the river near or slightly below flood stage the entire month. The river heights were not excessive and the river was well contained in its banks and immediate flood plain. Damages were minor.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Ice action caused the Kankakee River to rise 1.3 feet above flood stage at Momence, Ill., on the 28th. It was back within its banks by the 29th.

Heavy precipitation on December 23 and 24 produced flooding along the Illinois River which continued into January at and below La Salle, Ill. The river crested at La Salle, Ill., on December 26, 3.2 feet above flood stage and receded below flood stage on January 3. Additional rainfall, measuring up to 2 inches, occurred at the end of December and on the first of January in Illinois and Missouri. The river crested at Havanna, Ill., 1.4 feet above flood stage on the 5th. The crest reached Meredosia, Ill., on the 8th, 2.6 feet above flood stage. The Illinois was back within its banks at all points by the 21st. A sharp temperature drop, beginning on the 20th and continuing cold the balance of the month, created heavy ice conditions on the Illinois which resulted in erratic stage fluctuations. By the end of January all navigation pools continued to be ice-covered.

Minor flooding occurred on the Kaskaskia River at Carlyle, Ill., on the 5th.

Ohio Basin.--Excessive rains during the first week of January produced minor flooding on Paint Creek and the lower Scioto River in Ohio. No damage resulted since most of the inundated area was farmland not in production at the time. The first deep penetration of frost occurred during the second week of the month. The first heavy snow cover followed during the third week.

White Basin.--Heavy rain over the northern part of Arkansas and southern Missouri from the evening of December 31 until the early morning hours of January 2 caused flooding on many streams in the White Basin. Rainfall during this period averaged about 4-1/2 inches. Rainfall over the Black Basin averaged about 5 1/2 inches and over the Cache Basin above Patterson, Ark., about 7 inches. The heaviest rain occurred in the Walnut Ridge, Ark., area, ranging from 8.75 inches at Corning, Ark., to 10.04 inches at Paragould, Ark.

The flooding on the Black River was the worst since 1927. The lower portion went above flood stage during the afternoon of the 1st. The entire Black in Missouri and Arkansas was above flood stage from the 2d to the 19th. Extensive damages occurred to public property and roads in Arkansas. Many families in the west part of Walnut Ridge had to be evacuated due to the flooding of Village Creek. Several highways were closed.

Extensive flooding occurred along the Cache River at Patterson, Ark., from the 2d through the end of the month. Extensive damages occurred to public and private property. Portions of highways 91 and 226 were closed. Many houses east of Des Arc, Ark., were surrounded by water. This was the greatest damage resulting from the flooding Cache River in several years.

The Buffalo River rose rapidly to 3 feet above flood stage at Gilbert, Ark., on the morning of the 2d. Roads in Newton County were damaged. There was also some erosion to croplands.

The Little Red River at Judsonia, Ark., was above flood stage on the 2d and 3d. The State highway from Searcy to Pangburn was closed for a time. Losses to livestock were minor as they were moved from the area.

The White River went above flood stage at Batesville, Ark., on the 2d and receded within its banks at St. Charles, Ark., on the 31st. Considerable damage resulted to crops in four counties.

Lower Mississippi Basin.--Heavy rain on January 1 and 2 caused a rapid rise in the St. Francis River to above flood stage at Fisk, Mo., and St. Francis, Ark., on the 2d. The 2-day totals ranged from 8.95 inches at Wappapello Dam to 1.69 inches at Fredericktown with an average of 5.3 inches. Additional rains of 1 to 1 1/2 inches on the 5th and 6th caused increased discharge and the stage of the St. Francis River rose to 20.8 feet at St. Francis, Ark., on the 7th. The local rain caused the crest to be reached before maximum discharge from upstream reached St. Francis. The damages from this overflow was relatively light as very few areas had been planted in winter crops.

WEST GULF OF MEXICO DRAINAGE

The flooding on the Calcasieu River at Hineston, La., which began on the 25th and continued into the next month was due to heavy rain on the 20th, 25th, and 29th. No damage was reported.

Minor lowland flooding occurred on the Trinity River near Moss Bluff, Tex., from the 27th to the 29th. This overflow was due to moderate rains on the 19th-22d followed by heavy rains on the 25th. Little, if any damage resulted.

GULF OF CALIFORNIA DRAINAGE

Heavy runoff from warm rain and melting snow on December 30 produced flooding along the upper Gila and San Francisco Rivers from December 30 to January 3. At Cliff, N. Mex., the upper Gila was out of its banks from December 31 to January 1. A crest, 2 1/2 feet above flood stage, occurred about noon on December 31. Preliminary estimates of damage to farmland, river crossings, and irrigation systems was $200,000.

PACIFIC SLOPE DRAINAGE

Sacramento Basin.--Heavy rains over northern California during the first week in January brought a substantial rise to the Sacramento River. The upstream weirs of the Sacramento River Flood Control System overflowed between the 5th and 13th. No overflow occurred at the Fremont Weir, the largest weir of the system. At Sacramento, Calif., the stream crested 12 feet below flood stage.

Moderate flooding occurred on the Russian River during the period from the 4th to the 7th. There was also flooding in Marin County just north of San Francisco, Calif., from the heavy rains and overflowing of Corte Madera Creek. Slight flooding occurred in the lowlands of the Napa River, south of St. Helena, near Rutherford, Calif. This flooding was due to rain which began during the last week of December and continued through the first week of January. About 5 inches of rain fell in the Russian Basin in the 24-hour period, midnight to midnight, January 4, of which 4 inches occurred in 16 hours. The U. S. Army Corp of Engineers preliminary estimates of flood damage in the Russian Basin was $2 1/2 million. About two-thirds of this damage was to residences and resort businesses in the Guerneville, Calif., area. The remaining one third was to orchards, farmlands, and flood control levees. Preliminary estimates of damage in Marin County from the heavy rains and overflowing of Corte Madera Creek was $600,000. Practically all of this was to residential property. In some low-lying areas of Kentfield, flood water was as much as 4 feet deep. Many families had to be evacuated and some roads were temporarily closed.

Heavy rains on the 3d, 4th, and 5th in northern California caused major overflow along northern California coastal streams. In the Eel Basin, the South Fork crested nearly 6 feet above flood stage on the 4th. Along the main stem of the Eel, more than 7 feet of overflow occurred at Fernbridge, Calif. The Mad River at Arcata, Calif., crested nearly 3 feet above flood stage on the 4th. At Orick, Calif., Redwood Creek rose 3 feet out of its banks on the 4th. The Trinity River at Hoopa, Calif., crested more than 3 feet over flood stage on the 5th. Three and one-half to 6 feet of overflow occurred along the Smith River. Considerable damage resulted from the flooding. Many families had to be evacuated from their homes.

Heavy rainfall which began in southwestern Oregon on the 2d and continued through the 6th caused flooding for the second consecutive month in the Coquille Basin. The Umpqua River which was saturated from the late December rains rose to 1-1/2 to 3 feet above flood stage. The limited amount of rain over the Rogue Basin during the latter part of December allowed much of the early January rains to be absorbed. The Rogue River rose slowly from the rain on the 2d to the 4th and crested well below flood stage. The heavy rain on the 6th, with its much higher freezing level, resulted in minor overflow on the same date. Damage along the Rogue and Illinois Rivers was minor and limited to streambank erosion. Several trailer camps along the low-lying portions of the rivers were evacuated. The damage along the Umpqua Basin was limited to residential property. Major damages occurred along the Coquille River from the prolonged flooding.

Columbia Basin.--Heavy precipitation from the 2d to the 6th caused tributary flooding in the Willamette Basin. Streams had receded to well below bankfull stage when the second major storm series of the 1965-66 winter season moved into the Willamette Basin. Low elevation tributary streams experienced the first minor crest on midnight of the 2d. The second streamflow rise, which resulted in overbank flow on coast range Willamette tributaries, crested on the 4th. These two rises caused the middle Willamette to rise to within 1 foot of bankfull stage. The freezing level during these initial two storms remained at about 3,000 feet. Freezing levels rose to about 7,000 feet on the 5th. By evening of the 5th, 1.5 inches of precipitation had fallen over much of the basin. Both Coast and Cascade Range tributaries rose rapidly. The total precipitation during this storm period averaged from 5.75 inches for the Willamette Valley Stations to 8.5 inches for the Coast Range and Cascade Range Willamette Stations. Damages to crops, flood control structures, dwellings, movable equipment, and from bank erosion were estimated at $1,400,000 by the Corps of Engineers.

Chehalis Basin.--Minor flooding occurred along the Chehalis River in Washington from the 6th to the 8th. The high water was due to a combination of heavy rain, ranging from 2 to 4 inches over the lower elevations, and snowmelt. No damage was reported from the flooding.

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
ST. LAWRENCE DRAINAGE	Ft.			Ft.	
Lake Erie					
St. Joseph: Montpelier, Ohio	10	Dec. 25	4	(14.0 (10.9	Dec. 26 2
ATLANTIC SLOPE DRAINAGE					
Savannah: Clyo, Ga.	11	21	23	11.4	22
Ogeechee: Dover, Ga.	7	26	28	7.1	26
Eden, Ga.	9	28	1/	9.5	Feb. 1
Ocmulgee: Macon, Ga.	18	15	18	19.4	16
Altamaha: Charlotte, Ga.	15	27	1/	16.3	29
Satilla: Atkinson, Ga.	13	25	1/	15.0	31
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	(14 (16	14 30	15.1 18.4	14 21
Pearl: Jackson, Miss.	18	(8 (30	19 30	21.0 18.1	12 30
Bogalusa, La.	15	(6 (15	11 1/	16.7 17.6	8 31
Pearl River, La.	12	28	1/	12.6	31
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Kankakee: Momence, Ill.	4	28	29	5.25	28
Illinois: La Salle, Ill.	20	Dec. 26	3	23.2	Dec. 26
Havana, Ill.	14	Dec. 29	16	15.4	5
Beardstown, Ill.	14	5	10	14.3	7
Meredosia, Ill.	10	Dec. 28	21	12.6	8
Kaskaskia: Carlyle, Ill.	21	5	5	21.3	5
Ohio Basin					
Paint Creek: Bourneville, Ohio	10	(2 (6	3 6	12.6 11.4	2 6
Scioto: Piketon, Ohio	16	(3 (7	4 8	19.4 17.1	3 7
White Basin					
Buffalo: Gilbert, Ark.	30	2	2	33.0	2
Black: Poplar Bluff, Mo.	16	2	3	17.1	2
Black Rock, Ark.	14	1	19	26.8	2
Little Red: Judsonia, Ark.	30	2	3	32.9	2
Cache: Patterson, Ark.	7	2	1/	11.1	14
White: Batesville, Ark.	23	2	3	27.5	2
Newport, Ark.	26	4	8	27.7	5
Augusta, Ark.	32	5	13	32.7	7
Georgetown, Ark.	21	7	18	23.1	10-11
Des Arc, Ark.	24	9	18	25.4	12-13
Clarendon, Ark.	26	11	30	28.3	16
St. Charles, Ark.	25	17	31	26.0	20-24
Lower Mississippi Basin					
St. Francis: Fisk, Mo.	20	2	13	#24.2	6
St. Francis, Ark.	18	2	15	#20.8	7
WEST GULF OF MEXICO DRAINAGE	Ft.			Ft	
Calcasieu: Hineston, La.	12	25	1/	13.15	30
Trinity: Moss Bluff, Texas	4	27	29	4.55	28
GULF OF CALIFORNIA DRAINAGE					
Colorado Basin					
Gila: Cliff, N. Mex.	8	Dec. 31	1	10.5	Dec. 31
PACIFIC SLOPE DRAINAGE					
Sacramento: Moulton Weir, Calif.	77	6	7	77.8	6
Colusa Weir, Calif.	62	5	10	67.0	6
Tisdale Weir, Calif.	45	5	13	48.3	7
Russian: Hopland, Calif.	21	4	5	21.4	4
Healdsburg, Calif.	19	4	5	22.1	5
Guerneville, Calif.	32	4	7	42.3	[illegible]
South Fork Eel: Miranda, Calif.	27	4	5	32.9	4
Eel: Scotia, Calif.	45	5	5	45.3	[illegible]
Fernbridge, Calif.	17	4	6	24.2	5
Mad: Arcata, Calif.	17	4	5	19.9	4
Redwood Creek: Orick, Calif.	19	4	4	22.0	4
Trinity: Hoopa, Calif.	28	4	7	31.1	5
Smith: Jed Smith Park, Calif.	35	6	6	38.5	6
Dr. Fine Bridge, Calif.	30	6	6	36.0	6
Rogue: Raygold, Oreg.	12	6	6	12.05	6
Grants Pass, Oreg.	19	6	6	20.0	6
Coquille: Myrtle Point, Oreg.	35	3	8	(43.5 (40.4	4 6
Coquille, Oreg.	21	3	9	(24.7 (23.0	4 6
Umpqua: Winston, Oreg.	26	4 6	4 6	27.6 26.8	4 6
Roseburg, Oreg.	22	4 6	4 6	24.9 22.7	4 6
Columbia Basin					
McKenzie: Coburg, Oreg.	11	6	6	11.0	6
Marys: Philomath, Oreg.	20	(3 (5	4 6	20.5 20.5	3 5
Santiam: Jefferson, Oreg.	15	6	7	18.1	6
Luckiamute: Suver, Oreg.	27	(3 (5	5 7	28.7 28.6	4 6
South Yamhill: Whiteson, Oreg.	38	3	9	(41.8 (42.5	4 6
Pudding: Aurora, Oreg.	20	1	12	(24.3 (25.0	4 6
Tualatin: Farmington, Oreg.	29	3	13	32.4	8
Johnson Creek: Sycamore, Oreg.	8	(3 (5	4 6	11.9 8.9	3 5
Willamette: Oregon City, Oreg.	27	6	9	(28.0 (28.1	6 8
Chehalis Basin					
Chehalis: Centralia, Wash.	63	6	8	64.2	7
Grand Mound, Wash.	14	7	8	14.1	8

* Provisional
# Highest Stage Observed
1/ Continued at End of Month

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y. 1006 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	86	-7.5	76	309	6.8
1000	31	135			306	7.0
950	31	536	-8.4	74	312	13.8
900	31	953	-8.9	76	315	18.5
850	31	1,396	-9.2	70	317	20.0
800	31	1,864	-10.2	69	311	18.6
750	31	2,360	-11.[illegible]	63	302	21.8
700	31	2,890	-12.7	58	289	25.8
650	31	3,450	-15.1	58	283	28.4
600	31	4,055	-18.5	56	278	30.3
550	31	4,695	-22.2	55	278	36.7
500	31	5,397	-26.2	51	277	42.9
450	31	6,150	-30.8	46	274	42.9
400	31	6,979	-36.6	47	270	48.0
350	31	7,892	-42.8		274	51.5
300	31	8,919	-48.5		272	54.0
250	31	10,107	-53.0		268	55.9
200	30	11,526	-54.1		269	56.5
175	30	12,385	-52.7		268	53.6
150	30	13,380	-53.5		263	49.0
125	30	14,547	-54.7		262	43.1
100	30	15,968	-56.8		270	42.0
80	30	17,376	-58.3		267	39.0
70	30	18,215	-58.4		269	34.6
60	29	19,181	-59.1		270	31.7
50	29	20,323	-59.4		273	29.5
40	28	21,719	-59.9		269	27.4
30	27	23,511	-59.7		273	28.0
25	26	24,647	-60.1		277	28.2
20	23	26,041	-59.4		275	36.7
15	18	27,849	-57.1		270	48.0
10	5	30,455	-56.0			
7						
5						

ALBUQUERQUE, N. MEX. 838 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,619	-4.9	70	13	4.1
1000	31	207				
950	31	621				
900	31	1,054				
850	31	1,508				
800	31	1,989	-2.1	48	322	7.6
750	31	2,497	-4.0	48	308	10.1
700	31	3,042	-6.2	45	301	13.4
650	31	3,614	-9.2	42	294	15.5
600	31	4,234	-12.9	39	285	18.3
550	31	4,885	-17.3	39	282	21.8
500	31	5,599	-22.6	38	279	25.6
450	31	6,357	-28.4	36	278	28.9
400	31	7,198	-34.8	34	279	33.4
350	31	8,117	-41.6	37	274	37.9
300	31	9,148	-48.0		276	42.5
250	31	10,334	-53.4		277	47.6
200	31	11,768	-53.2		277	54.6
175	31	12,627	-53.5		278	58.5
150	31	13,616	-55.2		277	54.0
125	31	14,771	-58.6		274	50.7
100	31	16,165	-61.0		277	42.3
80	30	17,550	-61.9		279	32.8
70	29	18,378	-62.1		282	24.5
60	29	19,330	-62.2		289	17.1
50	24	20,461	-61.2		294	12.6
40	21	21,844	-60.2		302	9.7
30	19	23,643	-58.8		338	8.7
25	17	24,792	-58.1		351	7.0
20	13	26,206	-56.3		314	7.8
15	7	28,024	-55.7			
10						
7						
5						

AMARILLO, TEXAS 892 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,095	-5.6	75	266	4.5
1000	31	188				
950	31	600				
900	31	1,030				
850	31	1,477	-.2	60	267	8.4
800	31	1,963	-.1	49	275	10.1
750	31	2,477	-2.3	47	275	10.9
700	31	3,023	-5.4	44	274	12.8
650	31	3,596	-8.9	41	270	16.7
600	31	4,217	-12.6	35	271	20.8
550	31	4,874	-17.0	33	271	25.1
500	31	5,583	-22.3	34	269	29.7
450	31	6,344	-28.0	34	266	32.6
400	31	7,184	-34.6	34	263	36.9
350	31	8,103	-41.5	39	262	43.5
300	31	9,133	-48.3		263	49.9
250	31	10,317	-53.9		262	52.8
200	31	11,744	-54.8		265	60.6
175	31	12,598	-54.6		267	60.8
150	31	13,583	-55.9		266	58.1
125	30	14,732	-58.2		268	53.8
100	30	16,127	-60.8		268	45.8
80	30	17,508	-62.1		268	37.1
70	29	18,331	-62.3		269	30.5
60	28	19,283	-62.2		275	22.7
50	28	20,411	-61.2		278	17.3
40	27	21,797	-60.5		280	15.2
30	24	23,588	-59.5		289	14.4
25	20	24,730	-59.1		299	12.8
20	17	26,136	-57.9		298	14.6
15	11	27,951	-56.9			
10	8	30,532	-53.0			
7	6	32,838	-48.9			
5	5	35,108	-42.6			

ANCHORAGE, ALASKA 1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	29	-12.8	67	12	3.3
1000	31	78			13	4.9
950	31	478	-6.3	66	39	6.0
900	31	898	-5.9	58	87	5.2
850	31	1,344	-7.6	60	104	7.0
800	31	1,814	-9.8	59	118	7.4
750	31	2,311	-12.5	59	127	7.[illegible]
700	31	2,834	-15.3	54	123	7.8
650	31	3,390	-18.5	51	125	6.4
600	31	3,983	-22.2	48	122	5.2
550	31	4,614	-26.4	48	146	3.1
500	31	5,300	-31.1	45	134	1.6
450	31	6,036	-36.6	42	299	2.3
400	31	6,845	-42.6	44	317	3.5
350	31	7,734	-48.9		332	2.3
300	31	8,733	-54.3		330	4.5
250	31	9,892	-57.2		284	6.0
200	31	11,318	-53.1		272	10.1
175	31	12,180	-51.8		266	14.8
150	31	13,182	-50.9		266	16.3
125	31	14,369	-50.7		260	18.3
100	31	15,823	-50.3		266	22.7
80	31	17,277	-50.8		269	24.9
70	31	18,145	-51.2		269	27.4
60	31	19,148	-51.3		271	31.1
50	31	20,330	-52.0		273	32.2
40	31	21,770	-53.5		277	36.9
30	29	23,628	-54.5		278	36.3
25	27	24,806	-55.2		281	42.5
20	22	26,282	-55.9		284	45.6
15	14	28,093	-58.0		283	50.9
10						
7						
5						

* ANNETTE, ALASKA 1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	37	-2.1	73	73	4.9
1000	31	68			90	3.7
950	31	477	-3.3	75	120	6.0
900	31	903	-5.4	77	153	8.2
850	31	1,350	-7.0	76	175	8.9
800	31	1,822	-9.1	75	200	9.9
750	31	2,318	-11.3	72	221	9.7
700	31	2,847	-14.5	67	229	10.9
650	31	3,403	-17.9	59	238	13.2
600	31	4,000	-21.6	58	244	14.4
550	31	4,634	-25.9	58	250	17.1
500	31	5,321	-30.5	56	258	19.2
450	31	6,057	-35.8	52	263	23.9
400	31	6,873	-41.3	51	268	24.1
350	31	7,768	-47.2		265	31.1
300	31	8,775	-52.6		266	36.1
250	31	9,943	-55.2		280	34.4
200	31	11,375	-52.4		284	29.3
175	31	12,241	-51.0		284	27.6
150	31	13,245	-50.6		288	28.2
125	31	14,433	-51.0		290	28.0
100	31	15,882	-51.7		295	26.8
80	31	17,329	-52.1		296	26.4
70	31	18,191	-52.5		299	25.8
60	31	19,188	-53.0		303	26.6
50	31	20,362	-53.6		304	25.6
40	31	21,793	-55.0		309	27.6
30	30	23,619	-56.6		311	32.4
25	27	24,757	-57.7		315	32.8
20	24	26,168	-58.9		318	35.4
15	20	27,974	-59.9		322	39.8
10	10	30,476	-62.7			
7						
5						

ATHENS, GA. 991 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	.4	80	328	2.7
1000	31	170				
950	31	584	1.6	65	336	4.3
900	31	1,019	1.9	60	311	7.0
850	31	1,480	.8	59	284	11.8
800	31	1,966	-.9	56	276	15.2
750	31	2,482	-2.8	54	272	20.4
700	31	3,025	-4.7	48	269	26.2
650	30	3,604	-7.6	48	269	31.1
600	30	4,227	-11.0	46	272	39.0
550	30	4,889	-14.5	44	272	45.1
500	30	5,609	-18.9	45	267	51.3
450	30	6,381	-24.3	49	266	58.5
400	30	7,235	-30.3	48	263	64.9
350	30	8,172	-36.7	51	260	74.0
300	30	9,223	-43.9		261	85.9
250	30	10,428	-50.7		260	99.3
200	30	11,863	-56.1		260	106.3
175	29	12,717	-57.5		262	99.5
150	27	13,679	-59.7		263	85.9
125	26	14,814	-62.2		264	73.4
100	26	16,183	-65.0		263	59.8
80	26	17,538	-66.5		263	47.2
70	26	18,348	-65.6		264	40.6
60	25	19,287	-64.4		268	33.4
50	25	20,405	-63.1		270	28.4
40	24	21,782	-62.0		269	28.0
30	21	23,573	-60.1		276	23.9
25	20	24,714	-58.6		283	26.0
20	18	26,125	-56.1		276	33.8
15	15	27,981	-52.2		270	46.2
10	6	30,631	-44.6			

* BARROW, ALASKA 1020 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	-27.0	69	107	8.2
1000	31	153	-23.1	68	111	13.8
950	31	539	-15.6	53	113	16.7
900	31	944	-13.8	46	114	12.0
850	31	1,378	-14.1	45	118	9.3
800	31	1,838	-14.9	45	124	6.8
750	31	2,326	-16.6	47	120	4.1
700	31	2,842	-18.8	49	221	2.3
650	31	3,392	-21.4	48	246	3.9
600	31	3,978	-24.8	47	261	6.2
550	31	4,604	-28.6	47	265	8.5
500	31	5,283	-33.2	46	266	11.8
450	31	6,012	-38.3	47	262	14.6
400	31	6,817	-44.1	49	265	15.9
350	31	7,701	-50.4		262	20.2
300	31	8,692	-56.6		265	21.8
250	31	9,835	-61.0		265	20.6
200	30	11,216	-59.6		267	22.7
175	30	12,055	-57.9		270	24.7
150	30	13,029	-57.0		265	27.8
125	30	14,185	-56.5		265	31.1
100	30	15,601	-56.4		267	38.3
80	30	17,014	-57.0		268	42.7
70	29	17,846	-57.7		268	46.6
60	28	18,826	-58.0		268	51.9
50	26	19,968	-58.8		270	58.5
40	26	21,364	-59.7		270	64.1
30	25	23,157	-60.8		271	72.7
25	22	24,297	-61.9		270	80.6
20	20	25,659	-63.2		270	82.0
15	11	27,544	-64.0			
10	9	29,945	-66.5			

BARTER IS., ALASKA 1020 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	15	-27.7	76	108	8.2
1000	31	159	-23.0	74	108	11.8
950	31	544	-16.5	61	107	17.7
900	31	950	-14.1	56	107	13.6
850	31	1,383	-14.4	57	109	8.4
800	31	1,842	-15.4	49	100	6.0
750	31	2,325	-17.1	46	77	3.7
700	30	2,842	-19.5	46	29	3.3
650	30	3,386	-22.5	46	356	4.1
600	30	3,973	-26.2	46	346	7.4
550	30	4,593	-29.7	43	339	11.7
500	30	5,271	-34.2	41	341	15.2
450	30	5,995	-39.0	39	333	17.3
400	29	6,792	-44.6		328	22.3
350	29	7,675	-50.2		326	25.8
300	29	8,669	-55.6		323	27.8
250	29	9,818	-59.5		320	24.1
200	29	11,215	-58.7		305	21.6
175	29	12,058	-56.7		299	23.9
150	29	13,037	-55.9		295	25.6
125	29	14,199	-55.5		289	28.6
100	28	15,614	-56.1		290	36.7
80	28	17,031	-56.6		287	44.5
70	27	17,865	-57.3		287	46.6
60	26	18,837	-58.1		286	50.9
50	26	19,983	-59.0		284	60.0
40	25	21,396	-59.7		283	64.9
30	24	23,201	-60.7		284	73.8
25	24	24,333	-61.9		286	81.0
20	23	25,730	-63.1		284	89.7
15	14	27,724	-62.3			
10						

BETHEL, ALASKA 998 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	39	-14.5	70	43	11.3
1000	31	26			41	12.0
950	31	430	-3.4	72	100	14.0
900	31	851	-4.8	70	129	13.8
850	31	1,300	-6.8	70	141	14.4
800	31	1,772	-8.5	65	146	15.3
750	31	2,269	-11.0	61	145	14.8
700	31	2,798	-13.9	53	141	15.3
650	31	3,355	-17.2	52	140	14.6
600	31	3,953	-20.9	53	139	15.[illegible]
550	31	4,585	-25.2	51	132	17.3
500	31	5,277	-29.9	49	132	16.1
450	31	6,012	-35.3	48	136	16.1
400	31	6,829	-41.6	45	136	14.4
350	31	7,722	-48.0		144	13.2
300	31	8,725	-54.2		160	14.0
250	31	9,883	-57.8		177	12.6
200	31	11,303	-53.9		190	13.8
175	31	12,164	-52.2		199	15.9
150	31	13,164	-51.3		212	17.3
125	31	14,350	-50.7		221	19.2
100	31	15,806	-50.4		224	22.0
80	31	17,263	-50.2		239	26.2
70	31	18,134	-50.1		244	27.0
60	31	19,142	-50.3		246	28.0
50	31	20,330	-50.9		249	32.1
40	31	21,780	-51.8		253	34.2
30	29	23,649	-52.8		259	40.2
25	29	24,825	-53.2		264	43.5
20	27	26,245	-54.1		266	49.0
15	25	28,118	-54.6		270	49.7
10	15	30,811	-54.0		274	51.7

BISMARCK, N. DAK. 963 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	505	-21.6	70	19	3.5
1000	31	221				
950	31	600	-21.4	56	23	3.1
900	31	1,003	-16.0	61	295	5.4
850	31	1,437	-11.8	60	290	8.7
800	31	1,902	-11.6	56	290	13.0
750	31	2,392	-12.7	54	292	17.7
700	31	2,921	-14.6	55	292	21.4
650	31	3,475	-17.2	52	292	26.4
600	31	4,077	-20.5	49	291	28.6
550	31	4,708	-24.3	46	294	32.6
500	31	5,405	-29.0	46	295	36.3
450	31	6,142	-34.2	46	295	41.4
400	31	6,966	-40.2	46	293	43.5
350	31	7,864	-46.7		296	47.4
300	31	8,870	-53.2		291	48.4
250	31	10,030	-57.9		290	50.1
200	31	11,440	-56.3		290	44.9
175	31	12,292	-54.3		289	40.4
150	31	13,282	-53.5		286	38.5
125	31	14,455	-53.8		289	36.9
100	31	15,887	-54.6		289	33.0
80	31	17,311	-55.6		294	29.5
70	31	18,161	-56.1		297	27.6
60	31	19,141	-56.6		298	26.4
50	31	20,295	-57.9		304	25.3
40	30	21,700	-58.3		308	23.3
30	30	23,506	-59.6		315	20.6
25	28	24,647	-60.1		315	22.7
20	23	26,048	-60.3		321	24.9
15	19	27,860	-60.5		313	27.8
10	5	30,332	-62.3			

BOISE, IDAHO 918 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	868	-1.4	80	135	4.3
1000	31	180				
950	31	592				
900	31	1,026	.4	66	131	4.5
850	31	1,485	-.9	60	187	5.1
800	31	1,967	-3.4	62	244	8.9
750	31	2,473	-6.3	66	270	13.6
700	31	3,011	-9.3	67	278	18.3
650	31	3,579	-12.6	66	285	21.6
600	31	4,189	-16.1	66	286	25.1
550	31	4,835	-20.6	62	286	26.6
500	31	5,538	-25.4	60	287	29.7
450	31	6,288	-30.9	57	287	34.2
400	31	7,120	-36.9	53	288	36.9
350	31	8,031	-44.0	52	290	37.3
300	31	9,048	-51.4		289	41.0
250	31	10,215	-57.6		296	43.1
200	31	11,618	-57.5		293	42.7
175	30	12,464	-54.3		297	39.0
150	30	13,453	-54.0		294	36.5
125	30	14,622	-54.8		295	35.2
100	30	16,045	-56.3		300	28.6
80	30	17,460	-56.7		304	24.5
70	30	18,306	-57.0		307	21.8
60	30	19,280	-57.3		317	18.1
50	28	20,435	-57.6		339	16.3
40	28	21,842	-58.4		353	14.0
30	27	23,653	-59.1		356	16.7
25	27	24,796	-59.1		357	20.0
20	24	26,250	-58.8		7	19.8
15	17	27,988	-59.8		360	21.2
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* BOOTHVILLE, LA. 1019 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1	9.5	89	16	7.4
1000	31	155	10.0	84	28	8.7
950	31	584	8.4	82	43	5.4
900	31	1,028	7.9	69	260	1.4
850	31	1,499	6.8	57	256	8.2
800	31	1,996	5.3	46	267	12.8
750	31	2,524	3.2	39	266	16.9
700	31	3,078	.3	42	267	21.8
650	31	3,668	-2.8	44	265	26.0
600	31	4,299	-6.5	42	264	29.9
550	31	4,971	-10.5	40	262	34.2
500	31	5,702	-15.0	42	260	39.4
450	31	6,489	-20.3	42	260	47.6
400	31	7,354	-25.9	43	258	57.7
350	31	8,308	-32.7	46	258	67.8
300	31	9,376	-40.2	46	266	73.6
250	31	10,598	-48.2		261	76.9
200	31	12,041	-55.7		268	81.6
175	30	12,982	-58.6		269	81.4
150	29	13,844	-61.0		264	68.8
125	27	14,961	-65.3		267	63.5
100	25	16,306	-68.7			
80	23	17,632	-70.2			
70	21	18,426	-67.5			
60	21	19,359	-65.6		261	28.4
50	20	20,469	-64.6		262	24.3
40	20	21,838	-62.5		278	23.7
30	18	23,619	-60.4			
25	16	24,753	-57.7			
20	15	26,176	-54.2		274	34.2
15	15	28,042	-48.5		269	40.4
10	13	30,778	-41.0		261	62.0
7	8	33,222	-35.7			

* BROWNSVILLE, TEXAS 1018 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	7	9.3	93	330	4.7
1000	31	155	11.2	84	345	3.9
950	31	585	10.4	82	133	2.3
900	31	1,034	9.0	72	144	3.7
850	31	1,507	8.4	54	219	3.7
800	31	2,008	7.1	51	253	8.7
750	31	2,535	4.8	46	260	11.8
700	31	3,097	1.9	47	256	15.9
650	31	3,687	-1.1	39	258	19.0
600	31	4,326	-5.1	36	255	24.1
550	31	4,998	-9.4	39	253	30.7
500	31	5,736	-13.9	43	252	38.5
450	31	6,525	-19.1	49	251	46.4
400	31	7,398	-24.7	50	255	58.5
350	31	8,357	-31.0	52	253	72.5
300	31	9,433	-38.5	46	256	84.1
250	31	10,663	-46.7		257	91.3
200	30	12,117	-55.4		263	97.1
175	29	12,961	-59.7		263	89.7
150	29	13,916	-63.3		260	84.3
125	28	15,024	-68.1		260	68.0
100	28	16,349	-72.1		260	57.1
80	28	17,660	-72.5		259	40.2
70	28	18,446	-70.8		260	28.0
60	27	19,365	-67.7		260	20.2
50	25	20,467	-65.3		258	20.4
40	25	21,835	-62.5		263	22.3
30	23	23,617	-60.1		266	19.6
25	23	24,761	-57.7		266	21.2
20	22	26,181	-54.7		267	25.1
15	21	28,045	-49.8		264	28.0
10	14	30,736	-44.2		258	40.6
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BUFFALO, N. Y. 992 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	218	-7.3	79	264	5.2
1000	31	156				
950	31	553	-8.3	78	268	10.5
900	31	974	-9.4	74	278	14.2
850	31	1,415	-10.6	71	276	16.1
800	31	1,881	-11.3	64	277	19.4
750	31	2,371	-12.6	66	279	22.9
700	31	2,900	-14.2	61	275	27.0
650	31	3,459	-16.7	59	274	29.1
600	31	4,058	-19.4	59	272	33.8
550	31	4,699	-23.1	55	268	38.1
500	31	5,394	-27.3	51	264	43.3
450	31	6,142	-32.2	50	261	45.6
400	31	6,967	-37.6	47	259	50.9
350	31	7,876	-43.8	58	259	57.9
300	31	8,897	-49.7		255	66.2
250	31	10,076	-54.0		256	76.5
200	31	11,506	-54.2		259	67.6
175	30	12,362	-53.8		260	65.1
150	30	13,353	-53.9		261	58.7
125	30	14,521	-55.0		263	51.7
100	28	15,929	-56.6		265	45.8
80	28	17,338	-58.1		263	40.0
70	28	18,177	-58.6		261	36.5
60	25	19,143	-59.7		268	37.7
50	24	20,280	-60.2		273	33.2
40	23	21,672	-60.7		272	27.6
30	22	23,455	-61.3		275	27.8
25	21	24,589	-61.1		276	33.8
20	18	25,991	-59.8		278	32.1
15	16	27,801	-58.1			
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*CANTON IS., PACIFIC AREA
+ 1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	29.9	73	34	7.2
1000	31	63	28.7	72	36	7.8
950	31	508	23.1	76	32	9.5
900	31	987	20.4	73	34	7.2
850	31	1,481	18.1	68	5	4.5
800	31	1,998	15.7	61	323	3.7
750	31	2,540	12.9	57	299	5.2
700	31	3,122	10.4	52	301	4.9
650	31	3,733	7.3	51	300	3.5
600	31	4,391	3.3	53	310	3.1
550	31	5,091	-.2	45	352	3.9
500	31	5,851	-4.2	39	354	4.3
450	31	6,675	-8.9	37	8	5.1
400	31	7,579	-14.0	34	35	2.3
350	31	8,580	-20.6	30	341	.8
300	31	9,701	-29.0	28	201	4.5
250	31	10,978	-39.2	26	195	8.2
200	31	12,465	-51.7		186	14.8
175	30	13,316	-59.0		181	15.9
150	30	14,264	-67.0		179	15.9
125	30	15,341	-75.4		163	12.8
100	30	16,605	-83.9		87	11.1
80	30	17,826	-85.5		84	22.9
70	30	18,579	-76.6		90	23.5
60	30	19,476	-72.4		90	29.1
50	30	20,556	-69.0		88	44.9
40	29	21,906	-64.1		91	55.9
30	29	23,701	-56.2		87	60.0
25	29	24,875	-50.5		82	32.1
20	29	26,341	-47.9		253	1.7
15	29	28,250	-45.7		277	7.0
10	17	30,962	-43.5		91	4.1
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

■ CAPE HATTERAS, N. C. 1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	4.6	79	325	7.8
1000	30	139	4.9	73	333	10.7
950	30	551	2.9	68	303	12.2
900	30	993	1.8	64	281	13.0
850	30	1,454	1.0	52	275	19.6
800	30	1,941	-.6	44	269	23.1
750	30	2,453	-2.4	43	267	27.8
700	30	3,001	-4.5	41	270	31.9
650	30	3,575	-7.3	44	271	36.7
600	30	4,203	-10.8	46	269	42.2
550	30	4,859	-14.7	46	267	49.1
500	30	5,583	-19.1	42	266	56.1
450	29	6,355	-24.4	42	266	63.5
400	28	7,212	-29.9	41	263	68.6
350	27	8,155	-36.2	45	262	76.5
300	26	9,212	-42.8		263	84.1
250	26	10,423	-49.6		264	92.7
200	26	11,863	-55.4		264	98.3
175	26	12,711	-56.5		265	94.6
150	26	13,686	-58.3		267	83.7
125	23	14,838	-61.1		267	74.6
100	21	16,214	-64.4		267	62.0
80	20	17,575	-65.8		268	43.9
70	20	18,387	-65.0		267	36.7
60	20	19,330	-63.1		268	33.0
50	19	20,455	-62.1		266	29.9
40	18	21,829	-62.0		279	20.4
30	17	23,617	-59.8		275	24.9
25	16	24,760	-58.3		280	25.4
20	16	26,168	-56.7		284	28.7
15	16	28,015	-51.2		274	38.9
10	12	30,709	-42.1			
7	5	33,218	-31.2			

* CARIBOU, ME. 989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	191	-9.6	81	327	4.5
1000	31	100				
950	31	499	-9.3	89	345	6.6
900	31	914	-9.8	92	360	7.6
850	31	1,355	-11.0	90	15	6.6
800	31	1,819	-12.2	82	15	6.0
750	31	2,315	-13.6	74	333	4.5
700	31	2,834	-15.4	69	287	7.8
650	31	3,391	-18.0	64	290	11.3
600	31	3,986	-21.0	63	287	14.8
550	31	4,623	-24.8	66	277	18.3
500	31	5,312	-29.0	59	274	22.1
450	31	6,056	-34.2	56	273	25.1
400	31	6,874	-39.4	55	272	27.8
350	31	7,776	-45.2		267	32.4
300	31	8,793	-50.8		263	36.9
250	31	9,969	-53.9		264	42.9
200	31	11,402	-53.4		271	38.1
175	31	12,262	-53.0		269	39.0
150	31	13,257	-52.8		268	39.2
125	30	14,432	-54.3		267	33.8
100	30	15,856	-55.7		267	34.8
80	30	17,269	-57.5		269	33.2
70	29	18,104	-58.1		268	30.7
60	29	19,074	-58.6		270	29.7
50	28	20,215	-59.7		273	28.0
40	28	21,605	-60.6		269	26.2
30	26	23,392	-60.9		277	28.4
25	26	24,522	-61.2		275	29.1
20	25	25,903	-61.3		273	30.3
15	24	27,681	-60.4		275	34.2
10	10	30,243	-58.1			
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CHARLESTON, S. C. 1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	13	3.1	82	327	4.5
1000	31	153	5.3	73	330	5.2
950	31	573	5.8	62	309	5.1
900	31	1,016	4.6	59	283	8.5
850	31	1,481	3.2	56	267	13.0
800	31	1,972	1.4	50	266	18.6
750	31	2,493	-.2	45	266	23.7
700	31	3,041	-2.8	43	262	27.0
650	31	3,625	-5.4	40	263	32.2
600	31	4,251	-8.7	42	263	38.3
550	31	4,919	-12.6	41	265	45.3
500	31	5,644	-17.1	39	264	51.1
450	31	6,422	-22.8	40	259	56.9
400	31	7,283	-28.1	43	259	65.1
350	31	8,230	-34.4	43	259	71.9
300	31	9,291	-41.7	44	262	85.7
250	31	10,507	-49.0		263	92.9
200	31	11,951	-55.3		262	97.5
175	31	12,797	-58.0		261	92.5
150	31	13,763	-60.3		263	83.7
125	31	14,893	-63.0		265	69.0
100	31	16,257	-66.1		262	57.9
80	31	17,607	-66.5		263	44.5
70	30	18,414	-65.5		264	39.6
60	30	19,353	-64.1		270	29.3
50	30	20,472	-63.0		265	24.3
40	30	21,851	-61.2		277	21.4
30	29	23,644	-58.7		281	25.1
25	29	24,793	-56.9		278	26.0
20	29	26,213	-54.7		277	27.6
15	26	28,074	-49.8		276	41.4
10	13	30,761	-41.3		279	57.9
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CHIHUAHUA, MEXICO 857 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,428	1.4	57	293	.8
1000	31	161				
950	31	583				
900	31	1,030				
850	31	1,493	3.0	54	241	1.0
800	31	1,987	4.4	45	257	5.1
750	31	2,509	1.6	[illegible]	251	7.8
700	31	3,063	-.7	35	250	12.0
650	31	3,649	-3.8	29	253	14.8
600	31	4,279	-8.2	[illegible]	260	17.9
550	31	4,943	-13.0	34	267	21.0
500	31	5,667	-18.1	35	271	25.6
450	31	6,440	-23.4	34	[illegible]	28.4
400	31	7,299	-29.1	36	270	37.7
350	31	8,241	-35.3	43	270	49.9
300	30	9,299	-42.0	50	277	58.1
250	30	10,517	-47.9		280	60.2
200	29	11,969	-53.8			
175	27	12,819	-57.0			
150	26	13,790	-59.9			
125	25	14,919	-63.5			
100	25	16,276	-67.5			
80	25	17,618	-67.6			
70	25	18,421	-67.0			
60	25	19,358	-65.0			
50	24	20,471	-64.1			
40	22	21,848	-61.2			
30	21	23,648	-58.8			
25	21	24,796	-57.2			
20	18	26,230	-54.2			
15	8	28,071	-51.4			
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* COLD BAY, ALASKA 991 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	30	.4	88	148	8.5
1000	31	-41				
950	31	377	-.6	[illegible]	[illegible]	[illegible]
900	31	802	-3.0	[illegible]	[illegible]	[illegible]
850	31	1,253	-4.7	78	151	[illegible]
800	31	1,728	-7.0	71	[illegible]	16.5
750	31	2,227	-9.6	67	166	14.4
700	31	2,759	-13.1	[illegible]	171	13.6
650	31	3,317	-16.7	[illegible]	172	12.8
600	31	3,917	-20.9	[illegible]	175	[illegible]
550	31	4,550	-25.3	58	174	12.4
500	31	5,240	-29.7	55	[illegible]	13.4
450	31	5,981	-35.2	[illegible]	[illegible]	[illegible]
400	31	6,795	-40.8	53	174	[illegible]
350	31	7,691	-47.1		171	[illegible]
300	31	8,698	-52.6		176	17.1
250	31	9,870	-53.6		[illegible]	17.3
200	31	11,313	-51.0		209	18.5
175	31	12,185	-49.4		214	21.2
150	31	13,197	-48.8		221	19.2
125	31	14,395	-48.5		222	21.4
100	29	15,873	-48.4		227	21.6
80	29	17,339	-48.6		[illegible]	[illegible]
70	29	18,217	-48.5		235	22.9
60	29	19,229	-49.2		238	23.3
50	29	20,424	-49.3		243	23.1
40	29	21,885	-50.1		249	23.1
30	29	23,761	-50.7		259	22.9
25	28	24,951	-51.3		264	21.8
20	26	26,404	-52.2		276	23.7
15	23	28,269	-52.6		288	[illegible]
10	19	30,887	-53.0		301	[illegible]
7	11	33,282	-52.6			

COLUMBIA, MO. 994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	238	-6.3	75	28	2.1
1000	31	187				
950	31	586	-6.3	65	287	3.1
900	31	1,012	-5.6	59	280	8.0
850	31	1,461	-4.9	52	287	11.8
800	31	1,938	-5.8	50	285	15.2
750	31	2,438	-7.8	48	285	18.5
700	31	2,976	-10.4	48	284	21.6
650	31	3,539	-13.1	46	285	24.3
600	31	4,151	-16.5	41	284	28.7
550	31	4,793	-20.3	40	282	31.5
500	31	5,501	-25.0	39	277	35.9
450	31	6,250	-30.3	42	274	37.9
400	31	7,088	-36.3	42	275	42.2
350	31	8,001	-43.1	42	272	45.8
300	31	9,025	-49.6		276	54.2
250	31	10,204	-54.8		269	57.9
200	31	11,625	-55.7		270	56.9
175	30	12,481	-54.7		270	58.3
150	30	13,468	-55.2		269	58.3
125	30	14,629	-56.7		271	50.5
100	30	16,037	-58.9		273	44.7
80	30	17,433	-60.2		273	37.1
70	30	18,264	-60.5		273	32.8
60	29	19,221	-61.1		275	28.2
50	29	20,352	-61.2		284	23.9
40	27	21,741	-60.8		287	19.6
30	26	23,531	-60.5		289	20.2
25	21	24,682	-59.9		300	19.6
20	16	26,092	-58.7		309	23.3
15	10	27,878	-58.3			
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CORPUS CHRISTI, TEXAS 1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	26	[illegible]	11.6	81	354	4.1
1000	26	156	10.8	83	6	1.9
950	26	581	8.9	86	164	2.5
900	26	1,030	7.9	80	209	1.7
850	26	1,502	6.7	76	211	4.5
800	26	2,000	5.8	65	245	8.7
750	26	2,526	3.7	65	253	12.2
700	26	3,086	.9	65	258	15.9
650	26	3,673	-2.4	63	257	20.6
600	26	4,310	-6.2	62	253	22.7
550	26	4,976	-10.6	60	255	24.7
500	26	5,712	-15.1	58	254	34.6
450	26	6,491	-20.4	58	251	42.0
400	26	7,362	-26.6	63	254	51.5
350	26	8,315	-32.7	68	259	61.8
300	26	9,383	-40.1	70	259	73.2
250	26	10,607	-47.8		258	82.8
200	22	12,072	-56.0		259	85.5
175	19	12,914	-59.1		263	78.5
150	18	13,876	-62.7		264	75.0
125	18	14,991	-66.0		262	67.8
100	15	16,334	-70.0		265	53.2
80	14	17,659	-70.5		271	33.2
70	11	18,449	-68.6			
60	11	19,379	-66.4			
50	10	20,481	-64.5			
40	9	21,852	-62.5			
30	[illegible]	23,632	-60.2			
25	6	24,765	-58.4			
20	6	26,178	-55.5			
15	6	28,028	-50.6			
10	6	30,719	-41.4			

DAYTON, OHIO 985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	297	-6.9	76	305	1.7
1000	31	179				
950	31	581	-7.2	69	277	5.4
900	31	1,001	-7.3	61	290	10.9
850	31	1,446	-7.4	54	291	14.4
800	31	1,918	-8.4	52	287	17.5
750	31	2,416	-9.7	53	280	21.8
700	31	2,949	-11.7	50	285	27.0
650	31	3,510	-14.2	48	280	30.3
600	31	4,119	-17.5	46	276	32.8
550	31	4,761	-21.2	45	272	37.7
500	31	5,464	-25.6	43	270	41.6
450	31	6,217	-30.4	41	267	47.0
400	31	7,049	-36.2	42	265	52.4
350	31	7,963	-42.6	44	264	59.6
300	31	8,990	-48.9		261	71.1
250	30	10,164	-53.7		259	77.7
200	30	11,592	-54.5		263	73.8
175	30	12,448	-54.4		263	68.2
150	30	13,434	-54.7		264	64.3
125	30	14,596	-56.7		262	57.3
100	30	16,004	-58.9		263	49.3
80	29	17,399	-60.0		268	38.1
70	29	18,230	-60.6		271	30.7
60	29	19,188	-60.7		271	26.8
50	28	20,322	-61.1		272	24.7
40	26	21,702	-61.3		276	22.3
30	25	23,488	-60.8		278	26.2
25	24	24,625	-60.4		280	28.6
20	23	26,017	-59.7		275	29.9
15	19	27,828	-58.3		276	32.1
10	9	30,372	-54.4			

DEL RIO, TEXAS 983 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	314	4.6	83	36	2.3
1000	31	175				
950	31	594	5.6	73	102	2.9
900	31	1,037	4.7	66	212	3.1
850	31	1,503	4.9	51	248	5.6
800	31	1,997	4.4	45	263	8.5
750	31	2,521	2.2	40	260	11.5
700	31	3,076	-.8	42	260	15.2
650	31	3,659	-4.2	37	261	17.7
600	31	4,292	-8.0	34	258	21.8
550	31	4,953	-12.5	35	254	27.8
500	31	5,684	-17.7	38	254	31.3
450	31	6,456	-23.5	41	253	37.9
400	31	7,316	-29.6	40	255	45.6
350	31	8,256	-35.8	41	256	53.4
300	31	9,312	-42.2	56	259	65.1
250	31	10,527	-49.0		257	75.6
200	31	11,974	-53.8		264	79.3
175	31	12,826	-56.5		264	76.3
150	30	13,799	-59.1		264	69.5
125	29	14,929	-62.7		262	57.7
100	29	16,291	-66.7		265	49.3
80	28	17,633	-67.6		264	35.7
70	28	18,439	-66.3		266	28.2
60	26	19,375	-65.2		264	23.1
50	25	20,489	-63.4		265	18.1
40	24	21,866	-61.3		271	19.6
30	21	23,660	-59.4		268	12.8
25	18	24,803	-57.2		269	16.5
20	13	26,218	-54.9			
15	7	28,069	-52.2			
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DENVER, COLO. 835 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,611	-6.4	53	176	4.1
1000	31	180				
950	31	590				
900	31	1,021				
850	31	1,472				
800	31	1,951	-1.3	41	271	7.2
750	31	2,464	-3.8	39	298	11.1
700	31	3,005	-7.0	41	302	[illegible]
650	31	3,576	-11.0	[illegible]	306	16.7
600	31	4,188	-15.2	43	303	20.4
550	31	4,839	-19.4	41	304	21.4
500	31	5,542	-24.7	40	294	22.3
450	31	6,295	-30.3	41	298	24.7
400	31	7,126	-36.7	42	[illegible]	25.8
350	31	8,038	-43.6	40	[illegible]	28.9
300	31	9,057	[illegible]		297	29.7
250	31	10,229	-56.3		285	35.4
200	31	11,639	-56.8		282	[illegible]
175	31	12,490	-54.7		281	45.6
150	31	13,478	-54.7		279	44.9
125	31	14,641	-56.0		282	41.4
100	31	16,053	-58.1		[illegible]	34.4
80	31	17,454	-58.8		[illegible]	27.6
70	31	18,291	[illegible]		285	21.8
60	31	19,259	-59.1		[illegible]	17.9
50	30	20,401	-59.9		310	15.5
40	30	21,795	-59.8		312	13.8
30	27	23,599	-59.1		[illegible]	14.6
25	24	24,747	-58.2		328	14.2
20	21	26,150	-58.5		316	16.9
15	7	28,005	-57.2			
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DODGE CITY, KANS. 927 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	792	-7.5	83	319	1.4
1000	31	195				
950	31	597				
900	31	1,022	-3.9	65	281	3.5
850	31	1,475	-1.8	55	298	6.2
800	31	1,957	-2.3	51	306	7.8
750	31	2,465	-4.4	47	292	11.1
700	31	3,008	-7.3	44	288	14.8
650	31	3,577	-10.7	45	285	16.3
600	31	4,194	-14.5	44	284	17.5
550	31	4,844	-18.8	42	286	22.1
500	31	5,551	-24.1	40	281	26.2
450	31	6,305	-29.6	38	277	30.5
400	31	7,143	-36.2	35	273	33.8
350	31	8,056	-43.3		272	37.7
300	31	9,078	-50.1		274	43.9
250	30	10,247	-55.8		273	48.0
200	30	11,664	-55.7		269	55.6
175	30	12,516	-54.7		271	58.3
150	30	13,501	-55.0		272	55.6
125	30	14,661	-56.8		272	47.8
100	30	16,067	-59.3		271	41.4
80	30	17,458	-60.9		275	33.2
70	30	18,287	-61.0		278	26.2
60	30	19,243	-60.9		277	23.1
50	30	20,377	-61.0		295	16.5
40	28	21,763	-60.6		297	15.2
30	28	23,558	-59.7		304	14.8
25	27	24,702	-58.9		297	14.0
20	22	26,109	-58.1		303	19.2
15	16	27,906	-56.6			
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EL PASO, TEXAS 883 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,193	.3	57	345	2.3
1000	31	185				
950	31	600				
900	31	1,045				
850	31	1,504	3.4	47	340	2.9
800	31	1,994	1.6	47	280	4.7
750	31	2,509	-1.0	44	266	11.1
700	31	3,060	-3.4	38	262	15.7
650	31	3,635	-6.6	33	261	17.5
600	31	4,265	-10.7	30	264	21.8
550	31	4,922	-15.4	29	267	25.8
500	31	5,642	-20.6	29	268	29.7
450	31	6,406	-26.5	33	268	33.4
400	31	7,255	-32.8	34	265	37.3
350	31	8,182	-39.4	32	264	44.1
300	31	9,223	-46.0		263	54.9
250	31	10,420	-51.3		267	64.3
200	31	11,865	-52.9		274	72.3
175	31	12,723	-54.9		274	70.9
150	31	13,703	-57.7		273	61.4
125	30	14,844	-61.0		272	56.3
100	30	16,219	-64.5		272	45.5
80	30	17,578	-65.0		275	36.1
70	30	18,392	-64.2		277	26.8
60	30	19,334	-64.1		282	18.1
50	30	20,452	-63.1		283	13.6
40	29	21,829	-61.3		287	9.9
30	28	23,622	-59.5		306	9.5
25	27	24,770	-58.1		297	8.0
20	25	26,179	-56.4		280	16.5
15	23	28,018	-52.5		272	27.6
10	14	30,658	-45.3		259	51.9
7	12	33,074	-40.9		259	69.9
5	9	35,369	-37.4			

ELY, NEV. 808 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,908	-11.2	51	194	8.2
1000	31	242				
950	31	648				
900	31	1,074				
850	31	1,519				
800	31	1,989	-7.0	56	200	7.4
750	31	2,500	-5.2	49	224	3.3
700	31	3,036	-7.7	45	281	8.7
650	31	3,607	-10.5	41	289	13.8
600	31	4,222	-14.3	41	294	16.3
550	31	4,872	-18.6	33	294	18.3
500	31	5,580	-23.7	33	295	22.0
450	31	6,336	-29.6	R32	297	24.5
400	31	7,170	-36.0	R31	296	26.6
350	31	8,084	-43.0	37	304	28.4
300	31	9,105	-50.6		303	31.5
250	31	10,275	-57.2		293	37.3
200	31	11,681	-57.0		289	44.3
175	31	12,530	-55.3		288	46.0
150	31	13,514	-55.5		286	44.3
125	31	14,672	-56.8		284	37.9
100	31	16,077	-59.4		287	33.0
80	31	17,470	-60.1		291	25.6
70	30	18,302	-59.8		298	19.4
60	30	19,265	-60.0		306	15.5
50	29	20,401	-59.6		324	13.6
40	28	21,791	-59.7		344	11.1
30	27	23,588	-59.4		3	11.7
25	21	24,733	-59.2		8	11.7
20	18	26,129	-59.1		8	11.8
15	14	27,916	-58.7		346	10.9
10	10	30,479	-56.8			
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EMPALME, MEXICO 1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	12	10.5	69	324	6.2
1000	31	130	14.1	51	327	7.0
950	31	559	14.8	[illegible]	352	8.7
900	31	1,019	12.3	35	347	3.9
850	31	1,496	9.8	31	246	[illegible]
800	31	1,996	7.1	27	229	4.7
750	31	2,524	4.2	27	237	6.8
700	31	3,082	1.2	23	253	9.5
650	31	3,669	-2.6	20	260	13.8
600	31	4,303	-7.1	21	263	19.0
550	31	4,972	-11.9	23	266	22.3
500	31	5,698	-17.0	22	269	27.6
450	31	6,475	-22.6	25	270	34.2
400	31	7,335	-28.7	30	270	42.9
350	31	8,278	-35.0	34	270	56.9
300	31	9,341	-40.9	37	266	70.5
250	30	10,566	-47.4		268	91.1
200	30	12,021	-53.1		270	95.0
175	30	12,875	-56.5		272	85.7
150	30	13,845	-60.2		276	[illegible]
125	30	14,971	-64.0		276	62.2
100	29	16,324	-67.8		276	46.4
80	28	17,658	-69.2		275	33.0
70	28	18,456	-67.7		278	24.5
60	28	19,390	-65.6		287	16.5
50	27	20,504	-63.9		[illegible]	10.9
40	27	21,879	-61.3		280	11.3
30	24	23,679	-58.5		277	11.8
25	22	24,837	-56.8		[illegible]	10.9
20	18	26,247	-55.4		267	18.8
15	10	28,108	-50.3			
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* FAIRBANKS, ALASKA [illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	135	-24.2	83	5	2.3
1000	31	135			32	5.1
950	31	517	-18.1	60	96	11.5
900	31	918	-14.6	49	[illegible]	16.5
850	31	1,354	-10.8	40	107	12.8
800	31	1,820	-11.3	37	100	8.2
750	31	2,313	-13.4	38	91	5.6
700	31	2,835	-16.1	39	[illegible]	4.1
650	31	3,388	-19.3	39	80	3.9
600	31	3,980	-22.8	38	67	[illegible]
550	31	4,610	-27.0	[illegible]	[illegible]	5.1
500	31	5,293	-31.8	[illegible]	49	[illegible]
450	31	6,025	-37.0	[illegible]	56	6.0
400	31	6,834	-42.8	32	39	6.4
350	31	7,723	-49.1		31	7.4
300	31	8,720	-55.1		28	7.2
250	31	9,872	-59.0		325	6.8
200	31	11,280	-55.7		291	10.3
175	31	12,135	-53.6		282	15.5
150	31	13,129	-52.8		279	17.7
125	30	14,310	-52.3		272	[illegible]
100	30	15,754	-52.1		275	[illegible]
80	[illegible]	[illegible]	-52.7		[illegible]	30.1
70	30	[illegible]	-52.9		275	34.4
60	30	19,048	-53.4		275	36.3
50	[illegible]	20,241	-53.6		276	40.6
40	25	21,691	-54.1		[illegible]	44.7
30	22	23,577	-54.8		279	48.4
25	[illegible]	24,730	-55.8		[illegible]	53.0
20	17	26,140	-56.5		286	55.8
15	8	27,953	-57.3			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

FLINT, MICH.
992 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	234	-8.7	73	258	4.5
1000	31	169				
950	31	566	-9.4	71	284	8.9
900	31	983	-10.3	68	290	12.0
850	31	1,423	-10.7	62	293	14.0
800	31	1,889	-11.4	52	288	16.7
750	31	2,382	-13.2	49	284	20.2
700	31	2,907	-15.1	48	283	23.1
650	31	3,464	-17.5	51	280	27.0
600	31	4,061	-20.3	52	275	31.5
550	31	4,698	-24.2	50	273	33.4
500	31	5,390	-29.0	47	272	35.4
450	31	6,134	-33.9	42	268	38.7
400	31	6,954	-39.1	44	266	45.8
350	31	7,858	-44.7		265	53.4
300	31	8,876	-50.1		263	58.7
250	31	10,057	-53.5		262	60.2
200	30	11,487	-53.4		266	55.9
175	30	12,347	-53.0		267	52.6
150	30	13,340	-53.1		269	52.4
125	30	14,511	-54.6		269	46.8
100	30	15,931	-56.7		269	43.5
80	29	17,341	-57.6		271	37.9
70	28	18,178	-58.1		274	32.6
60	28	19,148	-58.6		277	27.2
50	28	20,291	-59.5		277	25.6
40	28	21,685	-60.1		284	26.2
30	26	23,480	-60.4		284	26.2
25	26	24,615	-60.2		289	27.4
20	23	26,020	-59.6		291	30.1
15	17	27,850	-57.5		287	33.8
10	13	30,443	-55.9			

FORT WORTH, TEXAS
1001 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	180	2.3	78	338	1.7
1000	31	185			348	5.1
950	31	601	2.4	70	292	1.0
900	31	1,036	1.9	60	249	3.5
850	31	1,498	2.4	55	267	6.6
800	31	1,988	1.5	50	271	10.5
750	31	2,509	-1.0	45	272	13.0
700	31	3,054	-3.9	45	269	15.0
650	31	3,633	-7.1	40	268	19.0
600	31	4,255	-10.8	41	269	25.6
550	31	4,913	-15.4	42	265	28.6
500	31	5,632	-20.5	40	263	34.6
450	31	6,398	-26.0	38	260	40.8
400	31	7,246	-32.2	39	259	46.8
350	31	8,176	-39.2	41	259	54.4
300	31	9,217	-45.9		258	65.5
250	31	10,413	-52.1		258	74.4
200	31	11,848	-55.0		260	81.4
175	31	12,699	-56.2		263	79.3
150	31	13,676	-57.6		265	72.8
125	30	14,817	-60.9		265	63.7
100	30	16,191	-64.1		267	53.2
80	28	17,554	-65.0		268	38.9
70	27	18,368	-63.9		270	30.7
60	26	19,313	-63.9		270	22.5
50	25	20,431	-62.8		282	18.1
40	22	21,812	-61.1		286	15.7
30	17	23,601	-59.8		276	14.8
25	12	24,748	-58.7		281	20.0
20	9	26,152	-55.9			
15						
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GLASGOW, MONT.
937 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	696	-20.3	68	82	6.0
1000	31	210				
950	31	594				
900	31	996	-16.2	72	189	2.9
850	31	1,430	-11.7	71	274	9.5
800	31	1,897	-9.8	69	283	15.9
750	31	2,390	-11.1	71	288	20.0
700	31	2,922	-12.9	71	290	24.5
650	31	3,482	-16.1	71	293	25.8
600	31	4,082	-19.6	66	292	28.7
550	31	4,718	-23.8	64	293	30.3
500	31	5,412	-28.8	61	290	34.0
450	31	6,150	-33.9	53	294	39.4
400	31	6,972	-40.0	53	294	43.5
350	31	7,871	-46.7		296	47.4
300	31	8,879	-53.2		298	51.3
250	31	10,037	-58.5		297	51.9
200	31	11,442	-56.7		294	46.8
175	31	12,293	-54.6		295	42.0
150	31	13,283	-53.4		296	38.3
125	30	14,459	-53.6		298	37.1
100	30	15,891	-54.6		301	33.0
80	30	17,317	-55.1		299	29.5
70	29	18,165	-55.9		309	30.7
60	28	19,146	-56.2		309	27.4
50	27	20,305	-56.6		319	23.7
40	26	21,722	-57.5		327	21.2
30	23	23,530	-59.4		339	24.5
25	17	24,666	-59.9		339	24.5
20	12	26,042	-61.7		330	24.9
15	8	27,789	-63.6			
10						

* GRAND JUNCTION, COLO.
854 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,474	-7.7	77	105	2.3
1000	31	231				
950	31	636				
900	31	1,063				
850	31	1,512			110	3.5
800	31	1,989	-5.0	54	144	5.4
750	31	2,494	-6.5	53	183	4.5
700	31	3,032	-9.3	56	260	6.8
650	31	3,598	-11.9	52	282	12.2
600	31	4,211	-15.6	48	290	15.3
550	31	4,858	-19.7	45	296	18.8
500	31	5,564	-24.7	43	299	21.2
450	31	6,314	-30.5	45	300	23.1
400	31	7,149	-36.6	42	305	25.6
350	31	8,060	-43.7	52	305	27.8
300	31	9,079	-50.6		304	31.1
250	31	10,250	-56.4		297	33.6
200	31	11,662	-55.6		291	40.8
175	31	12,513	-54.7		288	43.9
150	31	13,499	-54.9		286	42.5
125	31	14,659	-56.7		284	36.9
100	31	16,065	-58.7		288	32.4
80	29	17,458	-59.6		290	27.8
70	29	18,292	-59.5		296	22.1
60	28	19,257	-59.8		299	14.4
50	28	20,395	-59.8		310	12.8
40	27	21,791	-59.5		326	12.6
30	23	23,597	-59.6		351	12.4
25	22	24,734	-58.8		350	13.2
20	20	26,135	-58.6		343	12.2
15	13	27,930	-58.3		307	15.7
10	7	30,524	-55.8			

* GREAT FALLS, MONT.
885 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,123	-10.9	72	234	6.8
1000	31	173				
950	31	574				
900	31	995				
850	31	1,433	-8.9	58	244	15.5
800	31	1,904	-7.3	67	260	20.4
750	31	2,406	-8.2	66	271	24.1
700	31	2,940	-11.2	68	280	27.6
650	31	3,502	-14.6	67	285	30.9
600	31	4,107	-18.3	64	286	30.1
550	31	4,748	-22.7	61	286	30.9
500	31	5,444	-27.7	61	288	33.0
450	31	6,186	-33.3	62	287	35.2
400	31	7,011	-39.4	59	288	39.2
350	31	7,912	-45.8		287	41.6
300	31	8,923	-52.5		289	45.6
250	31	10,085	-58.2		289	46.8
200	31	11,491	-56.4		287	45.1
175	30	12,336	-54.5		289	39.8
150	28	13,326	-53.8		291	38.9
125	27	14,497	-53.8		293	35.5
100	27	15,931	-53.9		298	32.4
80	26	17,358	-54.9		302	28.2
70	26	18,209	-55.3		302	25.8
60	26	19,191	-55.6		308	24.7
50	23	20,358	-55.8		324	19.2
40	20	21,777	-56.6		334	17.5
30	15	23,600	-57.8		345	22.7
25	10	24,743	-58.2			
20	8	26,166	-60.2			
15						
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GREEN BAY, WIS.
996 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	210	-14.8	77	296	4.9
1000	31	178			308	5.2
950	31	567	-13.3	86	306	8.9
900	31	979	-13.6	82	305	9.7
850	31	1,415	-12.9	72	299	11.7
800	31	1,876	-13.8	69	292	13.6
750	31	2,366	-14.6	59	292	19.2
700	31	2,886	-16.2	52	293	24.1
650	31	3,440	-18.4	54	293	28.0
600	31	4,036	-21.4	48	288	32.1
550	31	4,670	-25.4	50	288	35.5
500	31	5,358	-29.7	47	287	39.0
450	31	6,094	-34.7	45	286	42.0
400	31	6,914	-40.6	45	285	45.8
350	31	7,812	-46.7		282	47.2
300	31	8,821	-52.1		273	48.6
250	31	9,995	-54.3		271	53.8
200	31	11,426	-53.3		268	55.2
175	31	12,287	-52.6		271	51.3
150	31	13,283	-53.0		270	49.7
125	30	14,456	-54.2		271	45.6
100	30	15,882	-55.7		270	40.6
80	29	17,299	-56.8		275	36.9
70	29	18,143	-57.4		281	32.1
60	29	19,115	-58.9		284	27.0
50	29	20,258	-58.9		289	23.5
40	27	21,660	-59.6		291	22.1
30	23	23,455	-60.9		299	22.1
25	20	24,586	-61.1		307	22.3
20	17	25,977	-61.2		309	24.5
15	11	27,740	-61.0			
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GREENSBORO, N. C.
987 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	273	-2.1	78	331	2.9
1000	31	165				
950	31	576	-.8	60	321	7.4
900	31	1,006	-1.2	57	310	9.9
850	31	1,462	-1.5	56	297	14.0
800	31	1,945	-2.4	49	292	19.0
750	31	2,457	-4.2	48	280	22.0
700	31	2,998	-6.6	50	274	26.2
650	31	3,571	-9.5	53	272	29.5
600	31	4,190	-13.1	55	270	33.8
550	31	4,845	-16.8	50	269	42.0
500	31	5,559	-21.2	50	270	47.6
450	31	6,326	-26.0	49	269	53.0
400	31	7,175	-31.4	51	268	62.4
350	31	8,110	-37.5	49	265	72.8
300	31	9,160	-44.3	53	266	84.3
250	31	10,363	-51.0		263	89.7
200	31	11,799	-55.7		265	95.4
175	31	12,649	-56.5		265	90.7
150	31	13,624	-57.7		265	83.5
125	31	14,768	-60.3		266	69.7
100	31	16,151	-62.9		267	57.9
80	31	17,520	-63.9		266	45.5
70	31	18,337	-63.7		269	37.9
60	30	19,285	-63.8		272	32.2
50	30	20,404	-63.1		276	26.0
40	30	21,780	-61.7		279	22.5
30	29	23,568	-60.4		283	23.7
25	28	24,708	-59.2		283	27.6
20	28	26,111	-57.5		279	33.4
15	26	27,934	-54.5		280	42.2
10	20	30,554	-48.2			
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GUAM, MARIANA IS.
1002 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	111	23.9	81	76	9.3
1000	31	126	23.9	80	77	9.5
950	31	573	20.9	82	70	22.3
900	31	1,041	17.9	77	73	23.1
850	31	1,529	15.5	67	75	21.2
800	31	2,043	15.0	44	76	19.8
750	31	2,587	13.6	28	79	18.8
700	31	3,165	11.0	24	81	17.5
650	31	3,774	8.0	26	83	14.8
600	31	4,435	4.1	26	87	13.8
550	31	5,132	-.1	22	102	14.2
500	31	5,894	-4.7	25	109	15.5
450	31	6,707	-9.9	23	110	16.7
400	31	7,613	-16.1	24	109	13.4
350	31	8,606	-22.8	25	105	10.7
300	31	9,717	-31.5	28	96	5.2
250	31	10,980	-41.6		137	3.3
200	31	12,453	-53.6		186	5.6
175	31	13,298	-60.5		186	9.7
150	31	14,242	-67.9		174	14.0
125	31	15,315	-76.0		156	20.2
100	31	16,579	-82.5		131	17.3
80	26	17,823	-81.4		101	11.7
70	25	18,580	-76.8		101	11.8
60	24	19,483	-71.4		96	13.4
50	24	20,569	-68.3		92	20.6
40	24	21,926	-62.5		96	29.9
30	24	23,729	-56.8		90	32.6
25	24	24,989	-54.7		92	28.4
20	24	26,330	-50.5		86	15.0
15	19	28,220	-46.5		46	6.0
10	10	30,931	-43.5			
7						
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HILO, HAWAII
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	18.7	87	253	5.2
1000	31	143	19.7	80	265	3.9
950	31	584	16.5	86	80	3.5
900	31	1,043	13.4	88	79	6.2
850	31	1,524	10.6	87	84	6.6
800	31	2,028	8.5	77	79	5.6
750	31	2,565	8.0	41	84	5.1
700	31	3,130	7.0	31	73	4.1
650	31	3,736	4.3	27	7	3.9
600	31	4,384	.8	25	322	8.2
550	31	5,071	-3.7	25	307	10.9
500	31	5,824	-8.5	25	301	15.9
450	31	6,632	-14.2	24	295	21.6
400	31	7,517	-20.1	26	301	25.8
350	31	8,494	-26.7	27	291	33.2
300	31	9,590	-34.0	26	283	41.8
250	31	10,845	-42.5		280	48.2
200	31	12,319	-52.7		280	50.9
175	31	13,170	-58.2		280	46.2
150	31	14,126	-64.5		277	42.5
125	31	15,222	-71.0		286	30.9
100	31	16,522	-77.5		281	22.9
80	31	17,796	-77.8		289	9.5
70	31	18,563	-75.1		357	2.7
60	31	19,467	-70.2		77	6.8
50	31	20,563	-65.9		71	7.0
40	30	21,933	-61.6		73	3.1
30	30	23,736	-57.3		87	2.7
25	30	24,892	-56.0		341	1.6
20	28	26,322	-53.4		31	1.4
15	26	28,203	-49.5		302	2.1
10	16	30,987	-45.7		264	15.2
7	10	33,315	-42.7			
5	5	35,614	-41.6			

HUNTINGTON, W. VA.
992 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	-5.0	80	278	1.9
1000	31	178				
950	31	584	-5.1	69	259	4.7
900	31	1,007	-6.1	70	276	10.5
850	31	1,454	-5.6	60	285	16.3
800	31	1,929	-6.4	68	286	20.0
750	31	2,431	-7.5	66	281	22.3
700	31	2,969	-9.5	65	277	25.6
650	31	3,535	-12.3	63	273	29.3
600	30	4,144	-15.8	58	273	32.1
550	30	4,792	-19.8	55	272	35.2
500	30	5,497	-24.0	52	271	39.2
450	30	6,254	-28.9	49	270	45.8
400	30	7,093	-34.6	47	269	54.0
350	30	8,014	-40.8	50	267	62.4
300	30	9,049	-46.6		263	72.3
250	29	10,247	-52.4		263	77.9
200	29	11,679	-54.8		263	80.8
175	29	12,532	-54.9		264	74.8
150	29	13,517	-55.7		263	69.7
125	29	14,673	-57.4		263	64.3
100	28	16,071	-60.1		265	56.7
80	28	17,460	-61.2		270	44.9
70	28	18,288	-61.0		272	37.5
60	28	19,246	-61.3		269	32.4
50	27	20,372	-61.6		274	26.4
40	27	21,755	-61.2		277	23.9
30	26	23,547	-60.0		280	25.6
25	26	24,687	-59.3		283	25.1
20	24	26,084	-57.9		279	28.6
15	24	27,910	-54.9		279	38.7
10	19	30,562	-47.2		266	59.8
7						
5						

* INTERNAT. FALLS, MINN.
980 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	360	-25.1	69	297	3.5
1000	31	212				
950	31	587	-22.4	80	316	4.9
900	31	986	-18.9	86	313	7.2
850	31	1,414	-16.9	82	313	11.3
800	31	1,870	-16.3	73	308	13.8
750	31	2,349	-17.3	69	299	15.9
700	31	2,870	-18.9	67	298	17.9
650	31	3,415	-21.3	62	297	21.6
600	31	4,007	-24.4	60	299	24.7
550	31	4,632	-28.4	60	299	27.6
500	31	5,314	-32.7	58	296	32.6
450	31	6,042	-37.3	52	292	36.3
400	31	6,855	-42.6	47	293	39.8
350	31	7,744	-48.8		295	42.3
300	31	8,745	-53.6		294	45.5
250	31	9,911	-55.6		290	42.7
200	31	11,335	-54.2		288	40.0
175	31	12,193	-53.4		284	36.1
150	30	13,184	-52.8		284	37.5
125	30	14,359	-53.3		285	36.5
100	30	15,792	-54.5		284	31.9
80	28	17,220	-55.5		288	31.1
70	28	18,069	-56.3		289	28.2
60	28	19,046	-57.2		294	27.2
50	28	20,196	-58.2		293	28.4
40	26	21,590	-59.5		298	27.8
30	25	23,386	-60.8		304	28.0
25	21	24,524	-61.9		308	30.1
20	17	25,910	-62.7		312	27.4
15	10	27,683	-64.1		306	34.8
10						
7						

JACKSON, MISS.
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	94	2.8	84	29	2.9
1000	31	172	3.0	77	33	2.9
950	31	590	3.1	75	342	3.7
900	31	1,026	3.2	70	313	6.0
850	31	1,489	2.4	69	296	10.3
800	31	1,978	.9	63	288	14.4
750	31	2,492	-.7	58	279	18.1
700	31	3,044	-3.1	52	273	22.3
650	31	3,621	-5.8	50	272	27.0
600	31	4,252	-9.4	48	269	31.3
550	31	4,912	-13.9	49	268	36.7
500	31	5,637	-18.6	48	265	43.3
450	31	6,408	-23.8	48	262	49.0
400	31	7,264	-29.9	48	257	56.7
350	31	8,203	-36.5	47	257	64.9
300	31	9,255	-43.5	49	257	76.7
250	31	10,462	-50.3		257	91.5
200	30	11,901	-55.8		259	95.6
175	30	12,747	-57.9		260	93.0
150	30	13,715	-59.3		260	84.5
125	30	14,848	-62.7		261	74.0
100	30	16,212	-65.9		264	56.1
80	30	17,560	-66.9		262	41.8
70	29	18,366	-65.5		265	34.4
60	27	19,309	-64.3		267	27.6
50	25	20,425	-63.1		273	21.0
40	22	21,805	-61.9		277	18.3
30	22	23,591	-59.9		277	19.0
25	20	24,736	-58.6		279	19.8
20	17	26,139	-56.8		275	28.6
15	16	27,983	-52.5		272	38.7
10	9	30,647	-45.0			
7						

* JACKSONVILLE, FLA.
1019 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	7.5	85	328	4.9
1000	31	162	9.1	77	348	5.4
950	31	587	8.2	70	238	2.3
900	31	1,032	6.9	65	247	7.0
850	31	1,501	5.7	54	272	12.6
800	31	1,996	4.2	50	265	17.7
750	31	2,519	2.6	45	263	22.1
700	31	3,075	.0	48	265	27.8
650	31	3,660	-3.0	50	264	32.4
600	31	4,295	-6.7	50	261	39.0
550	31	4,964	-10.8	47	260	40.8
500	31	5,695	-15.4	45	261	47.6
450	31	6,476	-20.4	47	262	59.1
400	31	7,346	-25.9	50	262	69.2
350	31	8,299	-32.6	49	262	79.4
300	31	9,369	-40.1	50	261	91.3
250	31	10,591	-47.8		261	100.4
200	30	12,038	-56.0		260	94.6
175	30	12,879	-59.8		262	92.5
150	30	13,837	-62.3		261	87.4
125	30	14,954	-65.6		264	80.0
100	29	16,299	-69.4		264	55.9
80	27	17,624	-69.6		264	39.8
70	27	18,422	-68.1		266	37.7
60	26	19,350	-65.8		264	28.6
50	24	20,461	-63.8		272	16.7
40	23	21,835	-62.3		278	22.0
30	23	23,623	-59.1		283	21.2
25	22	24,767	-57.1		284	24.3
20	22	26,186	-54.4		282	30.7
15	18	28,044	-49.2		278	42.5
10	11	30,760	-40.1			
7						

JOHN F. KENNEDY INT. ARPT.NY
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	-2.0	59	326	10.3
1000	31	130	-2.6	58	324	12.0
950	31	538	-4.5	64	324	15.2
900	31	959	-5.7	69	328	15.7
850	31	1,408	-5.5	61	316	15.2
800	31	1,984	-6.3	56	295	17.5
750	31	2,390	-7.7	56	280	22.1
700	31	2,922	-10.5	57	279	25.6
650	31	3,495	-12.8	52	275	31.9
600	31	4,096	-16.5	49	274	35.5
550	31	4,749	-20.4	50	273	41.0
500	31	5,445	-24.7	48	272	46.8
450	31	6,202	-29.9	47	271	51.3
400	31	7,034	-35.9	45	271	52.1
350	31	7,950	-42.2	59	270	61.6
300	31	8,979	-48.1		268	71.9
250	31	10,168	-52.4		270	75.6
200	30	11,605	-54.2		269	74.6
175	30	12,461	-54.0		269	67.4
150	30	13,449	-54.9		267	63.1
125	30	14,610	-56.8		266	57.3
100	30	16,016	-58.9		268	50.1
80	29	17,415	-60.4		269	42.7
70	28	18,243	-61.0		270	39.2
60	27	19,202	-61.0		273	32.6
50	27	20,334	-61.4		276	24.1
40	25	21,713	-60.9		275	24.3
30	22	23,501	-60.6		279	27.2
25	22	24,638	-59.9		281	27.0
20	21	26,039	-58.8		277	31.3
15	16	27,851	-56.4		278	39.6
10	7	30,450	-50.9			
7						

JOHNSTON IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	24.1	74	77	14.0
1000	31	126	23.0	75	75	16.7
950	31	579	19.2	79	70	19.6
900	31	1,036	16.0	75	71	19.6
850	31	1,521	12.7	78	73	16.7
800	31	2,029	11.4	56	71	15.3
750	31	2,575	12.3	28	68	12.4
700	31	3,146	10.1	24	62	10.1
650	31	3,759	7.0	25	49	9.9
600	31	4,412	3.3	25	45	8.5
550	31	5,111	-1.0	25	16	8.0
500	31	5,867	-5.9	27	355	9.3
450	31	6,683	-11.3	28	350	13.6
400	31	7,578	-17.7	27	338	16.7
350	31	8,564	-24.5	24	317	18.1
300	31	9,669	-32.3	24	305	22.5
250	31	10,931	-41.4		301	24.5
200	31	12,410	-52.4		297	27.8
175	31	13,261	-58.9		295	28.2
150	30	14,212	-66.0		294	25.6
125	30	15,297	-73.7		297	22.7
100	28	16,577	-80.9		309	14.2
80	27	17,826	-81.5		58	5.8
70	26	18,582	-78.2		93	10.9
60	26	19,475	-71.6		98	11.7
50	26	20,569	-66.0		100	11.8
40	25	21,935	-61.9		96	13.8
30	23	23,736	-57.0		85	14.6
25	23	24,895	-55.4		81	11.7
20	23	26,322	-53.8		66	7.4
15	21	28,203	-48.2		353	4.3
10	19	30,902	-43.2		251	18.1
7	6	33,257	-42.6			

See reference note at end of table

Recipients of Environmental Data Service
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Beginning early in 1966 the organization titles of our publications were changed. This change in organization titles will not affect the publication title and series numbering. These items will continue without change, so that it will not be necessary for you to set up new files or new card catalog entries.

The change in organization titles was made necessary by the consolidation of the Weather Bureau, Coast and Geodetic Survey, and Central Radio Propagation Laboratory of the National Bureau of Standards into a single organization known as Environmental Science Services Administration.

USCOMM–ESSA ASHEVILLE

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	KEY WEST, FLORIDA 1016 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	3	18.9	83	50	4.5
1000	29	141	18.0	80	65	6.8
950	29	577	15.4	77	94	6.4
900	29	1,037	13.2	74	146	4.5
850	29	1,517	11.3	67	231	3.7
800	29	2,022	9.3	52	241	9.1
750	29	2,556	7.1	46	251	10.9
700	29	3,121	4.9	38	257	14.4
650	29	3,719	1.7	40	258	19.4
600	29	4,365	- 1.0	36	259	22.9
550	29	5,049	- 4.7	37	254	29.7
500	29	5,800	- 9.0	39	249	32.8
450	29	6,604	-14.6	40	251	39.2
400	29	7,492	-20.9	34	252	42.5
350	29	8,464	-28.2	30	256	52.1
300	29	9,550	-36.8	29	258	55.2
250	28	10,788	-46.1		256	58.9
200	28	12,238	-56.3		258	67.8
175	28	13,076	-61.5		259	68.4
150	26	14,024	-66.4		259	63.9
125	26	15,117	-70.3		262	56.5
100	26	16,430	-74.3		264	49.5
80	25	17,726	-74.8		261	32.4
70	25	18,506	-71.7		260	21.4
60	25	19,423	-68.2		262	14.6
50	25	20,529	-64.9		271	12.0
40	25	21,902	-61.4		281	12.0
30	24	23,697	-57.6		275	19.4
25	24	24,856	-55.3		277	17.9
20	22	26,288	-51.6		288	20.4
15	21	28,179	-45.6		272	21.8
10	20	30,921	-40.2		252	26.2
7	12	33,363	-36.4			
5	5	35,622	-34.9			

Standard pressure surface (mb.)	KING SALMON, ALASKA 1000 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	15	- 6.7	79	71	7.4
1000	31	13			97	4.
950	31	423	- 2.4	66	111	12.2
900	31	847	- 3.9	66	136	11.7
850	31	1,297	- 6.1	64	151	12.8
800	31	1,770	- 8.2	63	154	13.4
750	31	2,270	-10.8	61	159	13.0
700	31	2,796	-13.9	58	162	12.8
650	31	3,355	-17.3	55	162	12.0
600	31	3,951	-21.0	58	151	12.0
550	31	4,584	-25.2	55	143	12.6
500	31	5,273	-30.0	52	149	12.8
450	31	6,010	-35.5	51	150	14.8
400	31	6,825	-41.1	50	148	15.2
350	31	7,720	-47.2		157	17.3
300	31	8,727	-53.1		166	15.0
250	31	9,891	-56.1		190	13.0
200	31	11,319	-52.5		209	14.4
175	31	12,184	-51.2		214	15.0
150	31	13,188	-50.4		222	17.5
125	30	14,377	-49.5		228	19.2
100	29	15,840	-49.2		234	21.4
80	28	17,300	-50.0		241	21.2
70	27	18,172	-50.0		248	21.8
60	27	19,179	-50.1		250	22.7
50	27	20,368	-50.5		254	23.3
40	27	21,820	-50.9		264	26.4
30	25	23,676	-52.4		272	28.4
25	24	24,855	-53.0		275	31.5
20	23	26,303	-53.5		281	35.0
15	22	28,141	-54.3		286	35.2
10	8	30,945	-50.6			
7						
5						

Standard pressure surface (mb.)	+ KOROR, CAROLINE IS. 1009 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	30	26.6	80	61	9.3
1000	31	110	25.8	77	61	12.0
950	31	557	21.9	79	64	22.7
900	31	1,028	18.8	75	67	24.3
850	31	1,518	16.4	68	73	22.5
800	31	2,033	14.7	59	77	17.7
750	31	2,577	12.6	46	80	17.9
700	31	3,154	9.9	39	86	15.9
650	31	3,766	6.6	37	87	16.7
600	31	4,419	2.8	40	88	18.1
550	31	5,116	- 1.0	37	93	17.9
500	31	5,873	- 5.3	33	96	19.2
450	31	6,692	-10.0	27	99	20.6
400	31	7,594	-15.5	25	[illegible]	21.2
350	31	8,588	-22.6	25	95	18.8
300	31	9,700	-31.2	24	96	16.3
250	31	10,965	-41.5		102	16.5
200	31	12,437	-54.0		111	19.2
175	31	13,281	-60.9		112	22.9
150	31	14,222	-68.4		113	27.2
125	30	15,294	-76.1		115	33.2
100	29	16,561	-81.2		104	19.4
80	29	17,810	-82.1		91	13.8
70	29	18,565	-76.7		87	15.9
60	29	19,466	-70.9		89	23.5
50	28	20,556	-66.8		92	34.6
40	28	21,916	-62.8		92	48.6
30	23	23,714	-55.8		91	55.2
25	20	24,881	-51.0		93	35.2
20	19	26,348	-46.9		144	8.7
15	10	28,254	-46.7			
10	7	30,958	-44.4			
7						
5						

Standard pressure surface (mb.)	KOTZEBUE, ALASKA 1013 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	-19.6	59	106	[illegible]
1000	30	99	-16.7	48	105	13.4
950	30	490	-11.8	43	104	20.2
900	30	903	-10.5	44	106	17.9
850	30	1,343	-10.6	45	110	15.7
800	30	1,808	-12.0	45	114	12.4
750	30	2,300	-14.1	43	113	9.9
700	30	2,821	-16.9	44	105	8.0
650	30	3,372	-19.8	43	105	6.0
600	30	3,964	-23.3	42	118	4.5
550	30	4,593	-27.2	39	113	[illegible]
500	30	5,277	-31.9	40	46	1.2
450	30	6,008	-37.1	39	48	1.7
400	30	6,819	-42.8		2	1.6
350	30	7,708	-49.0		187	4.1
300	30	8,705	-55.6		234	5.4
250	30	9,851	-60.7		245	9.1
200	30	11,248	-57.0		247	12.8
175	30	12,103	-55.4		248	17.1
150	30	13,083	-53.9		253	17.9
125	30	14,253	-53.8		256	22.5
100	30	15,687	-53.7		253	26.2
80	29	17,118	-53.7		259	33.8
70	29	17,975	-53.6		260	35.2
60	29	18,967	-53.8		263	40.0
50	29	20,136	-54.3		265	44.1
40	29	21,563	-55.3		267	51.5
30	28	23,402	-56.6		273	52.4
25	25	24,593	-56.6		274	57.3
20	20	26,020	-56.9		280	61.2
15	13	27,811	-57.5			
10	6	30,444	-55.9			
7						
5						

Standard pressure surface (mb.)	KWAJALEIN, MARSHALL IS. 1010 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	4	26.3	78	58	15.5
1000	31	97	25.7	78	60	16.5
950	31	547	22.3	84	65	22.1
900	31	1,016	19.1	83	69	23.7
850	31	1,507	16.6	75	71	20.2
800	31	2,022	14.8	60	77	16.9
750	31	2,567	13.2	43	80	15.7
700	31	3,146	11.4	29	82	16.3
650	31	3,760	8.3	24	82	18.5
600	31	4,417	4.6	23	79	22.5
550	31	5,119	.3	26	77	27.2
500	31	5,879	- 4.0	26	79	29.1
450	31	6,698	- 9.4	26	79	30.1
400	31	7,601	-15.3	22	80	25.8
350	31	8,593	-21.9	20	82	21.2
300	31	9,712	-30.4	26	87	15.0
250	31	10,981	-40.6	24	119	11.5
200	31	12,460	-52.7	26	131	15.2
175	31	13,305	-59.7	26	126	16.9
150	31	14,253	-67.9	22	118	18.5
125	30	15,320	-76.5		103	23.3
100	26	16,577	-84.9		91	29.3
80	18	17,806	-80.9		103	20.8
70	16	18,560	-76.9		90	15.9
60	14	19,460	-72.1		86	19.8
50	14	20,546	-68.8		88	33.2
40	14	21,891	-63.3		87	42.0
30	13	23,695	-55.9		93	46.8
25	13	24,857	-51.9		91	21.8
20	11	26,305	-49.8		343	3.5
15	11	28,205	-45.8		256	6.2
10	8	30,917	-43.4			
7	7	33,312	-41.2			
5						

Standard pressure surface (mb.)	LAKE CHARLES, LA. 1020 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	6.3	89	35	4.7
1000	31	167	6.7	78	51	5.8
950	31	591	6.3	78	50	3.1
900	31	1,033	6.2	74	300	4.3
850	31	1,501	4.8	65	280	8.5
800	31	1,995	3.7	52	278	13.4
750	31	2,511	1.7	50	278	17.3
700	31	3,072	- .9	48	274	20.6
650	31	3,655	- 4.2	48	268	25.8
600	31	4,288	- 7.5	47	266	28.7
550	31	4,956	-11.6	45	262	32.6
500	31	5,685	-16.5	42	260	37.3
450	31	6,464	-22.0	44	258	45.3
400	31	7,327	-28.2	44	255	50.7
350	31	8,271	-34.7	44	254	62.5
300	31	9,332	-41.5	45	256	77.7
250	31	10,549	-49.2		258	95.2
200	31	11,991	-55.1		260	96.2
175	31	12,839	-57.3		261	89.9
150	31	13,808	-60.0		259	81.8
125	30	14,938	-63.7		260	68.2
100	29	16,293	-67.1		263	56.9
80	27	17,640	-67.5		261	37.7
70	27	18,445	-66.7		260	31.9
60	27	19,380	-65.4		261	24.5
50	27	20,493	-63.4		266	22.7
40	25	21,869	-61.6		272	18.8
30	24	23,658	-60.0		270	18.5
25	24	24,800	-58.0		276	21.2
20	22	26,218	-54.8		277	26.6
15	18	28,080	-50.5		273	25.4
10	7	30,738	-45.1			
7						
5						

Standard pressure surface (mb.)	LANDER, WYO. 826 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,696	- 8.0	62	259	2.3
1000	31	185				
950	31	590				
900	31	1,020				
850	31	1,470				
800	31	1,944	- 4.2	48	292	1.9
750	31	2,453	- 5.6	43	291	5.6
700	31	2,991	- 8.5	42	296	14.0
650	31	3,557	-12.1	45	293	21.8
600	31	4,171	-15.9	47	290	26.8
550	31	4,816	-20.2	42	291	28.9
500	31	5,522	-25.2	42	292	29.7
450	31	6,272	-31.1	44	290	30.3
400	31	7,104	-37.7	45	293	31.9
350	31	8,012	-44.6	44	293	35.2
300	31	9,028	-51.6		295	39.2
250	31	10,193	-57.6		297	41.4
200	31	11,595	-58.3		288	45.1
175	31	12,441	-55.6		287	44.7
150	31	13,425	-54.9		287	44.1
125	31	14,591	-55.2		288	40.0
100	31	16,012	-56.1		289	31.3
80	31	17,425	-57.7		293	25.1
70	31	18,267	-57.8		297	23.9
60	31	19,239	-58.1		303	19.8
50	31	20,387	-58.4		314	15.3
40	31	21,785	-59.8		326	14.0
30	28	23,581	-59.5		333	15.5
25	25	24,723	-59.5		336	16.9
20	19	26,130	-58.8		338	17.5
15	12	27,953	-56.9			
10						
7						
5						

Standard pressure surface (mb.)	LAS VEGAS, NEV. 942 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	660	1.9	59	280	3.3
1000	31	175				
950	31	588				
900	31	1,032	4.8	37	360	6.2
850	31	1,497	2.9	34	8	7.8
800	31	1,985	.4	34	336	6.8
750	31	2,496	- 2.2	37	316	6.4
700	31	3,046	- 4.9	37	292	6.0
650	31	3,617	- 8.0	35	302	9.3
600	31	4,242	-12.2	32	295	11.3
550	31	4,895	-16.9	32	296	13.6
500	31	5,609	-22.1	31	295	17.3
450	31	6,371	-28.1	32	294	21.2
400	31	7,209	-34.6	35	292	25.1
350	31	8,129	-41.4	50	297	27.0
300	31	9,159	-48.3		295	31.7
250	30	10,347	-54.8		293	40.8
200	30	11,768	-55.2		286	51.7
175	30	12,622	-54.6		285	54.2
150	30	13,606	-55.8		287	51.3
125	30	14,758	-58.7		285	44.9
100	30	16,150	-61.4		282	35.7
80	30	17,528	-62.8		288	27.8
70	30	18,352	-61.8		294	22.9
60	29	19,304	-61.7		303	17.1
50	29	20,433	-61.4		326	11.3
40	28	21,821	-60.6		346	10.7
30	28	23,616	-59.7		4	8.4
25	27	24,757	-59.0		356	10.1
20	23	26,154	-58.4		347	9.7
15	19	27,979	-56.9		318	12.4
10	12	30,559	-52.6			
7						
5						

Standard pressure surface (mb.)	* LIHUE, HAWAII 1013 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	36	19.5	84	42	5.1
1000	31	151	20.3	73	46	7.4
950	31	588	16.5	82	56	11.5
900	31	1,050	13.1	81	58	10.3
850	31	1,529	9.8	78	59	8.0
800	31	2,032	10.2	42	60	6.0
750	31	2,569	9.6	28	25	4.1
700	31	3,139	7.4	24	328	3.7
650	31	3,740	4.1	23	303	5.6
600	31	4,391	.2	23	302	11.3
550	31	5,075	- 4.3	23	302	15.9
500	31	5,827	- 9.4	23	299	19.8
450	31	6,628	-15.1	23	295	24.3
400	31	7,513	-21.4	25	292	31.1
350	31	8,484	-28.2	25	293	39.6
300	31	9,573	-35.2	26	292	47.2
250	31	10,822	-43.0		286	52.4
200	31	12,293	-52.6		284	56.5
175	30	13,143	-57.8		284	54.6
150	30	14,102	-63.7		284	45.6
125	30	15,203	-70.2		279	38.3
100	30	16,508	-75.9		279	29.9
80	30	17,792	-76.3		282	15.2
70	30	18,564	-74.6		301	6.4
60	30	19,470	-69.8		68	2.7
50	29	20,566	-65.9		90	7.8
40	29	21,934	-61.9		83	6.4
30	27	23,734	-57.4		63	5.8
25	26	24,892	-55.7		78	3.3
20	26	26,320	-53.7		38	1.6
15	26	28,182	-50.3		48	2.9
10	22	30,858	-45.1		241	12.4
7	17	33,273	-40.4		261	27.2
5	10	35,641	-34.9			

Standard pressure surface (mb.)	LITTLE ROCK, ARK. 1013 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	79	- .1	79	20	3.7
1000	31	181	.3	64	15	4.3
950	31	594	.3	64	348	4.7
900	31	1,027	.3	62	317	6.2
850	31	1,486	- .1	59	296	10.3
800	31	1,970	- 1.3	54	289	13.4
750	31	2,480	- 3.5	48	287	16.9
700	31	3,027	- 5.7	44	283	21.6
650	31	3,600	- 8.5	44	279	26.4
600	31	4,222	-12.0	46	273	31.5
550	31	4,877	-16.1	44	271	36.1
500	31	5,594	-21.0	45	268	40.0
450	31	6,355	-26.4	45	266	45.3
400	31	7,206	-32.5	43	261	52.3
350	31	8,135	-38.9	46	260	62.5
300	31	9,177	-45.9		259	73.4
250	31	10,372	-52.2		259	79.6
200	31	11,804	-55.5		258	85.9
175	31	12,653	-56.4		261	82.6
150	31	13,630	-57.1		264	75.2
125	31	14,777	-59.8		262	67.0
100	31	16,163	-62.2		264	54.2
80	31	17,535	-63.7		265	38.9
70	31	18,354	-63.7		267	32.8
60	31	19,301	-63.2		268	27.4
50	30	20,423	-62.1		274	22.7
40	29	21,800	-61.9		279	16.5
30	22	23,584	-59.4		284	18.3
25	18	24,717	-58.9		285	20.6
20	15	26,116	-58.0		281	28.4
15	6	27,925	-54.1			
10						
7						
5						

Standard pressure surface (mb.)	MCGRATH, ALASKA 1000 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	103	-29.8	60	352	.4
1000	31	102			82	1.2
950	31	484	-19.4	79	77	14.0
900	31	889	- 8.4	69	98	16.3
850	31	1,335	- 7.0	58	118	10.5
800	31	1,807	- 8.7	55	130	7.4
750	31	2,297	-11.2	54	130	6.8
700	31	2,831	-14.5	52	136	8.5
650	31	3,382	-18.1	50	139	8.5
600	31	3,983	-22.0	51	137	7.6
550	31	4,612	-25.9	50	132	6.8
500	31	5,303	-30.5	49	130	6.8
450	31	6,036	-35.7	49	146	9.1
400	31	6,855	-41.6	48	144	7.8
350	31	7,748	-47.9		141	5.6
300	31	8,751	-54.1		138	6.6
250	31	9,908	-57.8		192	5.6
200	31	11,328	-53.7		224	12.0
175	31	12,189	-52.6		232	14.2
150	31	13,187	-51.6		240	17.3
125	31	14,372	-50.8		242	20.2
100	31	15,825	-50.9		249	23.9
80	31	17,276	-50.8		258	30.3
70	31	18,145	-50.8		259	31.3
60	31	19,147	-51.3		262	35.2
50	31	20,329	-51.8		265	38.9
40	31	21,772	-52.7		268	42.3
30	31	23,622	-54.1		270	49.0
25	30	24,789	-55.1		272	52.8
20	29	26,212	-56.0		275	58.3
15	25	28,086	-55.9		284	63.1
10	14	30,879	-55.1			

Standard pressure surface (mb.)	+ MAJURO, MARSHALL IS. 1010 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	3	28.1	76	61	12.4
1000	31	92	26.8	71	60	15.0
950	31	538	22.5	71	59	22.0
900	31	1,013	19.5	68	65	22.3
850	31	1,504	17.0	61	68	18.1
800	31	2,021	15.5	48	75	14.6
750	31	2,567	14.0	37	81	12.8
700	31	3,147	11.2	35	85	12.4
650	31	3,763	8.2	32	80	16.7
600	31	4,419	4.7	28	80	22.3
550	31	5,117	.8	26	82	23.7
500	31	5,884	- 3.4	25	80	28.2
450	31	6,705	- 8.5	23	77	28.7
400	31	7,615	-14.2	22	78	26.4
350	31	8,616	-20.9	22	83	20.0
300	31	9,737	-29.1	23	92	12.2
250	31	11,015	-39.2	25	114	13.4
200	31	12,505	-51.4		123	14.6
175	31	13,358	-58.6		120	16.3
150	31	14,308	-66.6		110	18.6
125	31	15,388	-75.3		94	22.9
100	30	16,653	-83.7		81	30.5
80	29	17,893	-79.9		88	27.2
70	29	18,656	-75.2		93	20.4
60	28	19,558	-71.3		91	25.1
50	26	20,645	-67.2		91	37.9
40	24	22,012	-61.3		90	45.6
30	20	23,826	-54.9		90	47.8
25	18	25,000	-52.9		92	30.5
20	15	26,450	-49.1		108	10.9
15	[illegible]	28,363	-45.7			
10	6	31,080	-42.4			

Standard pressure surface (mb.)	+ MARCUS IS., N. PACIFIC 1017 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	9	22.8	64	305	3.9
1000	30	157	21.1	60	270	2.9
950	30	597	16.9	61	261	4.5
900	30	1,057	13.3	63	255	7.2
850	30	1,536	10.2	64	253	9.7
800	30	2,039	9.3	41	263	15.7
750	30	2,574	8.0	31	270	21.0
700	30	3,141	6.1	26	274	27.4
650	30	3,743	3.8	24	273	34.4
600	30	4,392	1.3	23	272	40.4
550	30	5,082	- 2.2	22	268	46.8
500	30	5,840	- 6.5	22	264	50.7
450	30	6,650	-11.9	22	264	53.4
400	30	7,547	-18.2	22	266	59.1
350	30	8,531	-24.8	22	264	63.7
300	30	9,635	-32.8	23	263	64.3
250	30	10,893	-42.4		264	67.4
200	30	12,365	-53.3		263	67.4
175	30	13,213	-59.5		259	68.4
150	30	14,164	-65.6		256	68.4
125	30	15,254	-72.2		253	62.7
100	30	16,549	-77.2		258	45.8
80	30	17,828	-76.4		257	31.3
70	30	18,603	-72.6		260	22.9
60	29	19,519	-67.8		261	12.0
50	29	20,628	-63.4		270	2.9
40	28	22,014	-59.0		67	1.0
30	27	23,835	-55.4		125	3.9
25	26	25,005	-53.2		202	3.5
20	24	26,451	-51.0		124	2.3
15	20	28,349	-47.5		105	4.1
10	13	31,068	-40.6			

Standard pressure surface (mb.)	* MEDFORD, OREG. 972 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	401	1.4	88	187	.8
1000	31	170				
950	31	584	2.2	83	192	2.1
900	31	1,021	[illegible]	74	186	7.6
850	31	1,481	.5	68	210	11.1
800	31	1,966	- 1.9	68	235	13.0
750	31	2,476	- 4.4	64	252	17.5
700	31	3,019	- 7.0	62	267	20.6
650	31	3,590	-10.3	59	273	21.2
600	31	4,206	-14.2	52	273	24.9
550	31	4,856	-18.4	50	278	25.6
500	31	5,566	-23.3	50	284	28.6
450	31	6,322	-28.8	50	286	32.2
400	31	7,161	-35.2	49	290	35.0
350	31	8,078	-42.2	51	295	37.7
300	31	9,103	-50.3		296	43.7
250	31	10,271	-58.0		297	48.6
200	31	11,670	-57.9		292	47.4
175	31	12,518	-55.0		295	44.7
150	30	13,496	-54.5		292	39.6
125	28	14,662	-55.6		295	33.6
100	27	16,079	-57.2		299	[illegible]
80	26	17,488	-57.2		301	21.6
70	26	18,330	-57.8		306	19.8
60	25	19,306	-58.0		325	15.2
50	25	20,453	-58.3		333	14.4
40	22	21,861	-58.7		360	13.0
30	21	23,671	-59.2		24	15.7
25	18	24,814	-58.9		27	15.9
20	15	26,222	-57.8		28	18.3
15	10	27,999	-59.4			
10	5	30,594	-60.8			

Standard pressure surface (mb.)	MERIDA, MEXICO 1016 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	11	16.4	95	62	4.1
1000	31	149	19.9	83	71	7.2
950	31	584	17.5	78	87	8.7
900	31	1,051	14.9	75	80	4.7
850	31	1,534	12.7	71	249	1.2
800	31	2,042	10.9	58	237	5.6
750	31	2,576	8.8	50	239	13.8
700	31	3,148	6.1	42	251	9.7
650	31	3,745	2.8	44	254	12.6
600	31	4,396	- .1	35	247	16.3
550	31	5,078	- 3.5	32	246	21.0
500	31	5,837	- 7.4	30	249	25.3
450	31	6,641	-12.5	25	251	30.9
400	31	7,541	-19.0	23	257	34.0
350	31	8,520	-26.1	22	255	38.7
300	31	9,615	-34.8	27	259	39.4
250	31	10,860	-44.5		267	41.8
200	31	12,317	-55.3		276	38.3
175	31	13,157	-60.8		266	46.0
150	29	14,103	-66.2		255	44.3
125	28	15,195	-71.2			
100	28	16,499	-75.8			
80	26	17,782	-77.1			
70	24	18,553	-72.7			
60	24	19,473	-67.2			
50	22	20,582	-64.2			
40	21	21,957	-61.3			
30	21	23,761	-56.7			
25	18	24,921	-54.6			
20	14	26,359	-49.8			
15	11	28,252	-45.4			
10	6	30,965	-42.5			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JANUARY 1966

* MIAMI, FLA.
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	16.5	84	14	2.3
1000	31	146	16.9	76	51	3.5
950	31	583	14.8	80	107	5.4
900	31	1,040	12.4	74	143	3.3
850	31	1,518	10.6	61	215	4.3
800	31	2,022	9.4	48	244	9.5
750	31	2,555	7.0	43	253	15.2
700	31	3,119	4.4	42	256	20.2
650	31	3,716	1.2	46	254	23.5
600	31	4,359	- 1.8	40	256	29.3
550	31	5,041	- 5.4	39	256	33.8
500	31	5,790	- 9.7	43	255	40.8
450	31	6,590	-15.0	40	259	42.7
400	31	7,476	-21.4	43	257	48.6
350	31	8,447	-28.6	38	257	55.9
300	31	9,532	-37.0	37	258	62.4
250	31	10,769	-46.0		262	67.2
200	31	12,220	-56.1		263	72.1
175	29	13,063	-60.9		262	74.6
150	28	14,011	-65.9		261	71.3
125	27	15,110	-69.8		263	63.3
100	26	16,423	-73.7		263	49.5
80	22	17,720	-75.2		265	33.0
70	21	18,498	-72.4		265	25.3
60	21	19,412	-69.0		263	19.4
50	20	20,514	-65.6		268	17.3
40	20	21,881	-62.1		277	18.8
30	19	23,672	-58.1		276	23.5
25	18	24,823	-55.8		273	26.0
20	18	26,252	-53.5		275	26.4
15	15	28,128	-45.9		274	28.7
10	14	30,872	-39.7		261	38.7

* MIDLAND, TEXAS
918 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	874	- 1.7	79	306	.8
1000	31	183				
950	31	593				
900	31	1,030	1.4	60	231	1.7
850	31	1,493	3.6	51	258	7.0
800	31	1,984	2.0	47	276	9.3
750	31	2,500	- .1	43	281	12.2
700	31	3,053	- 3.0	42	274	15.9
650	31	3,632	- 6.3	38	270	19.8
600	31	4,259	-10.6	38	268	24.3
550	31	4,916	-15.4	41	265	27.6
500	31	5,635	-20.5	40	268	29.9
450	31	6,400	-25.9	39	267	34.6
400	31	7,250	-32.2	38	265	41.0
350	31	8,180	-38.8	46	262	47.6
300	31	9,222	-45.7		260	58.9
250	31	10,419	-51.7		263	69.7
200	31	11,859	-53.5		266	77.7
175	31	12,715	-55.6		266	72.5
150	31	13,691	-58.0		266	67.6
125	31	14,832	-61.0		268	61.2
100	29	16,210	-64.2		269	48.8
80	29	17,570	-65.1		271	35.0
70	29	18,383	-64.8		277	26.4
60	29	19,326	-64.4		276	19.4
50	27	20,443	-62.9		280	13.8
40	27	21,822	-61.7		281	12.0
30	26	23,616	-59.6		284	11.8
25	25	24,759	-58.5		280	14.2
20	23	26,171	-56.3		288	17.5
15	20	28,024	-53.2		277	26.8
10	14	30,642	-48.6			
7	7	33,050	-44.0			

MONTGOMERY, ALA.
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	3.0	80	10	3.9
1000	31	166	3.4	73	22	5.1
950	31	587	3.9	66	45	4.3
900	31	1,023	3.7	65	284	3.5
850	31	1,487	3.2	59	280	9.9
800	31	1,977	1.8	57	276	15.7
750	31	2,500	.2	52	271	21.0
700	31	3,048	- 2.0	52	270	26.6
650	31	3,635	- 4.9	46	270	31.9
600	31	4,260	- 8.4	44	267	36.5
550	31	4,926	-12.7	45	264	41.0
500	31	5,652	-17.4	44	262	45.8
450	31	6,432	-22.6	45	259	50.9
400	31	7,289	-28.4	45	258	58.3
350	31	8,233	-34.9	47	258	69.2
300	31	9,291	-42.6	48	257	84.1
250	31	10,499	-50.2		258	97.7
200	31	11,937	-55.9		258	105.1
175	31	12,782	-57.9		259	99.8
150	30	13,749	-60.3		257	89.2
125	30	14,879	-62.9		259	76.9
100	30	16,244	-65.9		260	58.5
80	28	17,588	-66.7		261	45.5
70	28	18,395	-66.1		260	38.3
60	28	19,334	-64.4		263	30.9
50	28	20,453	-63.0		266	24.3
40	28	21,830	-61.6		270	20.8
30	28	23,622	-59.4		271	21.4
25	28	24,768	-57.5		275	25.8
20	28	26,186	-54.8		278	30.5
15	27	28,044	-50.0		272	39.8
10	25	30,751	-42.8		266	58.7
7	23	33,187	-36.8		260	71.9
5	19	35,524	-33.7			

* NANTUCKET, MASS.
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	14	- 2.2	82	306	6.4
1000	31	99			296	8.7
950	31	504	- 3.4	73	303	11.8
900	31	933	- 4.4	73	303	13.8
850	31	1,383	- 5.2	66	290	15.5
800	31	1,859	- 6.5	62	282	19.2
750	31	2,359	- 8.6	58	281	23.1
700	31	2,895	-10.4	55	278	27.0
650	31	3,457	-13.1	49	277	30.1
600	31	4,069	-16.5	49	277	35.2
550	31	4,712	-20.2	50	277	39.0
500	31	5,418	-24.8	50	275	44.3
450	31	6,170	-30.1	49	273	48.4
400	31	7,006	-35.7	50	270	51.5
350	31	7,922	-41.6	58	269	60.0
300	31	8,954	-47.7		268	64.1
250	31	10,143	-52.1		268	71.3
200	31	11,583	-53.6		270	71.1
175	31	12,440	-53.9		266	66.2
150	31	13,428	-54.8		268	63.9
125	31	14,592	-55.6		268	54.8
100	29	16,009	-58.6		263	50.3
80	29	17,406	-59.9		265	42.2
70	28	18,234	-59.8		267	37.9
60	28	19,197	-60.4		271	33.0
50	28	20,331	-60.9		269	31.3
40	28	21,718	-60.7		269	28.2
30	26	23,500	-60.8		274	25.8
25	26	24,635	-60.1		273	27.0
20	26	26,029	-58.9		272	30.5
15	25	27,842	-56.1		271	38.9
10	19	30,469	-49.6		264	61.8

* NASHVILLE, TENN.
1001 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	177	- 2.4	78	9	2.3
1000	31	183			20	2.7
950	31	588	- 2.9	70	340	1.9
900	31	1,019	- 2.5	67	298	5.2
850	31	1,470	- 3.1	60	294	9.9
800	31	1,949	- 4.1	56	291	13.4
750	31	2,455	- 6.1	58	284	17.7
700	31	2,995	- 8.2	54	276	22.5
650	31	3,569	-10.7	49	273	26.4
600	31	4,183	-14.1	47	270	32.2
550	31	4,835	-17.7	48	269	38.7
500	31	5,547	-22.1	47	268	45.3
450	31	6,308	-27.4	45	268	51.5
400	31	7,151	-33.2	46	266	57.1
350	31	8,077	-39.6	48	261	66.4
300	31	9,116	-46.4		258	73.4
250	31	10,308	-52.7		257	83.7
200	31	11,737	-55.6		259	86.8
175	30	12,579	-55.6		262	80.6
150	30	13,558	-56.8		261	74.6
125	30	14,707	-59.4		263	68.0
100	29	16,096	-62.0		264	55.9
80	28	17,467	-63.2		266	44.7
70	28	18,290	-62.5		267	38.5
60	27	19,238	-62.5		268	32.2
50	27	20,364	-62.0		266	26.4
40	27	21,746	-61.1		272	25.4
30	26	23,532	-60.4		274	21.0
25	26	24,671	-58.9		280	23.1
20	25	26,074	-57.5		282	27.0
15	23	27,901	-53.8		276	42.0
10	20	30,546	-46.7		269	67.0
7	8	33,019	-35.3			

NOME, ALASKA
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	7	-14.5	71	68	12.4
1000	30	66			77	14.2
950	30	463	-10.5	55	101	20.4
900	30	876	- 9.3	64	121	16.9
850	30	1,319	- 8.9	57	128	15.9
800	30	1,787	-10.2	55	128	15.2
750	30	2,280	-12.1	51	131	15.7
700	30	2,806	-14.8	48	140	15.0
650	30	3,359	-18.5	50	139	14.0
600	30	3,955	-22.3	50	143	12.2
550	30	4,584	-26.3	47	152	12.2
500	30	5,271	-31.2	47	151	13.4
450	30	6,000	-36.5	47	155	12.2
400	30	6,816	-42.2	54	166	12.0
350	30	7,706	-48.7		177	9.7
300	30	8,704	-54.7		179	11.3
250	30	9,857	-58.8		185	14.6
200	30	11,265	-55.9		199	17.5
175	30	12,117	-54.1		215	18.5
150	30	13,109	-53.1		228	20.8
125	30	14,286	-52.4		231	22.0
100	30	15,728	-52.4		236	24.5
80	27	17,184	-51.6		236	30.9
70	27	18,051	-51.3		240	34.2
60	25	19,052	-51.3		243	37.1
50	25	20,236	-51.5		250	40.4
40	25	21,682	-52.4		254	43.5
30	24	23,549	-53.2		257	48.2
25	22	24,733	-53.9		262	52.3
20	20	26,152	-54.8		264	58.5
15	17	27,997	-55.2		274	69.0
10	6	30,988	-47.9			

■ NORTH PLATTE, NEBR.
919 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	848	-12.6	80	29	2.7
1000	31	199				
950	31	597				
900	31	1,010	- 8.9	71	338	2.3
850	31	1,457	- 6.0	67	279	5.6
800	31	1,932	- 5.5	62	284	10.5
750	31	2,434	- 6.7	57	292	15.9
700	31	2,974	- 9.6	60	292	20.2
650	31	3,538	-12.8	57	291	21.6
600	31	4,150	-16.4	56	288	23.3
550	31	4,794	-20.6	54	287	25.4
500	31	5,498	-25.6	53	287	28.2
450	31	6,249	-31.1	49	288	29.3
400	31	7,078	-37.4	46	292	32.4
350	31	7,986	-44.4		291	34.0
300	31	9,003	-51.3		291	36.7
250	31	10,170	-57.1		286	42.5
200	31	11,578	-56.9		279	45.6
175	31	12,427	-55.1		278	45.3
150	31	13,412	-54.4		278	43.5
125	31	14,578	-55.5		278	41.4
100	31	15,992	-57.4		281	36.7
80	31	17,398	-58.1		281	29.7
70	30	18,238	-58.8		284	27.2
60	29	19,205	-58.9		291	24.1
50	29	20,348	-59.3		297	19.8
40	29	21,743	-60.0		306	17.5
30	29	23,541	-59.5		316	14.8
25	26	24,684	-59.4		314	16.1
20	23	26,089	-59.2		304	20.2
15	17	27,930	-57.6		304	23.7
10	12	30,483	-54.9		273	42.5

* OAKLAND, CALIF.
1019 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	8.1	77	110	2.1
1000	31	164	8.5	70	83	2.5
950	31	587	6.9	65	58	2.1
900	31	1,031	5.5	57	331	1.4
850	31	1,497	3.8	51	283	2.9
800	31	1,988	1.8	43	280	4.9
750	31	2,504	- .8	42	279	8.9
700	31	3,055	- 4.0	39	285	12.8
650	31	3,631	- 7.4	41	294	14.6
600	31	4,256	-11.3	37	289	15.5
550	31	4,912	-15.7	39	294	17.5
500	31	5,631	-20.7	41	295	21.2
450	31	6,398	-27.0	43	295	24.7
400	31	7,240	-33.7	41	297	27.2
350	31	8,162	-41.1	48	302	31.9
300	31	9,192	-49.1		306	35.7
250	31	10,369	-56.0		304	41.6
200	31	11,781	-56.1		293	51.7
175	31	12,633	-54.8		291	51.3
150	31	13,617	-55.8		291	46.6
125	30	14,763	-57.9		292	41.2
100	30	16,161	-60.6		293	35.7
80	30	17,549	-60.5		299	24.9
70	30	18,380	-60.6		301	18.1
60	30	19,339	-60.6		314	15.2
50	30	20,473	-60.6		335	12.0
40	30	21,864	-59.6		2	12.8
30	28	23,667	-59.0		23	12.8
25	24	24,809	-58.4		26	13.0
20	22	26,221	-57.6		33	13.8
15	20	28,039	-56.2		20	14.6
10	13	30,614	-55.2		317	17.3

OKLAHOMA CITY, OKLA.
973 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	392	- 1.6	82	26	1.9
1000	31	175				
950	31	587	- .8	67	6	1.4
900	31	1,018	- .1	61	255	4.9
850	31	1,476	- .2	55	261	8.7
800	31	1,961	- 1.3	53	264	12.4
750	31	2,470	- 3.4	50	267	15.2
700	31	3,017	- 6.0	50	274	18.3
650	31	3,592	- 9.0	47	275	22.0
600	31	4,210	-12.7	47	273	26.0
550	31	4,865	-17.2	44	271	29.9
500	31	5,577	-22.3	41	267	32.1
450	31	6,337	-28.0	42	269	36.1
400	31	7,178	-34.2	40	267	42.3
350	31	8,099	-41.3	36	265	48.6
300	31	9,130	-48.4		265	58.9
250	31	10,314	-53.7		262	69.7
200	31	11,738	-55.7		263	72.3
175	31	12,589	-55.4		263	69.2
150	31	13,570	-56.5		265	65.1
125	31	14,720	-59.1		266	56.3
100	31	16,111	-61.7		267	50.9
80	29	17,489	-62.5		268	36.7
70	27	18,306	-62.5		270	28.9
60	27	19,257	-62.4		273	23.1
50	26	20,384	-61.9		278	17.7
40	24	21,767	-61.1		283	18.3
30	20	23,567	-59.7		284	13.4
25	17	24,708	-58.5		301	17.1
20	12	26,116	-57.6			

OMAHA, NEBR.
974 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	403	-11.7	75	10	3.3
1000	31	199				
950	31	595	-11.0	76	332	3.1
900	31	1,010	- 7.9	62	303	7.4
850	31	1,456	- 6.6	57	305	10.7
800	31	1,930	- 7.1	57	302	14.0
750	31	2,427	- 8.5	51	296	18.6
700	31	2,965	-10.8	49	292	20.0
650	31	3,525	-13.6	44	291	23.3
600	31	4,136	-17.2	45	289	27.0
550	31	4,776	-21.6	47	286	29.3
500	31	5,479	-26.4	46	288	31.5
450	31	6,226	-31.6	46	289	33.0
400	31	7,057	-37.6	40	288	38.5
350	31	7,966	-44.2		288	41.6
300	31	8,983	-51.2		286	45.3
250	31	10,153	-56.0		284	46.4
200	31	11,568	-55.0		277	49.5
175	31	12,421	-53.6		279	47.6
150	31	13,412	-53.4		281	45.1
125	31	14,580	-55.1		274	44.1
100	31	15,998	-57.4		275	38.7
80	31	17,405	-58.5		278	33.4
70	30	18,243	-58.5		282	30.1
60	30	19,211	-58.8		284	26.6
50	30	20,354	-59.5		289	22.0
40	30	21,751	-59.6		296	19.2
30	27	23,551	-60.0		304	17.7
25	25	24,695	-59.6		305	18.8
20	21	26,096	-59.0		297	22.0
15	9	27,914	-58.7			

* PEORIA, ILL.
999 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	200	- 9.1	67	330	3.9
1000	31	191			335	4.1
950	31	588	- 9.1	66	309	7.0
900	31	1,007	- 8.2	60	300	10.7
850	31	1,451	- 7.6	56	296	14.2
800	31	1,922	- 8.7	60	293	17.1
750	31	2,420	-10.1	63	288	20.2
700	31	2,951	-12.2	63	288	22.9
650	31	3,512	-15.0	56	289	27.2
600	31	4,116	-18.6	53	289	31.5
550	31	4,755	-22.6	49	288	35.7
500	31	5,452	-27.2	45	285	41.4
450	31	6,196	-32.2	45	281	42.5
400	31	7,024	-37.6	43	278	48.8
350	31	7,934	-43.9	44	273	54.2
300	31	8,953	-50.6		271	58.3
250	31	10,129	-55.1		271	63.7
200	31	11,553	-54.6		271	61.8
175	31	12,409	-54.2		270	61.2
150	31	13,398	-54.2		270	56.3
125	31	14,562	-55.9		269	50.9
100	31	15,975	-58.3		271	43.7
80	31	17,375	-59.3		272	38.3
70	31	18,210	-59.8		273	32.6
60	31	19,173	-60.2		276	27.2
50	31	20,309	-60.5		281	22.5
40	31	21,698	-61.0		288	21.0
30	30	23,488	-60.7		288	21.6
25	30	24,623	-60.4		289	23.3
20	21	26,002	-60.3		292	26.6
15	19	27,810	-58.0		283	35.4
10	16	30,409	-51.6		276	59.2
7	8	32,713	-46.5			

* PITTSBURGH, PA.
976 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	353	- 7.2	74	274	3.9
1000	31	171				
950	31	571	- 6.3	78	270	6.0
900	31	991	- 8.2	84	286	9.5
850	31	1,433	- 9.0	69	295	13.8
800	31	1,903	- 9.2	62	287	18.6
750	31	2,401	-10.4	61	286	22.1
700	31	2,931	-12.0	62	286	25.4
650	31	3,492	-14.2	61	280	28.7
600	30	4,098	-17.8	57	279	35.0
550	30	4,740	-21.6	54	275	38.3
500	30	5,441	-25.8	51	272	40.8
450	30	6,191	-30.9	48	274	47.8
400	30	7,023	-36.4	48	270	53.2
350	30	7,937	-42.6	53	267	60.2
300	30	8,964	-48.5		264	66.6
250	30	10,150	-53.3		266	77.3
200	30	11,581	-54.6		266	72.3
175	30	12,436	-54.2		267	68.8
150	29	13,421	-54.9		265	66.0
125	28	14,573	-56.2		267	61.4
100	27	15,977	-57.6		270	52.4
80	27	17,381	-59.1		270	39.6
70	26	18,217	-60.0		268	35.4
60	26	19,175	-61.1		270	33.0
50	26	20,308	-60.8		272	29.7
40	26	21,695	-60.8		276	29.1
30	25	23,487	-60.5		285	22.0
25	25	24,622	-60.1		285	23.3
20	25	26,015	-59.3		283	27.8
15	23	27,822	-56.7		281	37.1
10	23	30,422	-51.2		271	59.4
7	19	32,776	-44.1		265	99.1
5	12	35,069	-39.5			
4	5	36,606	-38.3			

PONAPE, CAROLINE IS.
+ 1006 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	39	27.5	77	53	9.3
1000	31	90	26.9	74	58	11.7
950	31	537	22.7	74	66	19.2
900	31	1,012	19.3	73	71	22.5
850	31	1,502	16.7	64	74	22.5
800	31	2,018	15.4	49	73	15.5
750	31	2,565	13.6	39	78	12.4
700	31	3,143	11.0	36	88	13.4
650	31	3,755	7.8	32	88	16.1
600	31	4,414	4.3	31	87	21.8
550	31	5,110	.2	31	88	25.3
500	31	5,876	- 4.1	28	88	27.6
450	31	6,690	- 9.1	26	88	29.1
400	31	7,603	-14.7	25	91	28.9
350	31	8,600	-21.7	26	90	23.9
300	31	9,717	-30.0	26	88	16.3
250	31	10,989	-39.9	26	102	12.0
200	31	12,474	-52.2		109	14.8
175	31	13,324	-59.3		111	18.1
150	31	14,271	-67.2		112	23.1
125	31	15,347	-76.0		103	30.9
100	31	16,606	-84.5		93	35.5
80	30	17,846	-80.7		92	19.6
70	30	18,604	-77.3		89	19.2
60	30	19,500	-71.8		92	24.7
50	30	20,586	-67.5		94	34.2
40	27	21,944	-62.9		91	47.0
30	26	23,741	-56.4		91	52.4
25	26	24,909	-52.1		91	41.8
20	23	26,363	-48.7		103	8.9
15	13	28,258	-45.5		258	8.0

PORTLAND, ME.
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	20	- 7.2	76	326	5.8
1000	31	105			338	7.8
950	31	507	- 6.4	72	333	12.8
900	31	929	- 7.3	76	345	12.4
850	31	1,374	- 8.1	73	332	8.7
800	31	1,845	- 8.8	72	299	10.5
750	31	2,342	-10.6	70	289	15.7
700	31	2,872	-13.0	68	284	18.1
650	31	3,432	-15.7	61	274	22.3
600	31	4,035	-19.0	59	271	27.8
550	31	4,670	-22.6	54	271	32.1
500	31	5,372	-27.1	51	269	35.5
450	31	6,116	-31.9	48	268	38.3
400	31	6,948	-37.5	49	269	43.1
350	31	7,860	-42.8	52	269	49.9
300	31	8,887	-48.7		265	53.2
250	31	10,072	-53.2		266	61.2
200	31	11,507	-53.9		267	58.1
175	31	12,366	-53.1		267	56.1
150	31	13,359	-53.3		264	53.2
125	30	14,523	-54.3		267	47.2
100	30	15,945	-56.6		268	42.2
80	28	17,354	-58.0		265	39.2
70	28	18,193	-58.8		267	34.8
60	28	19,160	-58.9		273	29.9
50	28	20,301	-60.0		275	28.2
40	28	21,690	-60.7		273	26.8
30	27	23,479	-61.0		274	27.2
25	25	24,615	-60.6		279	27.4
20	23	26,006	-59.9		276	29.5
15	13	27,772	-59.5		274	34.4

RAPID CITY, S. DAK.
905 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	966	-12.4	61	7	2.3
1000	31	196				
950	31	590				
900	31	1,007			360	1.9
850	31	1,449	- 7.3	64	287	7.2
800	31	1,922	- 6.4	62	289	12.2
750	31	2,419	- 7.9	62	295	18.1
700	31	2,959	-11.0	62	295	21.4
650	31	3,518	-14.4	63	293	22.5
600	31	4,127	-18.1	58	292	26.2
550	31	4,765	-22.4	56	292	29.3
500	31	5,466	-26.9	56	291	32.4
450	31	6,209	-32.5	54	293	35.4
400	30	7,036	-38.7	51	292	36.5
350	30	7,938	-45.7		292	37.7
300	30	8,949	-52.5		290	39.6
250	29	10,109	-58.1		287	45.3
200	29	11,510	-58.0		288	49.0
175	29	12,357	-55.2		287	44.7
150	29	13,342	-54.6		283	43.1
125	29	14,508	-55.2		283	39.8
100	29	15,930	-56.3		285	35.9
80	29	17,343	-57.1		290	29.7
70	29	18,186	-57.5		294	24.7
60	28	19,157	-58.1		298	21.2
50	27	20,305	-58.9		307	19.0
40	26	21,707	-59.0		316	17.9
30	22	23,512	-60.0		327	17.3
25	18	24,660	-59.5		335	19.2
20	15	26,056	-60.5		348	20.2
15	8	27,907	-60.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST. CLOUD, MINN. 986 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	316	-20.5	71	359	3.1
1000	31	208				
950	31	593	-18.5	85	342	6.4
900	31	996	-14.5	76	317	8.0
850	31	1,431	-12.8	73	306	12.6
800	31	1,894	-12.7	67	306	16.7
750	31	2,385	-13.5	62	305	20.0
700	31	2,910	-15.3	61	300	21.8
650	31	3,464	-18.0	58	300	25.1
600	31	4,062	-21.1	60	298	29.3
550	31	4,695	-24.7	57	296	33.2
500	31	5,388	-29.1	53	297	34.6
450	31	6,125	-34.4	49	297	36.5
400	31	6,947	-40.6	51	298	41.4
350	31	7,945	-46.8		296	43.9
300	31	8,852	-53.3		295	48.6
250	31	10,016	-56.4		292	47.2
200	31	11,436	-54.6		289	44.3
175	31	12,294	-53.0		285	41.6
150	31	13,287	-53.4		282	40.2
125	31	14,460	-53.5		280	38.3
100	31	15,891	-54.7		283	33.4
80	31	17,314	-56.1		286	30.7
70	31	18,161	-56.7		289	28.2
60	31	19,137	-57.6		291	25.1
50	31	20,286	-58.3		298	24.5
40	30	21,689	-59.4		302	21.6
30	26	23,494	-59.8		310	22.3
25	24	24,629	-60.4		307	24.3
20	18	26,017	-61.0		313	23.3
15	10	27,821	-61.0			
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ST. PAUL IS., ALASKA 992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	.4	94	100	8.5
1000	31	- 58				
950	31	350	- 1.4	91	115	13.8
900	31	781	- 3.8	89	134	15.7
850	31	1,231	- 5.9	88	141	14.4
800	31	1,714	- 8.5	81	143	13.2
750	31	2,199	-11.4	75	143	12.6
700	31	2,728	-14.6	69	143	12.8
650	31	3,280	-18.0	66	144	13.6
600	31	3,879	-21.9	57	148	13.0
550	31	4,507	-26.1	53	144	15.5
500	31	5,177	-30.8	53	143	18.1
450	31	5,926	-36.1	50	146	20.6
400	31	6,744	-41.8	54	151	24.1
350	31	7,636	-47.9		150	25.8
300	31	8,639	-53.4		158	25.1
250	31	9,876	-54.8		169	24.3
200	31	11,242	-51.3		191	19.8
175	31	12,112	-50.0		193	20.4
150	31	13,120	-49.7		201	21.6
125	31	14,315	-49.3		210	22.5
100	31	15,781	-48.2		215	23.3
80	31	17,249	-48.6		222	26.0
70	31	18,126	-48.7		227	27.0
60	31	19,140	-48.9		232	27.8
50	31	20,337	-49.2		236	28.0
40	31	21,798	-49.7		240	28.4
30	29	23,686	-49.9		244	32.1
25	29	24,877	-50.3		248	33.6
20	28	26,338	-50.7		255	34.8
15	23	28,201	-51.8		261	36.1
10	9	30,913	-49.5			

SALEM, OREG. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	3.3	89	188	5.4
1000	31	139			186	6.8
950	31	559	3.9	76	210	12.4
900	31	996	2.0	73	220	16.3
850	31	1,455	- .6	74	227	19.0
800	31	1,938	- 3.0	68	239	21.6
750	31	2,445	- 5.6	62	247	23.7
700	31	2,986	- 8.5	56	254	23.3
650	31	3,550	-11.9	54	261	26.4
600	31	4,165	-15.7	54	264	30.1
550	31	4,810	-20.2	54	268	31.7
500	31	5,515	-25.2	54	270	35.5
450	31	6,265	-30.5	51	276	39.4
400	30	7,101	-36.3	44	280	47.4
350	30	8,015	-42.8	45	286	49.0
300	30	9,037	-50.5		291	53.0
250	30	10,205	-57.7		293	49.0
200	30	11,609	-57.0		291	42.2
175	29	12,466	-54.8		291	40.4
150	29	13,454	-54.0		289	39.0
125	28	14,626	-55.4		291	34.4
100	28	16,046	-56.4		293	28.4
80	26	17,470	-56.4		301	21.8
70	26	18,315	-56.9		307	17.9
60	25	19,296	-57.5		310	15.9
50	25	20,444	-58.2		314	15.9
40	25	21,847	-58.4		340	15.2
30	23	23,654	-59.0		356	18.1
25	22	24,804	-59.6		356	18.5
20	18	26,229	-59.5		10	18.5
15	10	28,039	-59.7			
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SALT LAKE CITY, UTAH 873 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,288	- 3.3	75	149	4.5
1000	31	205				
950	31	616				
900	31	1,048				
850	31	1,504	- 1.6	58	170	7.0
800	31	1,985	- 3.4	56	191	8.4
750	31	2,496	- 6.1	58	239	6.6
700	31	3,031	- 9.2	59	271	12.0
650	31	3,600	-12.2	57	279	16.1
600	31	4,209	-15.9	54	285	20.4
550	31	4,855	-20.0	50	288	22.9
500	31	5,559	-24.9	50	288	26.2
450	31	6,315	-30.6	48	291	27.2
400	31	7,143	-36.9	49	299	30.3
350	31	8,054	-43.7	53	299	34.4
300	31	9,073	-50.7		301	35.0
250	31	10,244	-56.7		298	38.1
200	31	11,651	-56.6		291	43.9
175	31	12,501	-55.2		289	43.9
150	31	13,485	-55.0		293	42.0
125	31	14,647	-56.1		290	36.7
100	31	16,060	-57.4		289	31.7
80	30	17,464	-58.0		293	24.9
70	30	18,304	-58.1		300	19.0
60	29	19,273	-58.3		308	15.3
50	27	20,417	-58.6		313	13.0
40	26	21,821	-58.2		338	13.0
30	23	23,632	-58.7		13	13.8
25	21	24,787	-58.0		5	16.1
20	19	26,174	-58.3		10	15.9
15	17	27,987	-58.8		351	18.8
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SAN ANTONIO, TEXAS 992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	243	3.7	87	6	6.2
1000	31	177				
950	31	594	4.9	76	32	4.9
900	31	1,037	5.3	65	173	1.2
850	31	1,504	5.5	55	230	5.4
800	31	1,999	3.9	50	250	8.9
750	31	2,520	1.7	45	262	14.0
700	31	3,076	- .9	39	266	17.7
650	31	3,657	- 4.0	37	263	20.4
600	31	4,292	- 7.8	34	260	27.4
550	31	4,955	-12.2	35	257	31.1
500	31	5,685	-17.4	38	254	37.1
450	31	6,459	-22.9	39	253	44.1
400	31	7,321	-29.0	38	253	54.6
350	31	8,263	-35.5	38	253	66.8
300	31	9,322	-42.4	53	255	77.3
250	31	10,535	-49.3		256	89.0
200	31	11,979	-54.4		258	90.9
175	31	12,830	-57.2		261	83.1
150	31	13,798	-59.8		259	79.4
125	31	14,928	-63.6		261	67.6
100	30	16,285	-67.1		263	54.6
80	30	17,626	-67.9		264	38.5
70	28	18,429	-67.0		268	27.4
60	27	19,363	-66.0		268	22.5
50	27	20,474	-63.9		269	18.1
40	25	21,848	-61.9		273	16.9
30	24	23,632	-60.0		276	13.8
25	18	24,769	-58.0		273	17.1
20	15	26,178	-55.2		277	19.6
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SAN DIEGO, CALIF. 1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	124	6.9	84	64	3.1
1000	31	144			74	1.7
950	31	573	10.9	49	53	1.7
900	31	1,022	8.9	41	15	1.2
850	31	1,493	6.5	37	275	.8
800	31	1,988	3.8	32	270	2.7
750	31	2,507	.8	30	282	5.4
700	31	3,061	- 2.1	31	289	8.2
650	31	3,641	- 5.6	42	289	11.7
600	31	4,270	- 9.6	28	287	14.0
550	31	4,929	-14.3	29	294	15.9
500	31	5,652	-19.8	30	294	17.7
450	31	6,415	-25.9	30	291	21.0
400	31	7,268	-32.3	30	290	25.4
350	31	8,198	-38.8	31	288	29.9
300	31	9,242	-45.0		291	39.0
250	31	10,444	-50.9		289	54.6
200	31	11,889	-52.9		284	66.2
175	31	12,749	-53.9		282	64.9
150	31	13,733	-56.7		281	64.7
125	30	14,885	-59.9		279	53.8
100	30	16,264	-63.7		281	42.7
80	30	17,628	-64.1		286	30.5
70	30	18,446	-63.6		289	22.7
60	29	19,391	-62.8		295	16.7
50	29	20,517	-61.4		316	13.2
40	29	21,903	-60.6		341	6.6
30	28	23,703	-59.0		354	6.6
25	27	24,847	-57.7		357	7.4
20	26	26,256	-56.3		326	6.8
15	25	28,088	-54.0		294	16.1
10	24	30,724	-49.1		273	37.1
7	19	33,094	-43.7		270	68.0
5	13	35,372	-37.8			

*** SAN JUAN, P. R.** 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	6	22.2	85	120	2.7
1000	30	134	23.1	78	105	8.4
950	30	578	20.2	77	102	12.0
900	30	1,046	17.2	74	106	11.5
850	30	1,532	14.5	67	109	9.9
800	30	2,043	12.4	55	111	8.7
750	30	2,582	10.1	46	115	7.8
700	30	3,155	8.2	32	125	5.2
650	30	3,759	5.5	30	161	5.6
600	30	4,416	2.2	25	160	6.6
550	30	5,109	- 1.2	23	188	6.2
500	30	5,869	- 5.8	23	211	6.6
450	30	6,680	-11.5	24	224	8.7
400	30	7,580	-17.8	25	257	12.4
350	30	8,565	-25.0	26	267	17.3
300	30	9,666	-33.6	26	275	26.8
250	30	10,920	-43.3		277	37.1
200	30	12,385	-54.8		276	44.3
175	30	13,227	-60.8		275	47.4
150	30	14,173	-66.5		277	42.2
125	30	15,262	-71.9		280	33.2
100	29	16,557	-77.2		288	22.9
80	29	17,828	-78.8		296	9.9
70	29	18,592	-76.1		326	4.7
60	29	19,495	-68.8		24	5.4
50	27	20,600	-64.7		69	8.2
40	27	21,975	-60.9		83	11.7
30	26	23,787	-55.5		73	13.6
25	26	24,956	-52.9		74	14.8
20	26	26,402	-50.5		91	13.0
15	23	28,289	-47.0		72	7.6
10	12	30,993	-40.5		24	6.0
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SAN NICOLAS, CALIF. 997 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	174	9.9	77	334	5.6
1000	31	144				
950	31	574	11.7	45	2	6.8
900	31	1,025	9.6	38	4	5.2
850	31	1,497	7.1	37	335	4.9
800	31	1,994	4.4	36	324	6.2
750	31	2,515	1.6	36	312	7.8
700	31	3,069	- 1.6	35	299	8.2
650	31	3,651	- 5.5	34	298	11.1
600	31	4,279	- 9.7	35	303	13.6
550	31	4,937	-14.6	34	304	15.9
500	31	5,660	-20.1	34	302	18.3
450	31	6,424	-25.9	37	297	21.6
400	31	7,275	-32.3	36	297	25.8
350	31	8,203	-39.0	31	296	30.1
300	31	9,245	-45.8		295	38.7
250	31	10,441	-51.8		286	52.8
200	31	11,880	-53.2		284	63.1
175	31	12,738	-54.3		283	63.3
150	31	13,721	-56.9		282	57.9
125	31	14,868	-60.1		282	48.6
100	31	16,248	-63.5		282	39.0
80	31	17,613	-64.5		285	29.3
70	30	18,425	-63.5		288	22.3
60	30	19,375	-62.6		297	15.3
50	28	20,500	-61.7		324	10.1
40	27	21,885	-60.6		351	6.8
30	27	23,682	-59.2		10	6.6
25	26	24,830	-58.1		13	5.6
20	23	26,244	-55.9		24	6.2
15	20	28,094	-53.6		318	6.4
10	15	30,726	-50.1		285	24.5
7	10	33,005	-48.4			
5	6	35,142	-49.4			

*** SAULT STE. MARIE, MICH.** 992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	221	-12.9	80	342	1.9
1000	31	159				
950	31	549	-13.1	92	305	5.8
900	31	961	-13.6	90	304	10.5
850	31	1,396	-14.0	83	307	12.2
800	31	1,856	-14.9	71	300	13.6
750	31	2,343	-16.0	64	289	15.2
700	31	2,861	-18.0	59	282	16.9
650	31	3,410	-20.6	59	275	19.0
600	31	4,000	-23.5	56	272	21.8
550	31	4,629	-27.3	53	275	22.9
500	31	5,312	-31.3	51	273	25.6
450	31	6,046	-36.0	44	274	31.1
400	31	6,860	-41.5	46	274	33.4
350	31	7,755	-46.8		274	33.8
300	31	8,764	-51.7		268	37.3
250	31	9,939	-53.7		268	38.7
200	31	11,374	-53.2		269	40.4
175	31	12,236	-52.2		270	40.6
150	31	13,232	-52.6		270	40.8
125	31	14,406	-53.6		271	38.1
100	30	15,839	-54.6		269	34.8
80	30	17,259	-57.0		273	32.8
70	30	18,102	-57.6		274	31.9
60	29	19,073	-58.4		275	28.6
50	28	20,215	-59.0		284	26.0
40	28	21,610	-60.1		290	26.8
30	27	23,400	-61.5		292	24.1
25	26	24,532	-62.2		294	25.1
20	20	25,913	-61.9		297	29.1
15	16	27,700	-60.9		298	32.1
10	8	30,196	-59.2			
7	7	32,458	-54.4			
5						

SHEMYA, ALASKA 985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	38	- .2	84	216	2.5
1000	30	- 85				
950	30	325	- 2.4	78	264	2.7
900	30	751	- 5.8	83	213	2.7
850	30	1,197	- 8.9	81	213	4.3
800	30	1,664	-11.5	73	208	5.4
750	30	2,153	-14.7	66	204	6.4
700	30	2,675	-18.1	61	217	7.6
650	30	3,221	-21.6	54	211	7.2
600	30	3,810	-25.5	49	214	9.5
550	30	4,430	-29.7	48	204	10.5
500	30	5,109	-34.4	50	207	14.8
450	30	5,835	-39.6	47	204	17.7
400	30	6,634	-45.1	53	197	15.9
350	30	7,515	-50.3		204	18.8
300	30	8,512	-54.3		205	18.1
250	30	9,681	-53.4		207	17.3
200	30	11,129	-49.9		211	18.3
175	30	12,005	-48.9		214	20.0
150	30	13,019	-48.3		218	21.0
125	30	14,220	-48.0		217	23.1
100	30	15,693	-47.6		219	24.5
80	30	17,166	-47.8		220	27.0
70	30	18,046	-47.7		220	27.6
60	30	19,065	-47.4		217	28.9
50	30	20,272	-46.9		221	28.9
40	30	21,745	-48.4		217	25.6
30	30	23,636	-48.7		220	27.6
25	30	24,833	-48.7		223	27.6
20	28	26,297	-49.4		228	28.2
15	25	28,163	-49.8		240	31.3
10	17	30,775	-52.3		244	32.1
7	7	33,326	-47.6			
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*** SHREVEPORT, LA.** 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	79	3.0	84	29	3.9
1000	30	175	3.0	79	37	4.9
950	30	598	3.0	70	24	4.7
900	30	1,030	2.8	64	332	4.5
850	30	1,492	1.9	64	302	8.0
800	30	1,980	.5	65	294	12.8
750	30	2,497	- 1.6	49	282	16.3
700	30	3,044	- 3.8	50	277	20.2
650	30	3,624	- 7.0	47	272	23.5
600	30	4,246	-10.6	43	267	28.9
550	30	4,907	-14.8	40	266	32.8
500	30	5,624	-19.8	43	266	39.6
450	30	6,394	-25.1	45	261	47.2
400	30	7,245	-31.1	44	260	55.0
350	29	8,180	-37.8	52	256	64.9
300	29	9,225	-45.1		255	75.6
250	29	10,424	-51.2		255	94.0
200	29	11,957	-55.9		259	99.7
175	29	12,703	-57.1		261	89.7
150	29	13,674	-58.8		260	80.4
125	29	14,809	-62.1		261	66.8
100	29	16,175	-65.3		263	57.3
80	28	17,528	-66.6		262	35.9
70	27	18,335	-65.9		265	33.2
60	26	19,275	-64.2		268	26.2
50	26	20,391	-63.5		273	22.7
40	25	21,763	-62.2		278	22.7
30	23	23,547	-60.6		281	16.9
25	22	24,684	-59.3		275	21.4
20	19	26,080	-57.3		280	22.1
15	16	27,904	-52.9		275	36.3
10	11	30,602	-45.6		265	47.2
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SPOKANE, WASH. 931 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	717	- 2.1	87	193	5.6
1000	31	143				
950	31	552				
900	31	984	- 1.6	75	212	11.8
850	31	1,439	- 2.9	71	232	19.4
800	31	1,918	- 5.0	68	245	19.4
750	31	2,418	- 7.6	67	257	19.0
700	31	2,957	-10.8	66	266	21.0
650	31	3,515	-14.5	63	271	24.1
600	31	4,126	-18.0	58	273	26.4
550	31	4,765	-22.2	56	276	29.3
500	31	5,466	-27.1	56	274	33.2
450	31	6,210	-32.5	54	275	36.9
400	31	7,037	-38.4	51	280	41.0
350	31	7,940	-45.5		283	43.5
300	31	8,953	-52.1		282	50.9
250	31	10,119	-57.1		283	51.7
200	31	11,531	-55.7		285	45.6
175	31	12,386	-53.5		288	43.3
150	31	13,381	-52.4		290	38.1
125	31	14,559	-53.3		295	35.5
100	31	15,991	-54.5		294	30.5
80	30	17,422	-55.2		296	29.1
70	30	18,273	-55.3		299	28.7
60	30	19,256	-55.4		304	13.3
50	30	20,415	-56.2		320	22.7
40	30	21,829	-57.1		328	20.2
30	26	23,651	-57.8		354	17.7
25	20	24,802	-58.3		357	15.9
20	15	26,221	-58.6		1	21.6
15	11	28,044	-60.2		2	23.3
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SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	24.2	84	65	7.2
1000	31	118	23.6	81	60	9.3
950	31	569	20.1	85	69	11.5
900	31	1,031	17.2	82	76	9.1
850	31	1,518	14.7	73	79	6.8
800	31	2,030	12.8	62	65	3.7
750	31	2,578	10.7	53	357	1.7
700	31	3,143	8.2	46	281	4.7
650	31	3,752	5.1	43	273	6.0
600	31	4,403	2.0	43	249	7.8
550	31	5,100	- 1.8	40	246	10.3
500	31	5,853	- 6.2	35	240	12.0
450	31	6,670	-11.5	30	238	13.6
400	31	7,564	-17.7	29	246	15.9
350	31	8,549	-25.1	28	261	20.0
300	31	9,650	-33.7	30	255	26.2
250	31	10,902	-43.6		254	31.9
200	31	12,365	-54.8		249	37.9
175	31	13,207	-61.0		250	38.9
150	30	14,150	-67.1		255	39.2
125	27	15,235	-72.5		263	32.8
100	27	16,531	-77.5		264	24.5
80	25	17,802	-79.0		241	9.1
70	25	18,564	-75.7		206	3.9
60	25	19,471	-69.9		105	3.1
50	25	20,567	-66.0		88	9.7
40	25	21,934	-61.8		88	12.8
30	23	23,740	-56.8		82	13.4
25	23	24,901	-54.8		70	13.2
20	23	26,342	-50.1		86	8.5
15	21	28,247	-45.2		32	1.0
10	12	30,951	-42.3			
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TAMPA, FLA. 1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	11.3	87	34	3.9
1000	31	154	12.3	81	51	5.8
950	31	581	11.3	75	143	3.3
900	31	1,036	9.7	67	229	5.1
850	31	1,510	7.9	65	250	9.9
800	31	2,009	6.7	52	263	14.8
750	31	2,543	5.4	41	261	18.6
700	31	3,100	2.6	40	258	23.1
650	31	3,698	- .8	42	258	25.3
600	31	4,332	- 4.4	43	258	28.9
550	31	5,012	- 8.1	44	261	36.5
500	31	5,748	-12.4	43	260	43.7
450	31	6,545	-17.6	46	258	53.0
400	31	7,420	-23.1	48	257	60.2
350	31	8,384	-30.1	48	256	68.8
300	30	9,461	-37.8	43	256	79.8
250	30	10,694	-46.5		256	83.9
200	30	12,145	-56.2		262	86.1
175	30	12,985	-60.0		261	84.9
150	30	13,939	-63.2		260	76.3
125	30	15,050	-66.9		261	68.8
100	30	16,384	-71.0		262	53.4
80	30	17,701	-71.7		263	39.0
70	30	18,492	-69.6		263	29.1
60	28	19,418	-66.9		262	25.8
50	28	20,525	-64.9		262	23.3
40	27	21,896	-62.5		274	20.6
30	26	23,689	-58.6		274	26.6
25	25	24,849	-55.9		276	30.1
20	25	26,278	-52.8		277	30.1
15	21	28,159	-47.2		273	28.7
10	12	30,867	-41.2		256	36.3
7	10	33,270	-39.9			
5	6	35,626	-36.7			

*** TATOOSH IS., WASH** 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	31	6.1	85	177	7.6
1000	31	104			160	8.2
950	31	518	2.6	83	208	13.6
900	31	957	- .4	87	221	17.1
850	31	1,412	- 2.9	81	230	17.9
800	31	1,891	- 5.2	76	239	18.8
750	31	2,393	- 7.9	69	247	20.8
700	31	2,929	-11.0	63	252	24.3
650	31	3,489	-14.4	59	255	25.6
600	31	4,097	-18.6	57	260	27.2
550	31	4,735	-22.8	54	266	30.5
500	31	5,432	-27.5	54	270	35.2
450	31	6,173	-32.9	55	274	36.9
400	31	7,002	-38.7	51	277	41.2
350	31	7,906	-44.8		278	49.0
300	31	8,923	-51.1		274	49.1
250	31	10,092	-56.4		275	49.5
200	30	11,504	-55.7		270	45.1
175	30	12,359	-53.3		272	44.3
150	29	13,355	-52.7		275	39.4
125	28	14,532	-53.0		283	33.6
100	26	15,962	-53.6		287	30.9
80	26	17,394	-54.3		292	28.0
70	24	18,254	-54.0		306	22.7
60	24	19,243	-54.5		312	21.6
50	24	20,411	-54.7		320	20.6
40	24	21,834	-55.8		335	17.9
30	21	23,661	-57.1		345	18.5
25	20	24,819	-57.7		357	21.2
20	19	26,227	-58.3		9	23.9
15	14	28,042	-59.7		7	24.7
10	8	30,552	-60.4			
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

JANUARY 1966

TOPEKA, KANS.
991 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	269	- 6.4	71	2	2.1
1000	31	194				
950	31	593	- 6.1	69	296	2.5
900	31	1,020	- 4.4	65	288	6.6
850	31	1,471	- 4.5	57	285	9.5
800	31	1,947	- 5.7	55	282	12.2
750	31	2,448	- 7.0	51	285	15.2
700	31	2,989	- 8.9	44	286	18.5
650	31	3,554	-11.7	46	283	21.0
600	31	4,169	-15.5	45	281	24.7
550	31	4,815	-20.0	45	281	28.6
500	31	5,520	-24.8	45	282	32.8
450	31	6,274	-30.0	42	280	33.6
400	31	7,108	-36.2	40	280	37.3
350	31	8,021	-43.3	48	277	42.2
300	31	9,042	-50.3		275	45.6
250	31	10,218	-55.3		272	53.4
200	31	11,635	-56.2		268	56.5
175	31	12,487	-54.7		267	57.9
150	31	13,474	-54.4		271	52.3
125	31	14,637	-56.5		269	46.4
100	31	16,045	-58.5		273	43.3
80	31	17,443	-59.9		278	35.5
70	31	18,276	-60.0		278	30.1
60	30	19,238	-60.1		279	25.3
50	30	20,374	-60.7		283	20.4
40	29	21,764	-60.3		289	17.3
30	28	23,563	-59.8		299	18.1
25	24	24,705	-59.1		299	17.3
20	17	26,116	-57.3		300	22.1
15	14	27,943	-55.5		300	29.3
10	5	30,498	-55.4			
7						

TRUK, CAROLINE IS.
+ 1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	2	27.4	75	57	12.4
1000	31	102	26.5	72	59	14.6
950	31	551	22.6	72	68	22.1
900	31	1,024	19.5	69	73	23.7
850	31	1,515	17.0	64	78	21.2
800	31	2,031	14.7	54	82	17.9
750	31	2,578	13.5	35	87	15.5
700	31	3,155	11.2	28	89	16.1
650	31	3,770	7.9	30	92	19.2
600	31	4,426	4.2	27	94	22.7
550	31	5,125	.2	25	96	26.4
500	31	5,888	- 4.1	23	98	28.2
450	31	6,708	- 9.1	22	101	29.5
400	31	7,616	-15.1	23	98	27.4
350	31	8,612	-21.7	24	97	22.5
300	31	9,730	-30.1	24	93	16.9
250	31	11,001	-40.4	22	99	13.4
200	31	12,484	-52.3		112	14.8
175	31	13,334	-59.4		114	18.8
150	31	14,281	-67.3		112	22.9
125	31	15,358	-75.5		105	30.5
100	31	16,625	-82.3		104	32.6
80	31	17,878	-79.4		96	19.8
70	31	18,640	-75.5		96	17.5
60	31	19,544	-70.9		97	22.0
50	31	20,635	-66.8		96	32.6
40	31	22,000	-62.2		93	43.9
30	26	23,810	-55.3		94	48.0
25	20	24,981	-50.5		97	37.3
20	13	26,455	-47.8		92	10.9
15	7	28,352	-44.0			
10						
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* TUCSON, ARIZ.
926 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	789	4.0	71	131	6.8
1000	31	155				
950	31	574				
900	31	1,019			135	8.5
850	31	1,488	6.2	43	141	3.7
800	31	1,982	3.2	41	231	3.1
750	31	2,499	.3	37	263	5.2
700	31	3,053	- 2.8	33	254	9.3
650	31	3,631	- 6.4	29	263	11.5
600	31	4,258	-10.4	28	273	15.0
550	31	4,913	-15.2	26	272	17.1
500	31	5,635	-20.4	26	276	21.2
450	31	6,399	-26.2	25	274	25.3
400	31	7,248	-32.7	28	278	31.1
350	31	8,174	-39.4	31	281	35.2
300	31	9,213	-46.1		279	45.1
250	31	10,408	-51.9		274	60.4
200	31	11,851	-52.9		274	72.8
175	31	12,709	-54.2		274	70.1
150	31	13,692	-56.9		275	61.0
125	31	14,836	-60.8		278	53.6
100	30	16,209	-64.1		275	44.7
80	30	17,569	-65.3		278	32.8
70	30	18,383	-64.5		280	26.2
60	30	19,325	-63.7		289	19.4
50	30	20,446	-62.6		291	11.5
40	29	21,827	-61.5		294	8.5
30	24	23,621	-59.1		315	6.2
25	23	24,768	-57.9		318	8.2
20	22	26,179	-56.7		305	7.8
15	19	28,027	-53.9		285	11.5
10	14	30,652	-49.0		270	34.0
7						

* VANDENBERG AFB, CALIF.
1006 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	100	6.8	79	80	3.7
1000	30	151	8.5	72	58	5.6
950	30	579	10.1	52	37	6.8
900	30	1,026	8.4	44	36	4.7
850	30	1,496	6.0	41	4	3.5
800	30	1,991	3.6	36	324	5.2
750	30	2,513	.9	32	317	7.8
700	30	3,064	- 2.2	28	316	9.7
650	30	3,642	- 5.8	29	314	12.0
600	30	4,272	-10.0	31	309	15.0
550	30	4,931	-14.6	32	308	15.2
500	30	5,652	-20.1	32	307	17.3
450	30	6,418	-26.0	33	308	18.1
400	30	7,266	-32.6	36	304	22.0
350	30	8,192	-39.7	38	296	27.0
300	30	9,229	-46.9		295	34.4
250	30	10,418	-53.5		288	43.1
200	30	11,849	-54.4		283	59.4
175	30	12,704	-54.8		283	56.1
150	30	13,686	-56.5		280	55.0
125	30	14,835	-59.5		285	46.4
100	30	16,220	-62.7		281	39.8
80	30	17,594	-63.1		289	31.3
70	30	18,415	-62.5		294	21.8
60	29	19,364	-62.6		306	16.3
50	28	20,489	-61.6		329	10.3
40	27	21,875	-60.4		11	9.9
30	27	23,671	-59.5		29	10.9
25	25	24,815	-58.5		13	10.1
20	23	26,229	-56.9		7	7.8
15	22	28,061	-54.1		316	13.2
10	18	30,677	-49.9		279	30.7
7	14	33,056	-44.3		266	46.8

* WAKE IS., PACIFIC AREA
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	24.5	76	49	10.7
1000	31	149	23.0	77	56	12.8
950	31	590	18.9	84	71	13.4
900	31	1,057	15.5	83	77	13.6
850	31	1,541	12.8	76	79	11.1
800	31	2,050	12.8	39	65	7.6
750	31	2,589	12.4	24	49	4.9
700	31	3,169	11.1	23	31	3.1
650	31	3,778	8.3	23	325	3.5
600	31	4,441	4.5	23	314	5.4
550	31	5,136	.0	23	307	6.8
500	31	5,901	- 4.8	22	297	9.7
450	31	6,715	-10.4	23	291	12.2
400	31	7,619	-16.8	23	290	15.0
350	31	8,609	-23.7	24	283	18.3
300	31	9,717	-32.1	25	283	20.6
250	31	10,979	-41.6		277	22.5
200	30	12,455	-53.2		272	25.8
175	30	13,302	-59.8		267	25.3
150	30	14,250	-66.8		261	24.7
125	29	15,328	-74.6		253	23.1
100	27	16,595	-82.5		243	14.2
80	22	17,836	-81.5		209	2.5
70	21	18,593	-77.4		131	4.5
60	20	19,488	-71.6		129	5.4
50	17	20,570	-65.9		118	5.8
40	13	21,939	-60.9		94	6.0
30	12	23,740	-56.9		86	9.7
25	12	24,897	-56.0		62	9.1
20	12	26,325	-52.5		45	7.8
15	11	28,198	-48.3		62	9.3
10	10	30,897	-42.7		270	8.2
7	7	33,308	-41.5			

* WALLOPS IS. VA. NASA
1018 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	- 1.0	74	303	6.8
1000	30	148	- .2	63	315	10.9
950	30	558	- 1.9	63	310	17.3
900	30	988	- 2.3	65	304	17.7
850	30	1,442	- 2.4	61	291	18.3
800	30	1,922	- 3.6	53	284	20.4
750	30	2,430	- 5.4	47	278	23.9
700	30	2,971	- 7.5	42	274	28.0
650	30	3,542	-10.6	41	268	34.4
600	30	4,157	-13.8	42	266	37.9
550	30	4,811	-17.9	42	265	43.9
500	30	5,521	-22.2	46	269	48.0
450	30	6,282	-27.6	46	266	55.6
400	30	7,125	-33.3	45	268	65.3
350	30	8,051	-39.5	49	268	73.2
300	30	9,093	-45.7		268	88.6
250	30	10,292	-51.3		264	96.9
200	30	11,728	-54.8		264	91.5
175	30	12,581	-55.5		264	88.6
150	30	13,560	-57.1		265	74.6
125	30	14,708	-59.4		265	67.4
100	29	16,093	-61.6		262	56.5
80	25	17,471	-62.6		266	46.0
70	24	18,294	-62.7		269	39.0
60	24	19,243	-62.6		269	33.4
50	24	20,368	-62.0		272	29.7
40	24	21,749	-61.5		276	26.6
30	24	23,534	-60.6		277	24.9
25	24	24,671	-59.6		277	25.8
20	23	26,069	-57.7		272	28.6
15	22	27,904	-53.2		278	37.1
10	14	30,537	-46.0		270	59.6
7						

WASHINGTON, D. C.
1009 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	84	- 3.2	61	329	6.6
1000	31	155	- 3.3	58	320	8.4
950	31	560	- 4.4	64	318	15.3
900	31	985	- 5.6	65	314	18.6
850	31	1,433	- 5.1	59	309	19.4
800	31	1,909	- 5.7	56	297	18.6
750	31	2,413	- 7.2	52	284	20.0
700	30	2,955	- 9.0	50	276	25.8
650	30	3,526	-11.5	48	272	28.6
600	30	4,136	-15.1	48	272	32.8
550	30	4,785	-19.2	51	268	35.7
500	30	5,491	-23.7	51	267	40.6
450	30	6,247	-29.1	50	265	43.7
400	30	7,086	-34.6	46	266	50.1
350	30	8,007	-40.6	51	264	58.1
300	30	9,043	-46.8		262	69.5
250	30	10,236	-52.4		263	80.8
200	30	11,667	-55.2		266	82.0
175	30	12,520	-54.9		265	75.6
150	30	13,503	-55.8		264	69.9
125	29	14,664	-57.8		267	63.9
100	29	16,063	-60.2		266	52.1
80	29	17,450	-61.0		267	43.5
70	29	18,278	-61.4		268	38.1
60	29	19,234	-61.0		273	31.1
50	28	20,363	-61.4		273	29.3
40	28	21,748	-60.7		278	23.1
30	28	23,536	-60.6		278	22.0
25	27	24,671	-59.6		276	26.0
20	25	26,074	-57.8		275	26.6
15	22	27,898	-54.5		271	38.5
10	20	30,531	-46.8		268	63.9
7	10	33,000	-34.4			

WINNEMUCCA, NEV.
870 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,310	- 4.0	73	169	2.3
1000	31	198				
950	31	612				
900	31	1,049				
850	31	1,497	- .4	55	189	4.1
800	31	1,981	- 2.0	50	229	7.6
750	31	2,489	- 4.7	49	250	11.3
700	31	3,032	- 7.7	48	267	14.4
650	31	3,600	-10.9	48	276	17.9
600	31	4,217	-14.5	45	284	19.2
550	31	4,866	-18.8	43	288	21.0
500	31	5,575	-23.5	39	293	23.1
450	31	6,333	-29.0	36	294	24.5
400	31	7,168	-35.4	36	296	26.0
350	31	8,084	-42.3	39	297	28.9
300	31	9,109	-50.1		299	32.4
250	31	10,280	-57.1		298	37.1
200	31	11,684	-57.7		291	41.8
175	31	12,534	-54.7		290	40.2
150	31	13,521	-54.6		289	39.8
125	31	14,685	-55.5		289	35.0
100	31	16,101	-57.7		290	29.1
80	31	17,507	-58.2		298	22.3
70	31	18,347	-57.9		301	18.5
60	31	19,316	-58.5		312	15.7
50	31	20,462	-58.5		330	13.2
40	31	21,866	-58.5		346	12.2
30	29	23,678	-58.7		5	15.2
25	26	24,834	-57.6		4	14.8
20	25	26,245	-58.7		6	14.6
15	18	28,068	-57.3		354	14.8
10						
7						

WINSLOW, ARIZ.
852 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,492	- 8.8	75	217	2.7
1000	31	234				
950	31	642				
900	31	1,064				
850	31	1,511			191	2.9
800	31	1,991	- 1.7	55	277	2.1
750	31	2,503	- 3.0	45	293	4.1
700	31	3,048	- 5.8	44	297	6.8
650	31	3,620	- 9.0	39	292	9.1
600	31	4,241	-12.6	36	291	12.0
550	31	4,894	-17.2	35	289	16.1
500	31	5,608	-22.3	34	289	19.2
450	31	6,366	-27.9	35	288	22.9
400	31	7,209	-34.6	33	286	27.0
350	31	8,128	-41.5	33	285	31.9
300	31	9,158	-48.6		284	36.1
250	31	10,340	-54.5		287	47.2
200	31	11,769	-54.2		283	54.2
175	31	12,625	-54.1		283	56.7
150	31	13,611	-55.7		282	54.2
125	31	14,764	-58.7		281	47.8
100	31	16,155	-62.0		281	37.3
80	31	17,534	-62.6		283	27.2
70	31	18,353	-62.7		287	23.7
60	31	19,303	-62.2		295	18.5
50	31	20,429	-61.8		307	12.6
40	31	21,812	-61.0		328	6.2
30	30	23,605	-59.3		340	6.8
25	29	24,747	-58.7		335	8.4
20	27	26,146	-58.1		316	10.7
15	19	27,969	-55.7		300	17.3
10	9	30,576	-51.8			
7						

YAKUTAT, ALASKA
1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	12	- 8.9	76	88	7.2
1000	31	65			88	8.0
950	31	468	- 3.9	68	86	11.5
900	31	895	- 6.0	69	101	7.8
850	31	1,340	- 8.4	68	99	5.2
800	31	1,809	-11.0	66	110	1.4
750	31	2,303	-13.7	60	105	1.4
700	31	2,824	-16.6	56	149	1.4
650	31	3,378	-19.9	55	146	1.9
600	31	3,967	-23.6	57	217	1.7
550	31	4,595	-27.9	56	276	3.3
500	31	5,276	-32.6	56	279	5.2
450	31	6,006	-37.6	50	293	7.0
400	31	6,815	-42.8	45	286	8.7
350	31	7,705	-48.1		289	11.5
300	31	8,710	-52.9		285	12.2
250	31	9,878	-54.8		291	16.7
200	31	11,314	-51.8		286	18.8
175	30	12,180	-50.5		283	20.2
150	30	13,186	-50.2		279	21.8
125	30	14,376	-50.2		281	24.9
100	30	15,833	-50.3		284	26.6
80	30	17,287	-50.9		285	27.8
70	30	18,154	-51.7		282	28.9
60	30	19,154	-52.3		285	30.3
50	30	20,331	-53.0		288	33.8
40	30	21,766	-54.3		291	35.4
30	30	23,605	-55.5		295	40.0
25	30	24,765	-56.2		297	42.3
20	28	26,161	-57.8		299	49.0
15	27	27,966	-59.4		301	57.3
10	13	30,448	-61.0			
7	5	32,631	-62.3			

YAP, CAROLINE IS.
+ 1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	17	26.6	79	45	10.7
1000	31	112	25.5	74	54	15.0
950	31	561	21.6	75	65	22.7
900	31	1,029	18.5	71	69	25.4
850	31	1,519	16.3	63	75	23.1
800	31	2,034	14.8	48	77	19.8
750	31	2,579	12.5	41	79	18.8
700	31	3,155	10.0	34	82	18.6
650	31	3,768	6.9	32	86	20.0
600	31	4,422	3.3	30	88	19.8
550	31	5,117	- .6	27	92	20.4
500	31	5,879	- 4.7	28	99	21.0
450	31	6,695	- 9.8	25	100	21.8
400	31	7,602	-15.7	25	98	20.6
350	31	8,596	-22.5	26	94	20.0
300	31	9,709	-30.9	26	97	16.1
250	31	10,976	-40.9		101	14.6
200	31	12,454	-53.4		118	15.9
175	31	13,298	-60.8		127	16.5
150	31	14,240	-68.4		130	20.6
125	31	15,311	-76.5		124	26.6
100	31	16,576	-81.7		109	22.5
80	31	17,822	-82.2		94	16.3
70	31	18,577	-77.1		88	16.7
60	31	19,475	-71.0		86	18.5
50	30	20,568	-66.6		85	26.0
40	27	21,930	-62.8		89	40.0
30	22	23,731	-56.0		89	46.0
25	18	24,907	-52.1		91	40.4
20	11	26,376	-48.4			
15						
10						

YUCCA FLAT, NEV.
883 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,196	- 3.7	75	342	2.1
1000	31	201				
950	31	613				
900	31	1,048				
850	31	1,503	1.5	43	2	5.6
800	31	1,989	- .5	35	20	3.7
750	31	2,500	- 2.6	33	302	1.7
700	31	3,049	- 5.0	30	282	5.8
650	31	3,624	- 8.3	28	289	8.7
600	31	4,245	-12.6	R26	295	11.1
550	31	4,898	-17.1	R25	300	13.6
500	31	5,611	-22.4	R25	300	16.9
450	31	6,367	-28.3	R26	306	18.8
400	31	7,210	-34.6	R26	304	22.1
350	31	8,131	-41.6	R33	310	26.4
300	31	9,160	-49.0		304	31.7
250	31	10,341	-55.3		297	39.4
200	31	11,762	-54.9		292	49.3
175	31	12,619	-54.2		291	48.6
150	31	13,606	-55.6		289	46.0
125	31	14,761	-58.2		287	45.1
100	31	16,161	-59.9		286	34.4
80	31	17,549	-61.3		290	24.5
70	31	18,378	-60.7		292	19.4
60	31	19,338	-60.6		308	15.7
50	31	20,473	-60.4		324	11.8
40	29	21,866	-60.0		346	8.7
30	26	23,669	-59.2		359	10.7
25	23	24,812	-58.2		6	12.4
20	19	26,234	-57.6		14	11.7
15	13	28,072	-56.7		343	13.2
10	8	30,705	-54.5			

YUMA, ARIZ.
1003 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	21	131	6.6	69	8	1.9
1000	21	153			5	2.5
950	21	579	11.1	38	2	8.9
900	21	1,029	8.8	35	29	7.4
850	21	1,500	6.5	34	35	5.8
800	21	1,995	3.6	33	19	4.1
750	21	2,514	.7	31	349	4.1
700	21	3,066	- 2.4	28	304	6.4
650	21	3,642	- 5.9	25	303	8.9
600	21	4,271	-10.4	26	311	10.5
550	21	4,927	-15.2	27	301	9.9
500	21	5,646	-20.6	27	302	13.0
450	21	6,407	-26.7	26	304	15.7
400	21	7,255	-32.8	26	302	19.8
350	20	8,185	-39.1	27	296	23.3
300	19	9,231	-45.8		300	27.2
250	17	10,438	-50.5		289	45.1
200	16	11,898	-51.1		287	62.4
175	16	12,761	-53.5		286	60.4
150	13	13,747	-56.6		287	57.1
125	10	14,899	-60.9		286	49.7
100	7	16,258	-63.7			
80						
70						
60						
50						
40						
30						
25						
20						
15						
10						

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from lithium chloride hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. They were also equipped with carbon hygristors. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

R More than half of the observations are from statistical values.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

JANUARY 1966

MADISON, WIS.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Jan.									
3-----	----	----	----	----	S 1.29	----	M 1.15	M 1.04	M 0.93
4-----	----	M 0.93	M 1.11	----	S 1.19	----	S 1.09	S .92	S .83
5-----	----	----	M 1.05	----	----	----	----	----	----
11----	S 0.94	S 1.05	S 1.19	----	----	----	----	----	----
13----	----	----	----	----	S 1.19	----	----	----	----
14----	----	----	----	----	----	----	S 1.19	----	----
17----	----	----	----	----	S 1.21	----	S 1.08	----	----
19----	M .88	M 1.00	S 1.16	----	S 1.28	----	S 1.16	M 1.04	S .95
23----	S .93	----	S 1.19	----	S 1.33	----	----	----	----
30----	S .82	S .93	M 1.06	----	M 1.23	----	S 1.10	S .99	----
Averages	0.89	0.98	1.13	----	1.25	----	1.13	1.00	0.90

BLUE HILL OBS., MASS.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Jan.									
4-----	1.01	1.11	1.24	----	1.33	----	1.32	1.11	1.00
5-----	.83	.96	1.07	----	----	----	----	----	----
9-----	.79	.91	1.07	----	1.23	----	1.15	.99	.93
11----	.86	.95	1.10	----	1.21	----	----	----	----
12----	.84	.95	1.07	----	1.23	----	1.11	.99	.88
13----	.96	1.07	1.17	----	----	----	----	----	----
14----	.57	.65	.81	----	1.16	----	1.07	.99	.84
15----	.71	.91	1.11	----	1.25	----	1.08	.99	.90
16----	.98	1.06	1.17	----	1.27	----	----	----	----
17----	----	----	----	----	1.27	----	1.12	1.00	.90
18----	.88	1.00	1.12	----	1.25	----	1.11	.98	.87
22----	----	----	1.04	----	1.30	----	----	----	----
25----	----	----	----	----	1.17	----	.94	.79	.70
Averages	0.84	0.96	1.09	----	1.24	----	1.11	0.98	0.88

OMAHA, NEBR.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Jan.									
1-----	HS0.98	HS1.08	HS1.24	----	----	----	----	----	----
4-----	HS .98	HS1.06	HS1.22	----	HS1.31	----	HS1.18	HS0.97	HS0.86
5-----	HS .90	HS .99	HS1.12	----	----	----	----	----	----
6-----	HM .80	HS .98	----	----	----	----	----	----	----
7-----	----	----	----	----	----	----	HS1.13	HS1.00	HS .88
8-----	HS .98	HS1.06	HS1.14	----	----	----	----	----	----
10----	HS .96	HS1.38	----	----	----	----	----	----	----
13----	----	----	HS1.14	----	HS1.28	----	----	----	----
14----	HI .54	HI .70	HM .94	----	----	----	----	----	----
18----	HS .86	HS1.01	HS1.10	----	HS1.18	----	HM1.07	HM .97	HM .87
19----	----	HS .92	HS1.01	----	HS1.20	----	HM .98	HM .85	HM .75
22----	HM .92	HM1.01	HM1.12	----	HS1.32	----	HS1.13	HS .92	HM .75
26----	HI .76	HI .82	HI .96	----	----	----	----	----	----
Averages	0.87	1.00	1.10	----	1.26	----	1.10	0.94	0.82

TUCSON, ARIZ.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Jan.									
5-----	0.97	----	----	----	----	----	----	----	----
9-----	1.09	----	----	----	----	1.30	----	0.99	----
15----	.89	----	----	----	----	----	----	----	----
16----		Pyrheliometer Inoperable							
19----	.68	0.78	----	----	----	----	----	----	----
21----	----	----	----	----	----	----	----	----	0.73
22----	----	1.06	----	----	----	----	----	----	.86
29----	0.94	----	----	----	----	----	----	----	----
31----	----	----	----	----	----	----	----	----	.92
Averages	0.91	0.92	----	----	----	1.30	----	0.99	0.83

MAUNA LOA OBS., HAWAII

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jan.									
3-----	1.16	1.24	1.35	1.45	1.55	1.45	1.32	1.22	1.13
4-----	1.19	1.27	1.37	1.49	1.58	1.48	1.38	1.27	1.20
5-----	1.18	1.26	1.36	1.48	1.57	----	1.36	1.26	----
6-----	1.24	1.31	1.41	1.54	1.64	1.49	1.37	1.27	1.20
7-----	1.19	1.28	1.39	1.52	1.61	1.50	1.37	1.27	1.19
8-----	1.20	1.29	1.39	1.51	1.60	(1.44)	----	----	----
9-----	1.23	1.31	1.41	1.53	1.62	1.51	1.39	1.30	1.21
10----	1.22	1.31	1.40	1.52	1.61	1.51	1.40	1.30	1.21
11----	1.25	1.33	1.43	1.54	1.63	1.53	1.41	1.31	1.23
12----	1.27	1.35	1.44	1.55	1.64	1.52	1.40	1.32	1.23
13----	1.24	1.33	1.43	1.54	1.64	1.53	1.41	1.33	1.25
14----	1.25	1.34	1.44	1.55	1.59	1.50	1.38	1.30	1.21
15----	1.21	1.30	1.41	1.52	----	----	----	----	----
16----	1.24	1.33	1.42	1.54	1.60	----	1.36	1.28	1.21
17----	M	M	M	1.52	1.59	1.50	1.38	1.29	1.19
18----	1.17	1.28	1.38	1.50	----	----	----	----	----
19----	1.20	1.28	1.38	1.50	----	----	----	----	----
21----	----	----	----	----	----	----	1.31	1.20	1.11
22----	1.23	1.31	1.41	1.50	1.58	1.50	1.40	1.30	1.21
23----	1.25	1.33	1.42	1.54	1.60	1.51	1.40	1.30	1.21
24----	1.25	1.33	1.42	1.54	1.63	1.50	1.40	1.30	1.21
25----	1.24	1.32	1.42	1.53	1.62	1.51	1.40	1.29	1.22
26----	1.24	1.32	1.42	1.53	1.59	1.49	1.37	1.27	1.19
27----	1.18	1.27	1.37	1.50	1.59	1.44	1.33	1.24	1.17
28----	1.24	1.32	1.42	1.54	1.60	(1.48)	1.35	1.26	1.17
29----	1.26	1.36	1.42	1.55	1.61	1.50	1.40	1.31	1.22
30----	1.19	1.28	1.39	1.51	1.61	1.45	1.32	1.24	1.16
31----	1.18	1.28	1.37	1.49	1.60	1.49	1.37	1.27	1.20
Averages	1.22	1.31	1.40	1.52	1.60	1.50	1.37	1.27	1.20

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
	Instrument site changed during month								

HS	Slight haze	S	Slight haze - indeterminable
HM	Moderate haze	M	Moderate haze - indeterminable
HI	Intense haze	*	Values corresponding to true solar noon
( )	Clouds present		

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	135	292	290	279	279	---	281	---	261	256	159	256	245	265	227	216	224	83	---	---	---	331	312	307	331	338	302	329	330	276	189	261
AMES IOWA	93	50	209	211	202	123	200	209	131	122	---	---	---	---	---	205	248	209	261	211	185	283	252	172	247	211	263	224	249	291	236	204
ANNETTE ALASKA	19	57	58	71	47	65	21	76	51	40	1	15	8	50	9	17	74	41	26	21	70	54	86	20	18	26	72	27	29	---	---	40
APALACHICOLA FLORIDA	264	244	104	188	124	183	274	351	378	336	361	319	154	50	154	377	386	363	235	95	59	61	406	138	18	114	433	416	49	464	442	243
ARGONNE NAT. LAB.	194	15	212	211	184	33	187	232	135	209	204	5	184	121	118	129	255	248	248	80	90	85	273	194	165	224	245	222	269	287	261	178
ASTORIA OREGON	---	---	---	---	8	15	36	62	57	13	36	---	28	27	171	187	88	180	148	107	38	36	44	31	95	94	15	62	27	76	128	70
ATLANTA GEORGIA	220	108	65	35	17	94	326	340	330	261	327	245	79	33	31	168	349	218	337	137	150	25	268	181	93	101	366	373	48	409	264	194
BARROW ALASKA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	4	3	5	3	5	1
BETHEL ALASKA	23	19	9	23	27	16	15	13	13	12	16	31	21	19	18	19	21	19	20	24	22	13	30	49	44	26	39	62	71	35	45	26
BISMARCK N.DAK.	130	170*	152*	99	69	43	172	112	108	125	42	183	55	141	54	185	206*	212	99	160	223	230*	199	208	238	168	209	244	262	204	222	159*
BLUE HILL MASS.	92	63	44	225	189	26	180	20	231	140	224	233	198	218	231	244	241	243	108	57	124	227	31	100	207	---	---	---	---	---	---	156
BOISE IDAHO	176	70	31	24	47	35	148	75	186	149	109	91	133	53	227	231	232	234	254	224	184	81	84	145	218	263	239	214	87	76	255	148
BOSTON MASSACHUSETTS	77	62	25	222	186	9	169	6	193	128	214	225	167	207	222	240	234	232	83	70	66	220	11	103	176	162	107	289	---	---	---	147
BROWNSVILLE TEXAS	265	120	175	---	414	171	270	374	405	311	378	230	203	230	450	368	55	81	126	138	39	311	---	52	---	431	479	435	419	485	391	279
CANTON ISLAND P.I.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	643	512	575	439	263	124	157	158	491	211	331	475	475	516	492	554	460	---
CAPE HATTERAS N.C.	260	187	174	122	52	64	241	104	307	278	296	312	237	80	48	72*	320	202	302	192	316	31	277	321	198	15	302	338	72	163	395	203*
CARIBOU MAINE	109	164	37	165	188	81	90	90	181	44	---	160	191	185	191	135	142	128	93	111	165	181	174	81	130	219	160	72	114	63	156	133
CHARLESTON S.C.	259	233	221	84	35	---	287	323	343	222	331	331	289	54	45	146	345	249	343	181	47	24	346	239	39	26	387	393	37	428	420	224
CLEVELAND OHIO	106	21	218	236	111	60	26	201	194	184	143	160	18	113	75	157	144	---	128	---	82	79	105	221	208	193	155	232	112	173	198	140
COLUMBIA MISSOURI	41	51	250	237	120	238	218	246	174	248	183	50	198	253	222	130	176	184	191	160	111	215	268	163	254	274	266	193	320	318	121	196
DAVIS CALIFORNIA	258	231	78	98	91	235	78	167	229	111	267	168	146	253	277	300	298	270	300	304	280	241	286	298	212	255	310	272	66	142	174	216
DODGE CITY KANSAS	248	261	264	259	262	244	240	252	232	229	176	264	272	268	81	182	246	299	121	168	245	338	198	179	233	334	210	300	323	303	152	238
E. LANSING MICHIGAN	190	12	154	197	181	12	71	191	97	97	99	57	96	90	217	225	132	120	99	147	160	67	132	238	246	262	239	271	210	277	169	153
EL CENTRO CALIF. NPF	269	275	280	273	274	271	271	198	269	257	179	271	279	276	266	92	49	251	281	206	303	299	270	285	300	263	156	311	265	260*	260*	250*
EL PASO TEXAS	360	371	367	357	363	363	362	299	361	371	267	354	367	382	376	336	203	137	269	283	191	413	324	422	420	429	390	424	425	437	335*	347*
ELY NEVADA	266	262	260	224	247	243	265	133	287	255	255	286	278	234	222	299	317	333	264	322	319	271	259	224	322	---	333	339	250	126	255	265
EPPLEY NEWPORT R.I.	104	76	43	222	168	39	183	19	223	205	227	233	199	218	221	235	234	239	130	123	126	203	54	62	234	166	113	291	271	81	203	166
FORT WORTH TEXAS	29	346	328	125	322	332	333	340*	273	279	249	182	119	349	351	342	148	88	49	72	74	393	368	34	39	382	317	42	421	395	61	232*
FRESNO CALIFORNIA	270	269	253	264	254	254	190	189	101	232	73	114	257	80	138	236	113	307	229	265	287	278	284	133	289	235	326	311	217	165	228	221
GAINESVILLE FLORIDA	351	360	301	104	178	124	260	337	398	252	421	406	319	228	236	399	408	425	260	84	97	87	368	352	77	60	453	462	48	480	488	285
GLASGOW MONTANA	147	95	75	93	108	114	141	104	144	183	134	118	156	180	128	175	200	144	157	224	184	163	147	194	190	125	150	210	151	234	200	154
GRAND JUNCTION COLO.	108	295	279	287	272	218	272	161	269	174	210	286	286	196	208	286	297	295	285	155	329	281	218	322	340	336	308	340	275	199	286	260
GREAT FALLS MONTANA	128	89	88	105	135	88	82	100	150	82	91	120	57	129	64	138	170	83	152	192	172	102	133	199	105	169	113	157	149	135	146	123
GREENSBORO N.C.	200	109	45	172	56	87	277*	303	290	264	296	260	89	133	25	228	309	251	343	277	346	54	345	284	159	114	412	404	87	515	522	234*
GRIFFIN EXP.STA.GA.	192	157	45	50	20	97	312	334	324	243	324	263	102	42	39	154	341	221	321	178	151	36	307	166	50	82	367	371	41	407	308	195
INDIANAPOLIS INDIANA	---	45	258	258	56	110	59	273	202	266	228	62	51	226	179	205	277	192	288	38	93	82	314	175	245	325	285	296	255	342	245	196
LAKE CHARLES LA.	157	33	65	16	61	300	264	354	332	235	339	154	28	12	251	341	226	43	30	131	21	54	325	46	21	227	416	62	245	428	166	172
LAKELAND FLORIDA	365	351	285	198	220	159	214	254	282	239	223	279	625	353	178	348	406	320	276*	25	100	54	394	325	150	59	460	431	62	484	337	273*
LANDER WYOMING	235	227	208	213	209	211	209	178	251	192	199	203	233	153	128	286	327	310	124	288	265	162	312	258	327	173	171	289	219	258	144	225
LARAMIE WYOMING	196	280	255	243	235	137	253	243	279	190	213	252	270	159	149	282	333	329	179	201	376	246	259	253	349	315	309	294	188	299	144	249
LAS VEGAS NEVADA	305	282	303	286	280	289	290	236	300	297	279	316	306	311	277	324	202	318	230	329	348	316	345	345	346	239	311	370	275	147	326	294
LITTLE ROCK ARKANSAS	34	231	195	146	32	286	265	304	225	272	163	72	185	118	151	271	200	68	168	125	66	142	341	55	56	484	316	119	390	373	81	191
LOS ANGELES CALIF.WB	323	326	320	285	---	314	316	274	278	217	287	316	338	325	313	259	334	338	93	309	344	327	343	309	328	312	339	339	294	230	361	303
MADISON WISCONSIN	217	25	221	207	211	162	226	236	118	228	227	41	223	250	170	256	262	229	264	134	169	174	293	257	225	239	273	265	307	306	280	216
MANHATTAN KANSAS	106	284	296	265	259	232	254	263	209	538	91	112	266	289	183	90	288	352	260	241	236	313	229	158	151	255	264	238	330	287	68	230
MATANUSKA ALASKA	24	25	24	23	26	10	18	31	8	22	47	49	54	12	19	19	33	15	18	19	53	19	24	43	22	33	60	85	94	15	41	32
MAUNA LOA OB.HAWAII	341	353	548	565	542	579	573	568	575	577	583	551	590	585	463	604	596	429	508	345	331	607	613	615	614	610	604	607	629	617	623	547
MEDFORD OREGON	139	56	29	29*	80	69	65	175	88	37	62	77	83	112	101	183	225	106	202	212	143	148	102	133	132	71	245	170	83	144	---	117*
MIAMI FLORIDA	469	467	289	292	335	248	172	222	299	141	43	340	365	366	250	329	406	344	352	153	305	176	225	296	265	109	474	388	207	364	453	295
MIDLAND TEXAS	---	---	---	256	369	350	361	352	349	360	305	350	350	372	359	280	74	50	---	43	213	393	---	---	240	396	369	70	420	348	261	292
NASHVILLE TENNESSEE	57	27	153	217	26	168	236	300	290	173	299	246	35	101	123	166	305	109	324	---	262	72	283	147	113	310	353	328	245	384	114	199
NEW YORK N.Y.U	80	15	8	205	168	14	164	137	230	190	218	236	90	213	179	233	202	244	125	167	102	117	16	233	206	77	215	290	211	36	251	157
NORTH OMAHA NEBRASKA	45	204	261	254	238	184	254	236	170	242	145	83	260	270	62	218	250	293	285	174	286	322	270	224	218	277	276	282	372	313	215	232
OKLAHOMA CITY OKLA.	85	272	282	206	225	272	262	273	241	275	158	259	193	288	254	44	81	300	99	113	131	327	346	56	44	308	279	68	334	309	33	207
PHOENIX ARIZONA	266	284	285	278	279	274	271	204	284	281	128	285	307	292	259	188	182	78	219	166	309	331	308	315	323	267	197	320	301	209	343	259

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

JANUARY 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PORTLAND MAINE	81	122	23	226	185	26	84	144	212	176	196	210	202	180	230	217	195	234	83	65	60	249	37	78	189	250	120	282	281	35	256	159
PROSSER WASHINGTON	83	131	28	75	41	116	93	165	95	55	46	94	70	88	183	188	28	123	92	134	147	93	184	203	99	161	143	151	64	89	247	113
RAPID CITY S.DAK.	108	160	142	99	165	92	56	68	150	132	39	149	107	119	64	75	203	210	94	166	216	154	170	157	269	165	203	165	164	208	162	143
RENO NEVADA	208	154	174	43	127	197	189	221	179	209	229	229	206	213	203	266	267	264	222	274	258	172	220	253	259	182	282	258	275	177	215	214
RUSTON LOUISIANA	---	---	---	---	40	299	293	303	278	215	267	121	156	35	240	302	228	179	80	42	---	---	314	53	29	261	335	28	323	361	120	196
SAINT CLOUD MINN.	134	100	181	176	95	102	207	125	169	198	156	96	140	187	109	235	160	226	234	146	164	263	272	253	213	138	260	273	228	251	197	184
SALT LAKE CITY UTAH	224	194	233	173	221	151	230	47	232	210	81	172	101	164	253	270	284	302	99	208	264	163	272	66	230	297	204	285	233	179	104	198
SAN ANTONIO TEXAS	---	---	---	---	---	---	---	---	---	---	---	---	---	---	381	303	---	39	139	---	107	366	333	---	318	432	426	216	441	410	209	---
SANTA MARIA CALIF.	270	269	269	252	262	263	206	260	268	244	273	282	278	281	279	295	296	298	102	300	297	294	303	304	287	225	283	317	153	249	302	266
SAULT STE MARIE MICH	86	62	112	118	---	83	112	141	---	---	179	---	---	---	212	188	---	---	217	240	135	---	---	202	263	204	120	202	239	194	171	---
SEATTLE TACOMA WASH.	32	56	23	44	15	37	64	74	66	29	34	33	32	59	128*	88	51	111	102	96	77	76	53	107	128	98	179	108	63	60	141	73*
SPOKANE WASHINGTON	119	---	61	103	38	100	86	120	95	50	144	97	60	145	107	40	116	68	153	71	133	117	81	205	74	122	87	99	82	13	62	95
STATE COLLEGE PENN.	100	8	131	228	146	28	40	134	231	113	171	237	25	136	150	256	118	145	73	128	160	48	118	259	284	123	238	314	147	154	185	149
STERLING VIRGINA	83	11	59	260	80	39	204	264	272	246	278	289	38	265	103	239	279	257	263	280	203	34	206	295	188	73	327	351	109	188	310	197
STILLWATER OKLAHOMA	107	252	269	207	215	253	241	261	212	242	138	215	215	289	230	32	74	281	24	58	107	310	328	21	57	288	239	100	306	289	10	189
SWAN ISLAND W.I.	472	466	437	338	375	442	401	105	202	197	383	---	495	498	499	401	474	432	465	421	526	509	434	461	467	500	383	478	530	168	499	415
TAMPA FLORIDA	371	347	274	234	276	---	209	307	321	269	336	292	349	354	230	---	416	318	263	25	119	66	407	333	129	50	465	450	63	498	396	282
TUCSON ARIZONA	208	338	341	341	342	325	330	279	328	---	184	330	341	335	271	321	228	113	329	214	308	378	352	375	373	235	142	306	---	---	367	298
WAKE ISLAND,PACIFIC	412	420	409	345	358	386	320	401	169	282	386	347	386	370	390	381	407	192	370	393	399	396	395	180	365	373	406	404	279	398	243	354

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont. JANUARY 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	-52	-32	-35	44	43	7	37	-10	-64	24	10	5	31	31	22	38	0	-12	-3	8	10	41	29	12	-38	-4	56	70	58	25	33	12

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																														Mean O3
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

DESCRIPTION of CHARTS

CHART I., A. AVERAGE TEMPERATURE (°F.) AT SURFACE. B. DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL. -The average monthly temperature presented in Chart I-A is computed from the average daily maximum and the average daily minimum temperatures reported by some 870 Weather Bureau and cooperative stations. The departures from normal are presented in Chart I-B. They are based on the 30-year normals (1931-60) for the first-order Weather Bureau stations.

CHART II. TOTAL PRECIPITATION. - Chart II is based on daily precipitation records at about 870 Weather Bureau and cooperative stations.

CHART III. PERCENTAGE OF NORMAL PRECIPITATION. -In this chart the anomaly in the month's precipitation is shown as a percentage of the normal total. This anomaly shows the deviation from the 30-year normal (1931-60) for about 270 first-order Weather Bureau stations.

CHART IV. TOTAL SNOWFALL. CHART V. A. PERCENTAGE OF MEAN MONTHLY SNOWFALL. B. DEPTH OF SNOW ON GROUND.-Chart IV gives the total depth in inches of unmelted snowfall as reported during the month by Weather Bureau and cooperative stations. This is converted in Chart V-A into a percentage of the mean monthly total amount computed for each Weather Bureau station having at least 10 years of record. The depth of snow on ground is that reported by both Weather Bureau and cooperative stations as of 7:00 a. m. Eastern Standard Time on the Monday nearest the end of the month. This is reported only for the months December through March. The snowfall charts are presented each month November through April.

> Isolines for Charts I, II, III, IV, and V, are drawn through points of approximately equal value. Caution should be used in interpolating on these charts, particularly in mountainous areas.

CHART VI. A. PERCENTAGE OF POSSIBLE SUNSHINE. B. PERCENTAGE OF MEAN MONTHLY SUNSHINE. -CHART VI-A shows the amount of sunshine received in terms of percentage of the total hours of sunshine possible during the month. In Chart VI-B this is shown as a percentage of the mean number of hours of sunshine received. Means are computed for Weather Bureau stations having at least 10 years of record.

CHART VII. A. AVERAGE DAILY VALUES OF SOLAR RADIATION, LANGLEYS. B. PERCENTAGE OF MEAN DAILY SOLAR RADIATION. -Shown on Chart VII-A are the monthly averages of daily total solar radiation, both direct and diffuse, in langleys (gm. cal. cm. $^{-2}$) for all Weather Bureau stations which record this element.

CHART VII-B shows the percentages of the mean based on at least 5 years of record during the period 1950-1960, and corrected to the International Pyrheliometer Scale of 1956.

CHART VIII. -TRACKS OF CENTERS OF ANTICYCLONES AT SEA LEVEL.

CHART IX. TRACKS OF CENTERS OF CYCLONES AT SEA LEVEL. -Centers which can be identified for 24 hours or more are tracked in these charts. Semi-permanent features such as the Great Basin and Pacific Highs and Colorado and Mexico Lows are not shown. The 7:00 a. m. EST positions are shown by open circles, with the intermediate positions at 6-hour intervals shown by solid dots. The date is given above the circle and the central pressure to whole millibars below. A dashed track indicates a regeneration rather than actual movement to the next position. Solid squares indicate position of stationary center for period shown beside it.

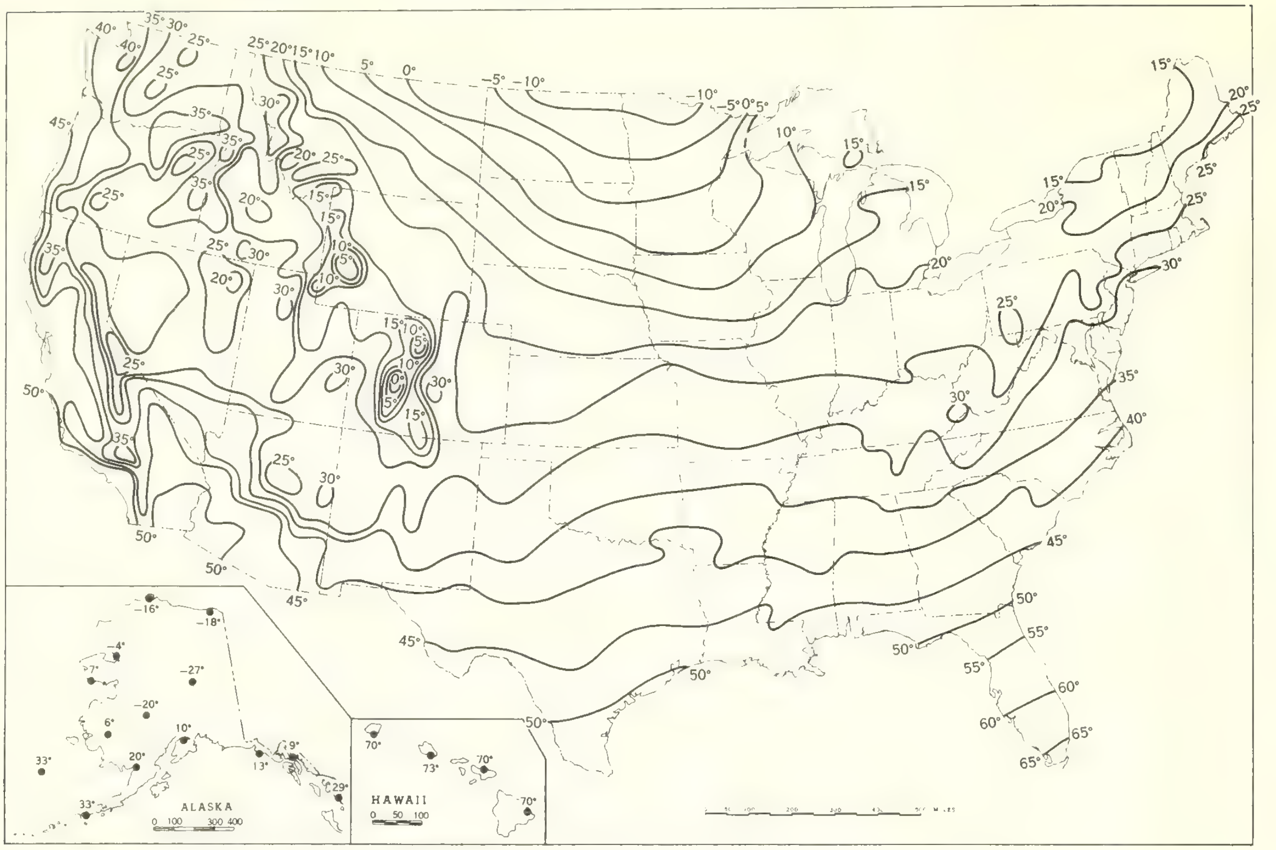
CHART X. AVERAGE SEA LEVEL PRESSURE (mb.) AND RESULTANT SURFACE WIND.-The average monthly sea level pressures are obatined from the eight daily 3-hourly observations reported at Weather Bureau Stations. Resultant surface wind directions (to 36 points of the compass) for the month are shown by arrows. Resultant speeds are indicated by the length of arrow shafts. Constancy ratios (resultant surface wind divided by average surface wind for month) are shown to two decimal places. The inset shows the departure of the average pressure based on 30-year normals for first-order Weather Bureau Stations, other stations having at least 10 years of record; and for each 10° intersection in a diamond grid over the oceans.

CHARTS XI-XVI. AVERAGE HEIGHT, TEMPERATURE, AND RESULTANT WINDS, 850, 700, 500, 300, 200, and 100 mb. -Height is given in geopotential meters and temperature in degrees Celsius. These are the averages of the 1200 GMT radiosonde reports. Wind speeds are given in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. Directions are shown to 360° of the compass. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

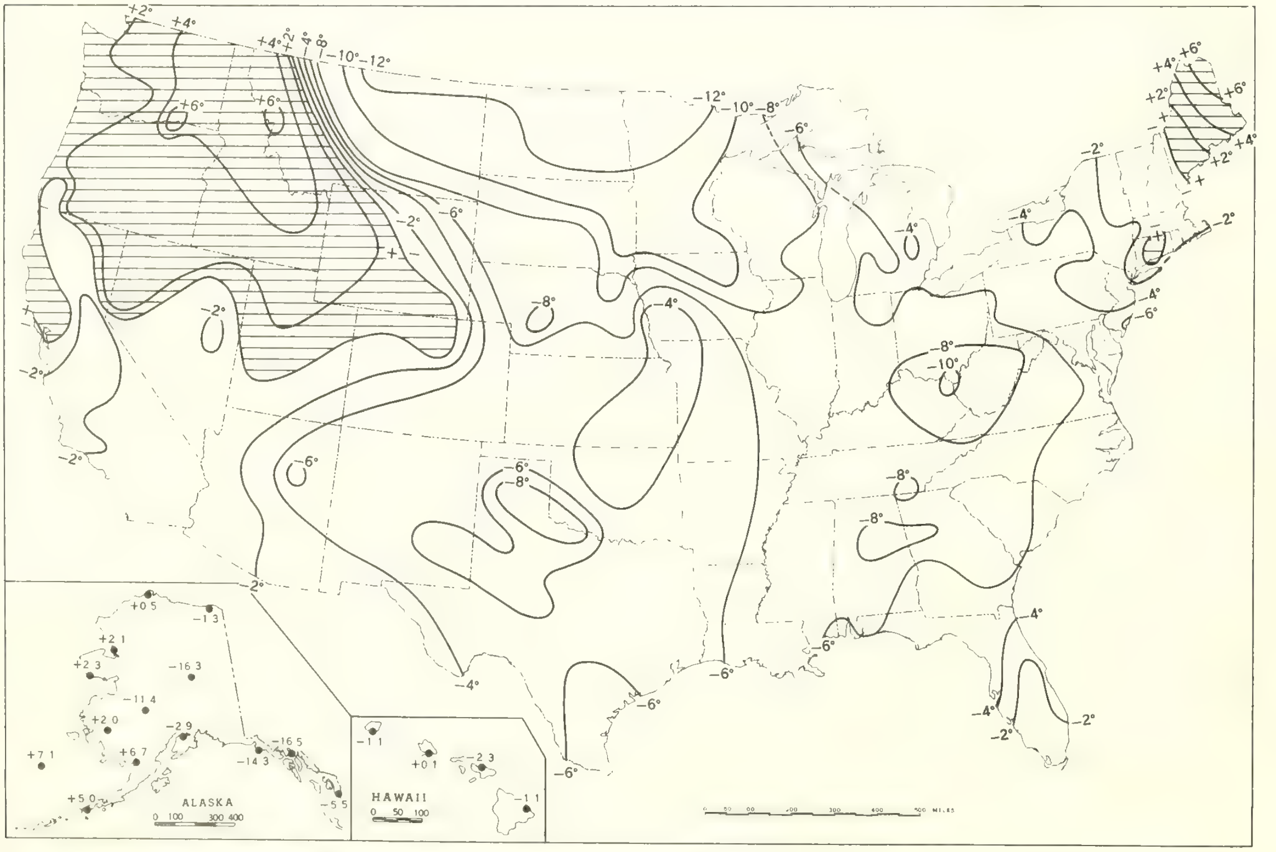
CHART XVII. A. 50-MB. RESULTANT WINDS. B. 30-MB. RESULTANT WINDS. -Wind speed (isotachs) in knots. Arrows show resultant wind direction. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

Exact values of most of these charted elements for Weather Bureau stations are printed each month in tabular form in CLIMATOLOGICAL DATA, NATIONAL SUMMARY. Extreme values of temperature and precipitation for each state are included in the tables, Condensed Climatological Summary. Annual averages for surface elements are presented in the CDNS Annual Issue each year.

Chart I. A. Average Temperature (°F.) at Surface, January 1966.



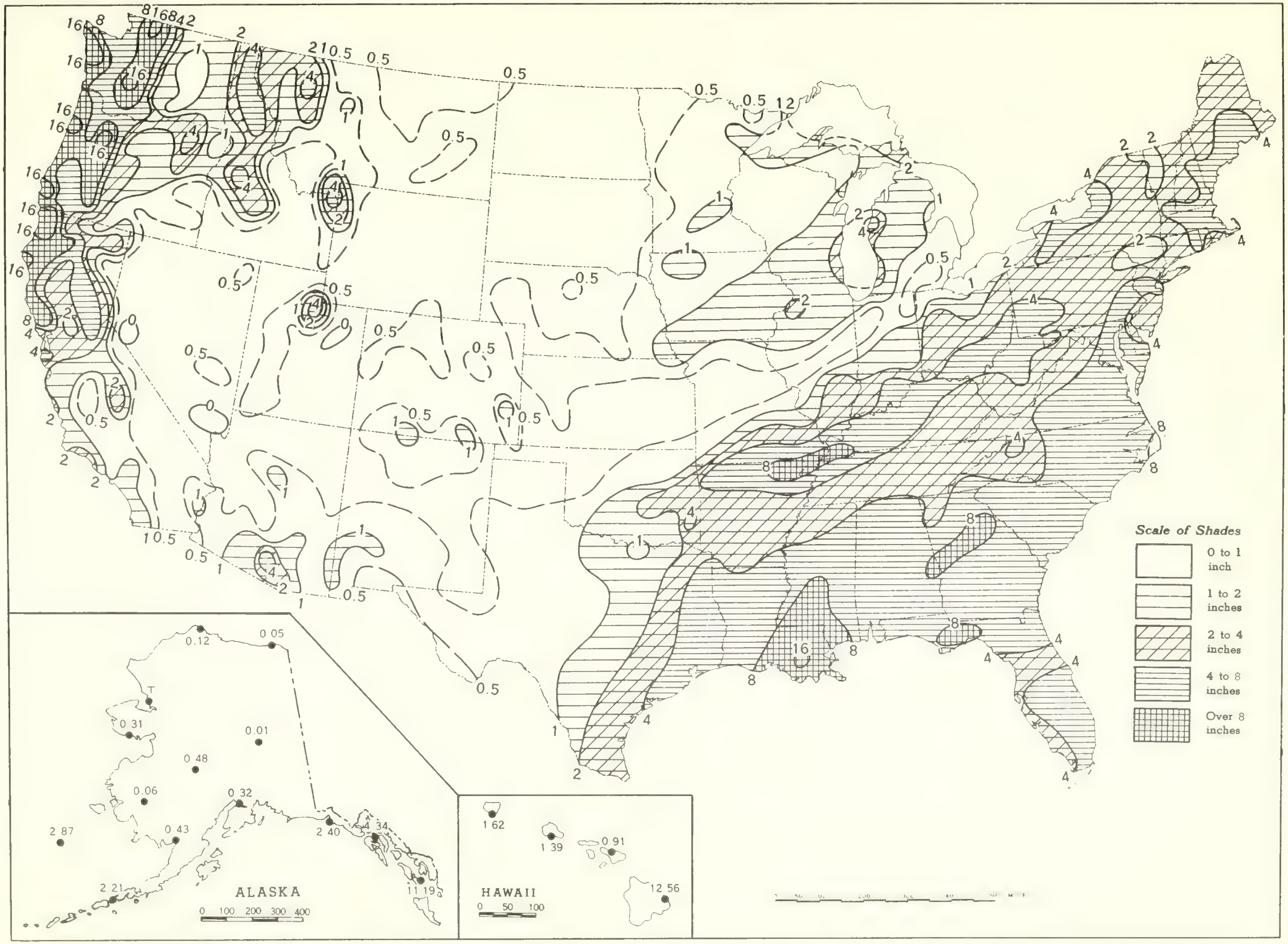
B. Departure of Average Temperature from Normal (°F.), January 1966.



A. Based on reports from over 870 Weather Bureau and cooperative stations. The monthly average is half the sum of the monthly average maximum and monthly average minimum, which are the average of the daily maxima and daily minima, respectively.

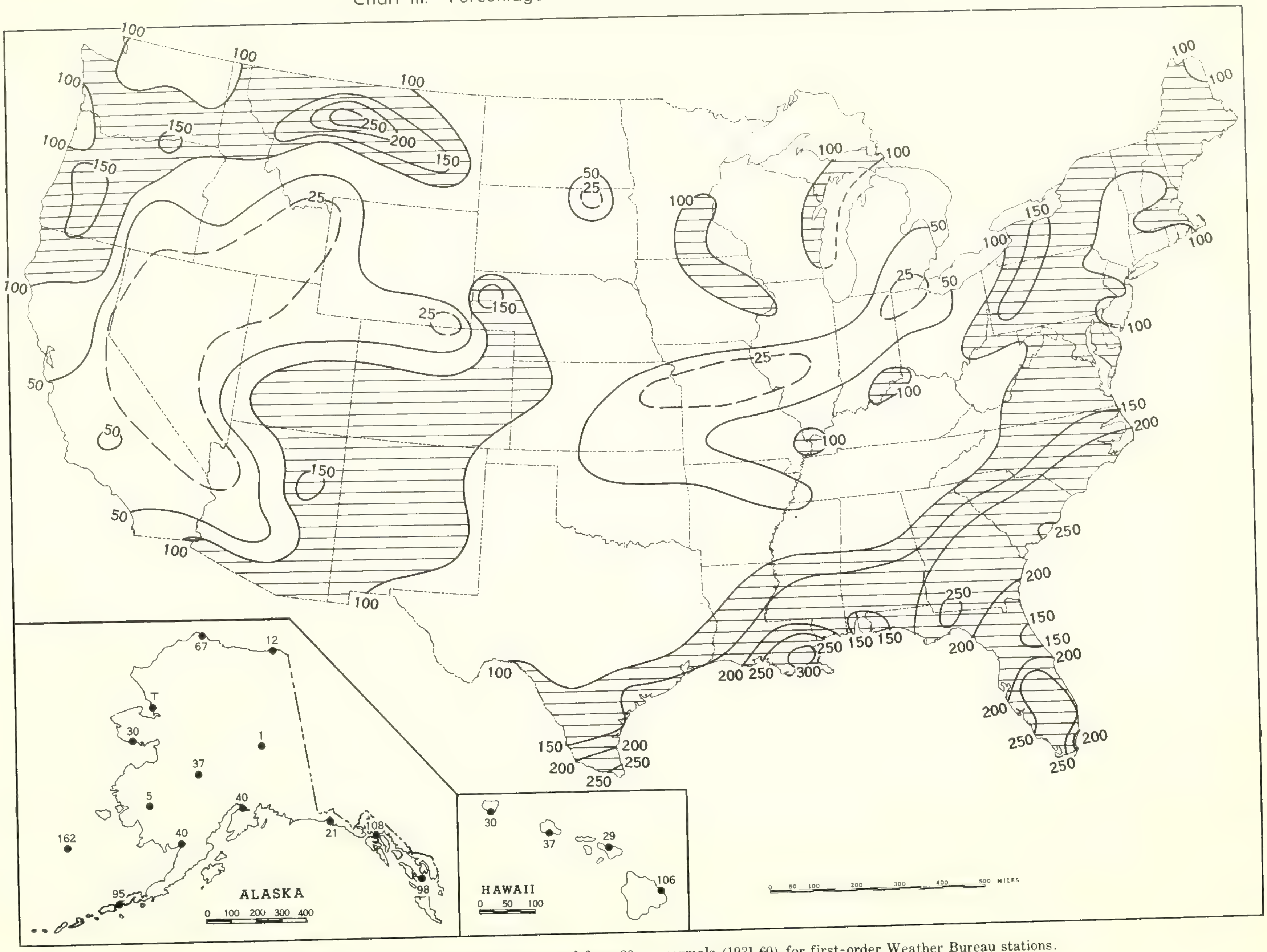
B. Departures from normal are based on the 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart II. Total Precipitation (Inches), January 1966.



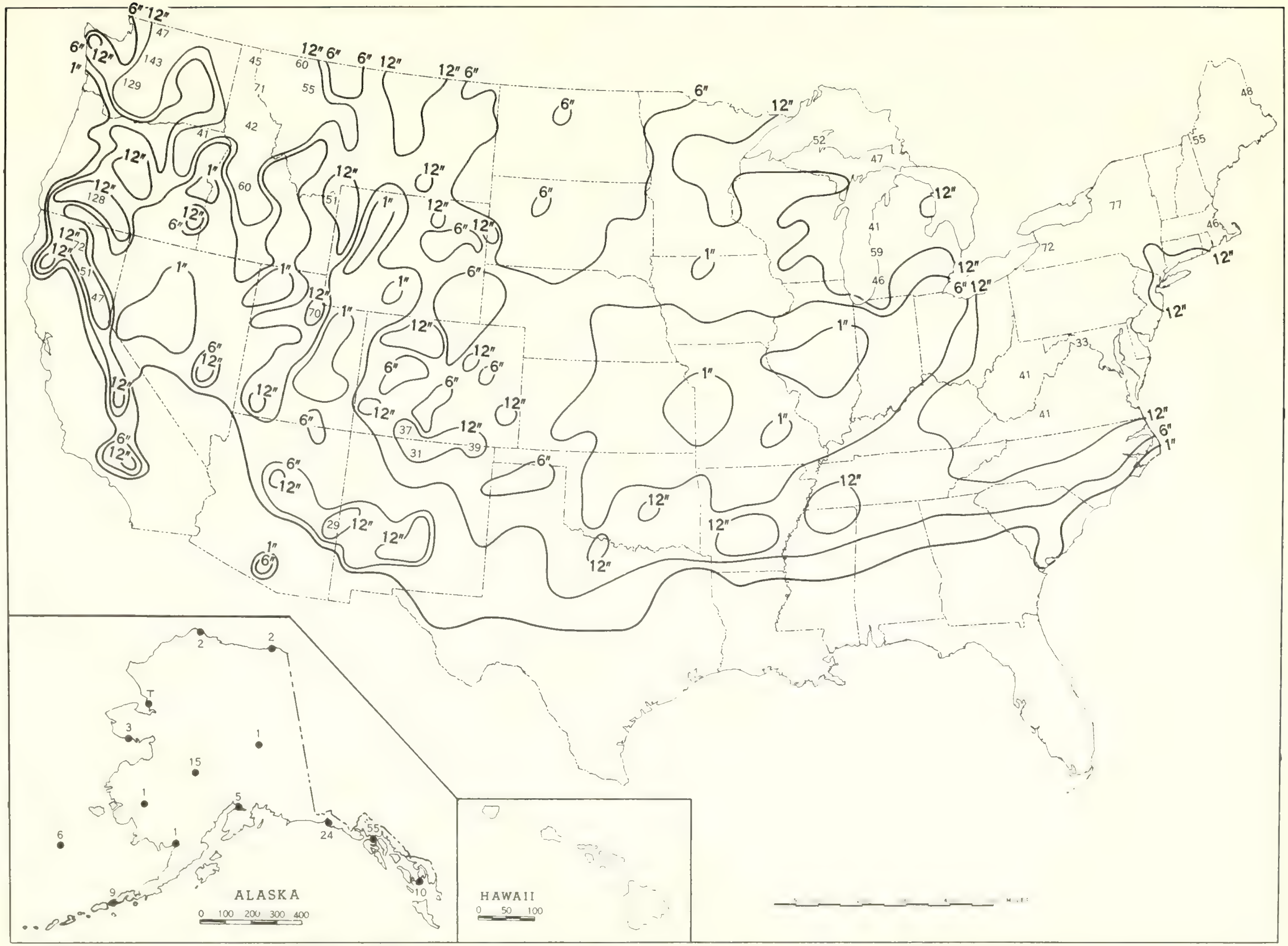
Based on daily precipitation records at about 870 Weather Bureau and cooperative stations.

Chart III. Percentage of Normal Precipitation, January 1966.



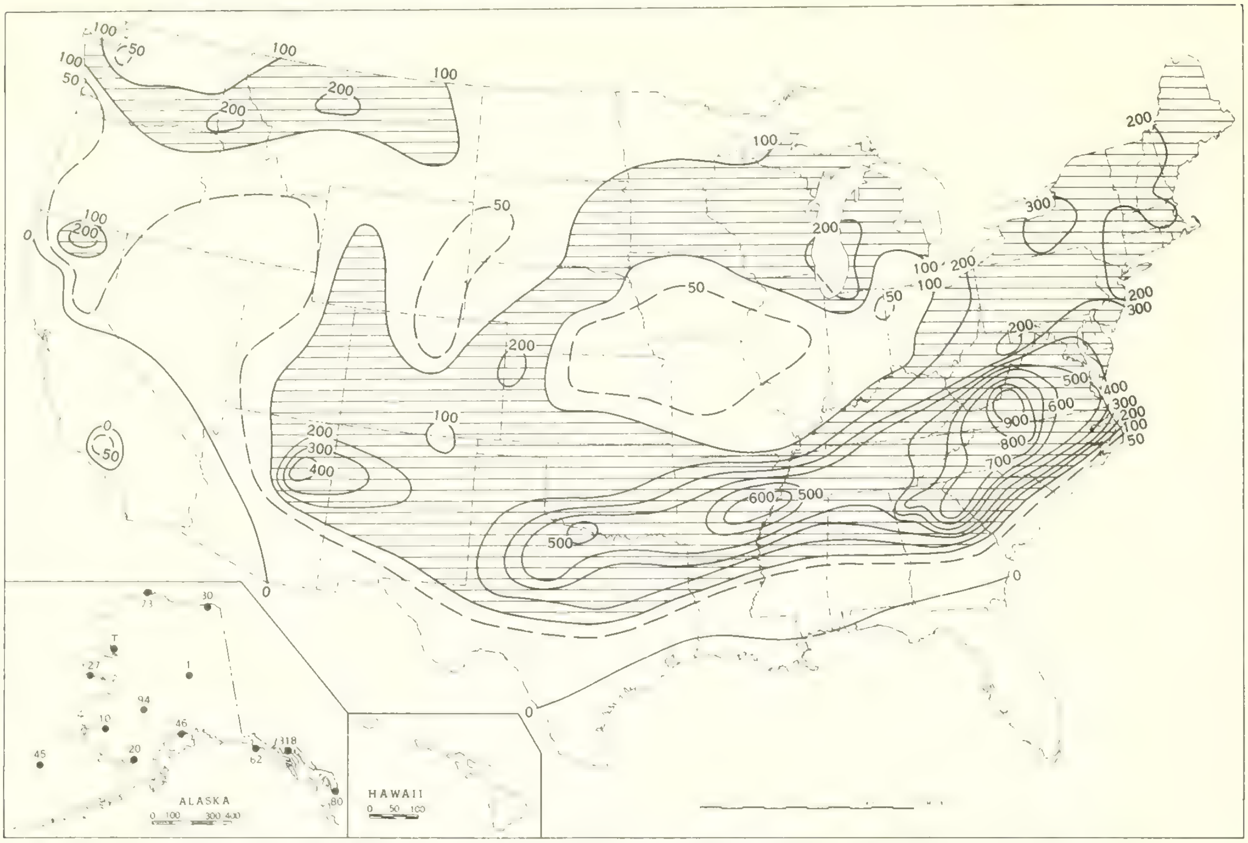
Normal monthly precipitation amounts are computed from 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart IV. Total Snowfall (Inches), January 1966.

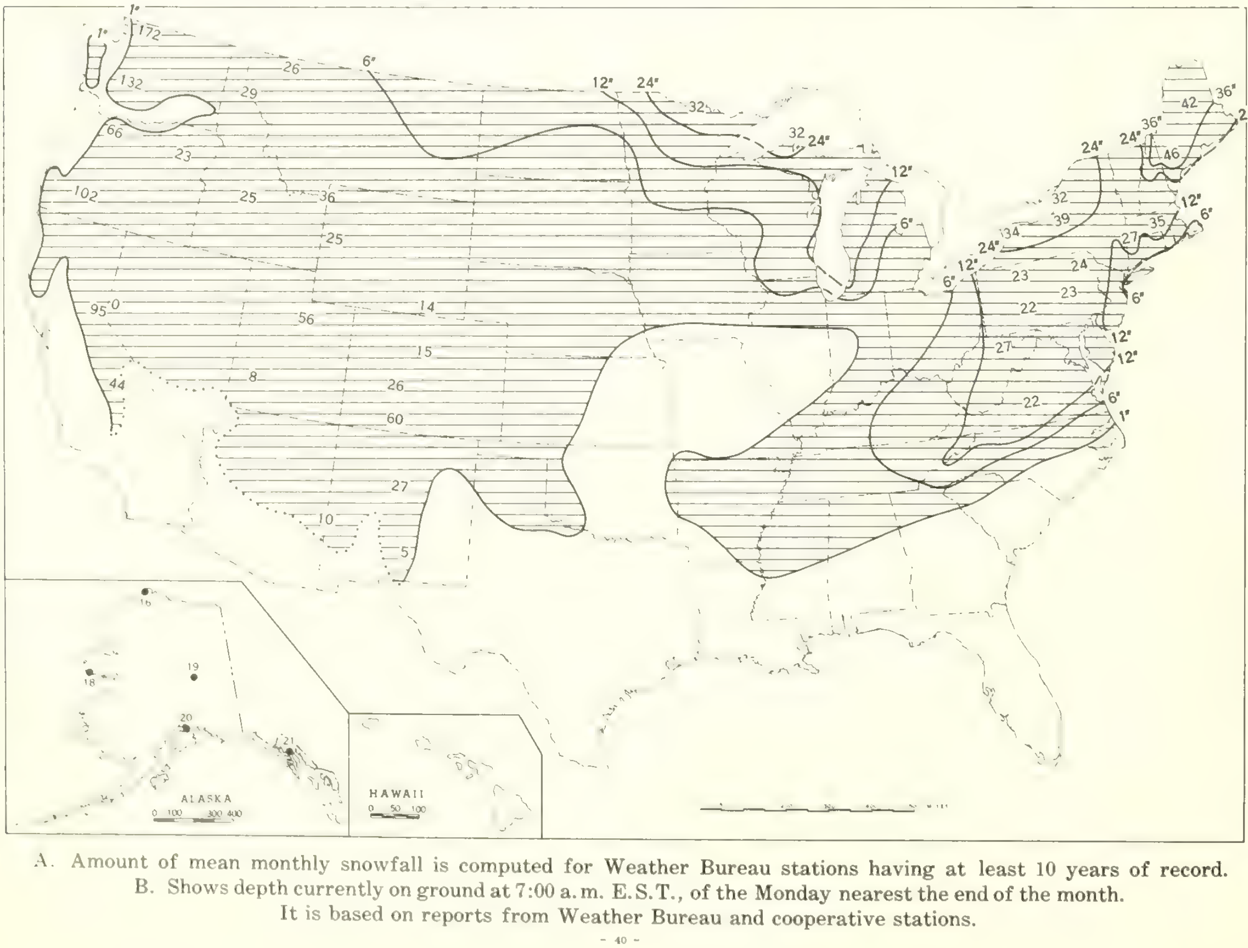


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, January 1966.

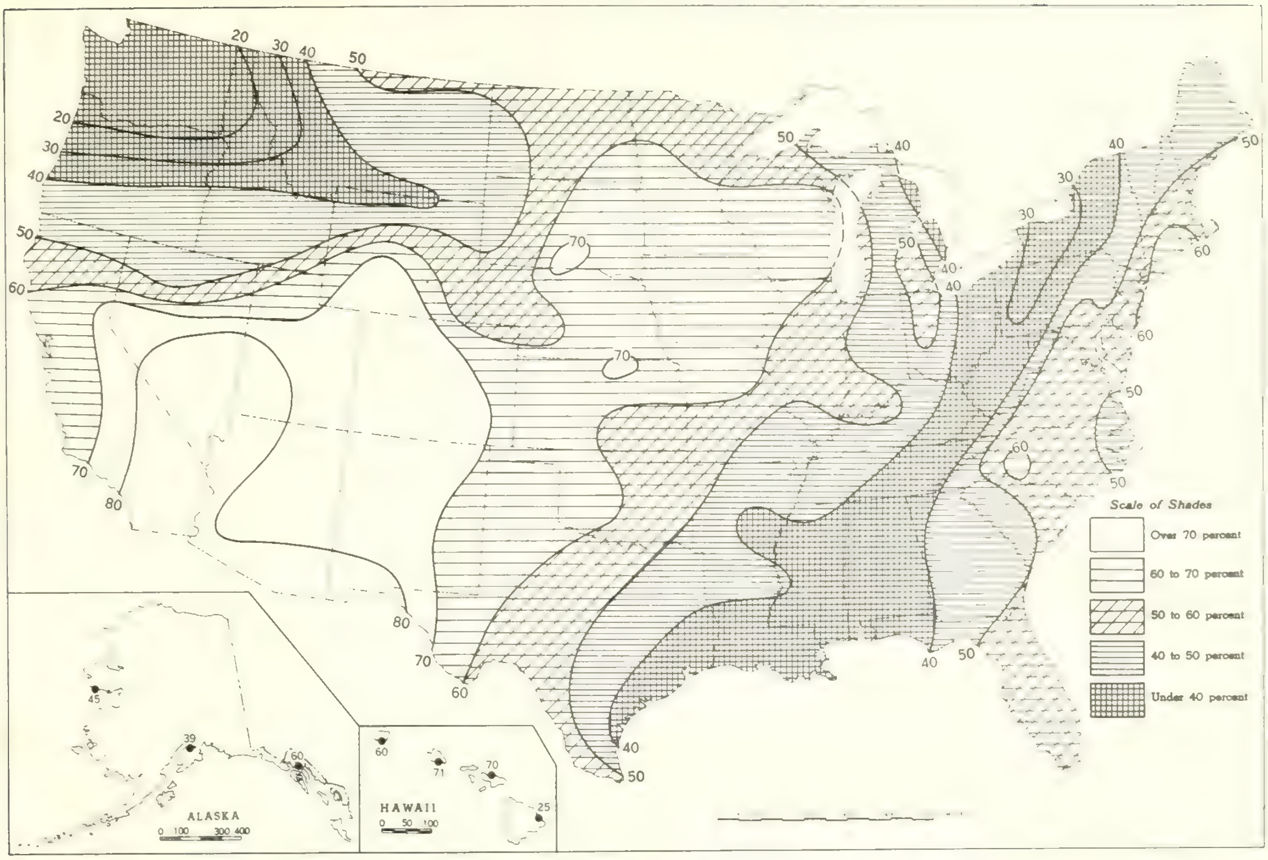


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., January 31, 1966.

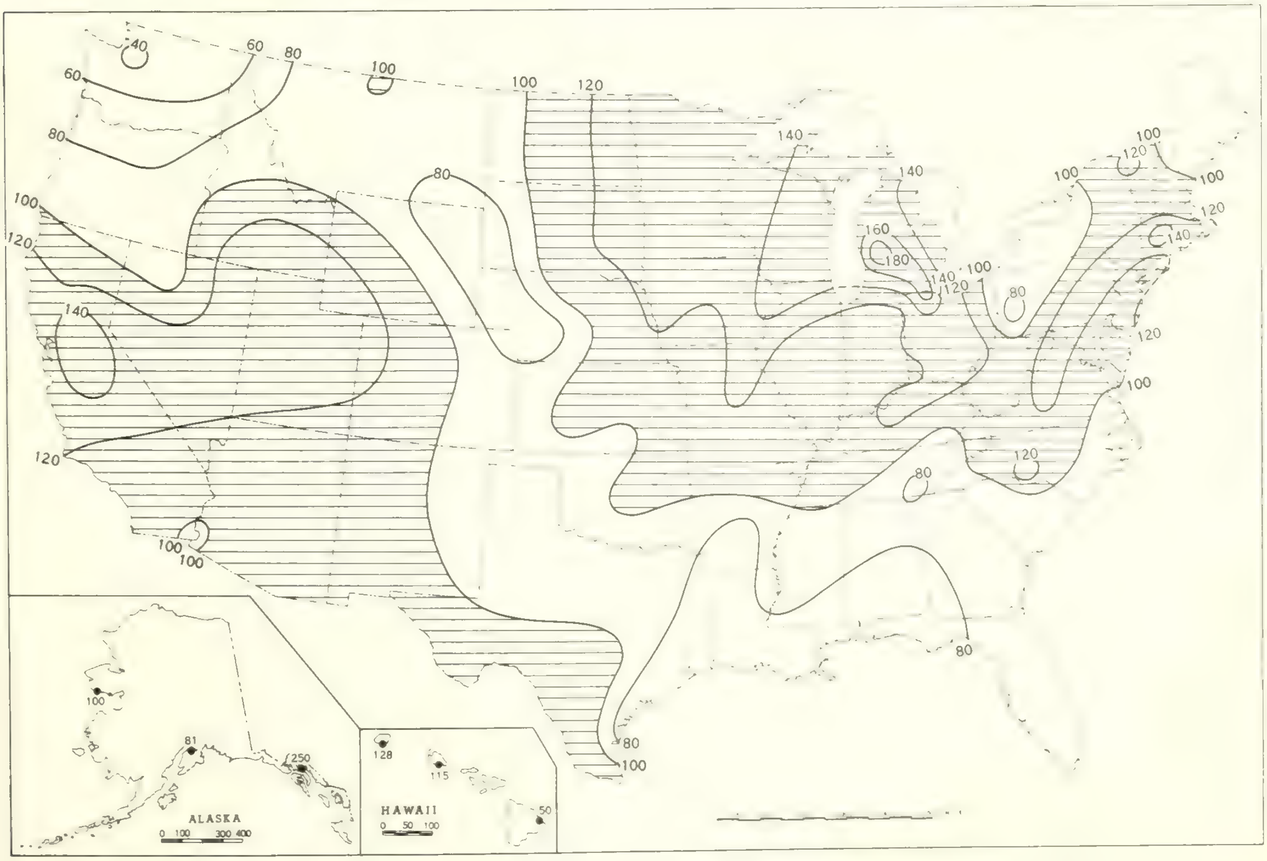


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a. m. E. S. T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, January 1966.

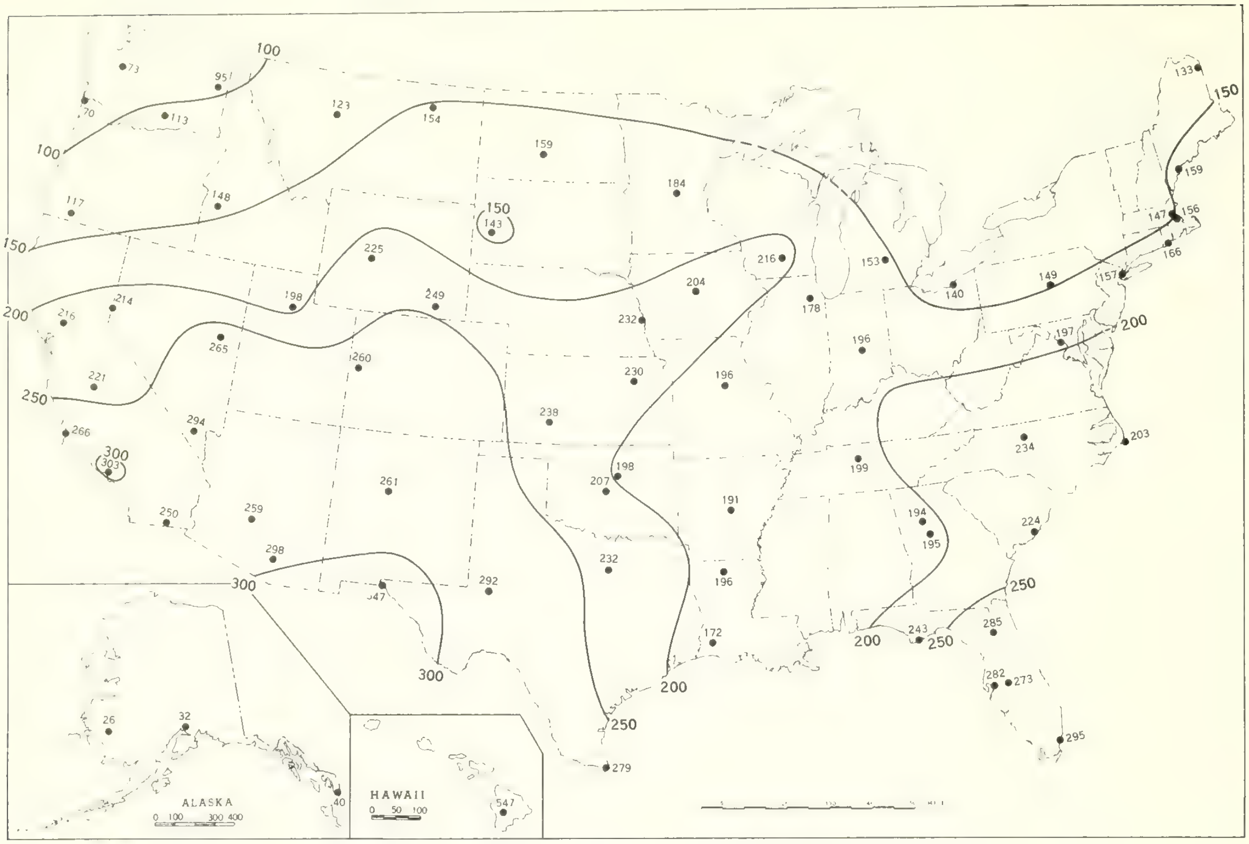


B. Percentage of Mean Monthly Sunshine, January 1966.

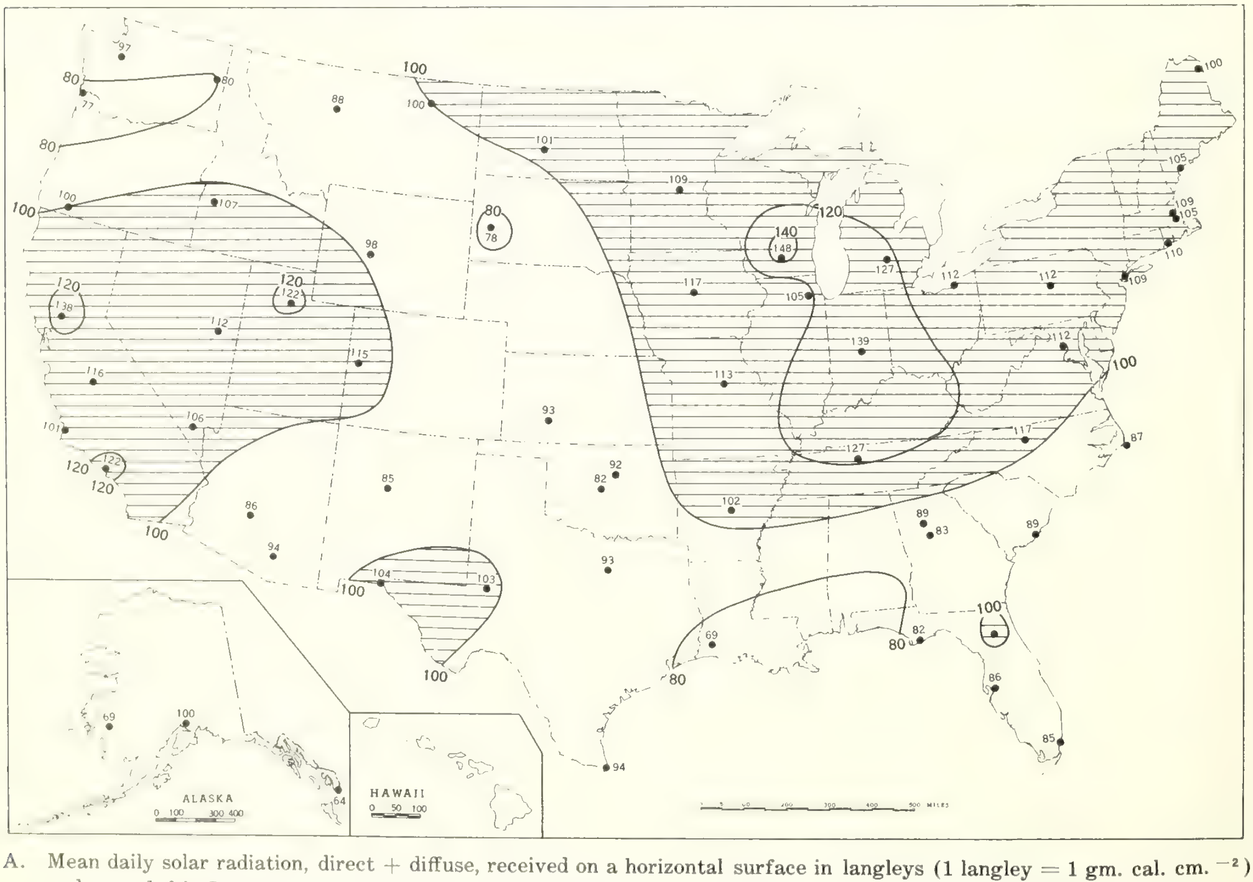


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, January 1966.

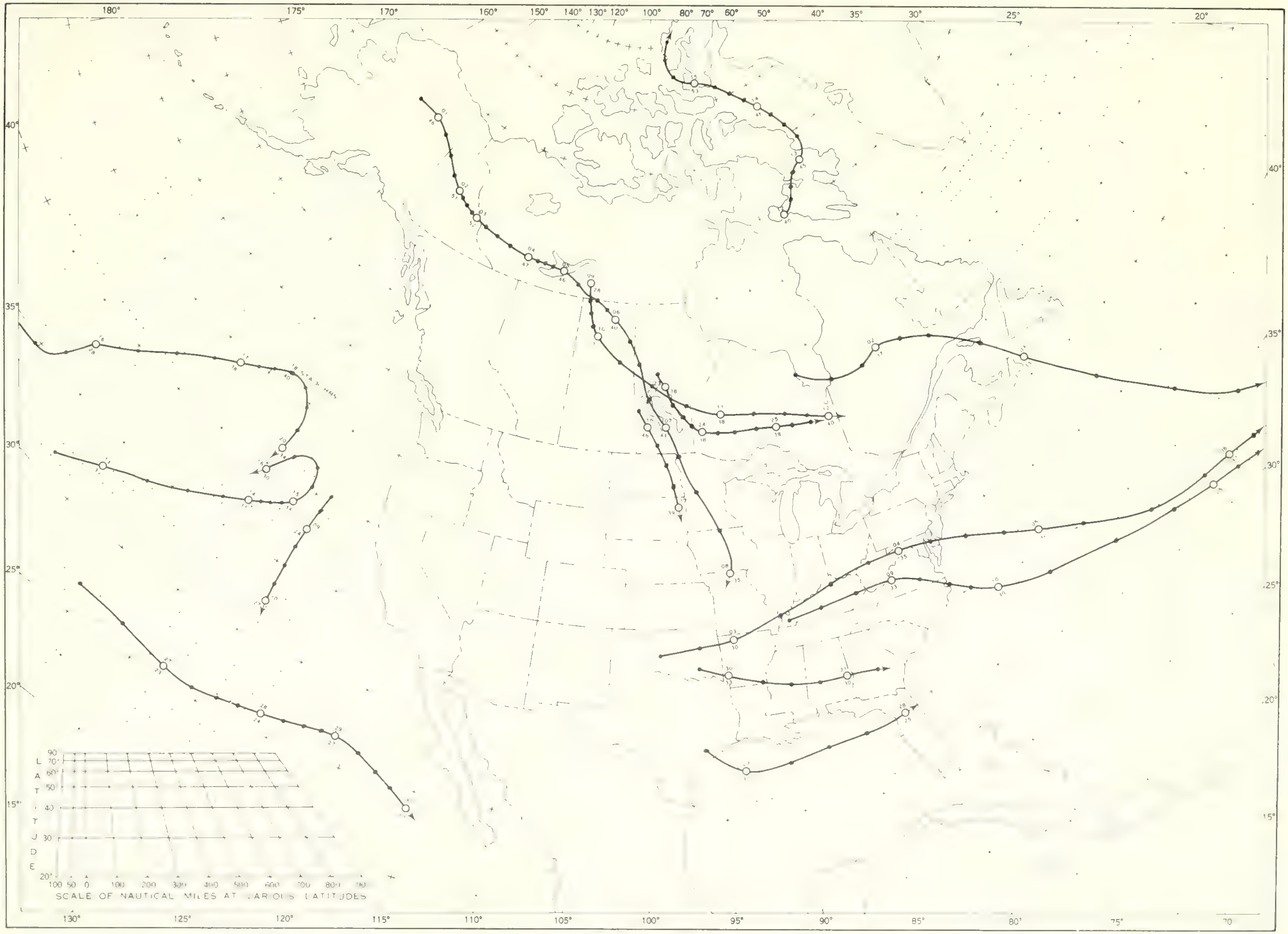


B. Percentage of Mean Daily Solar Radiation, January 1966.



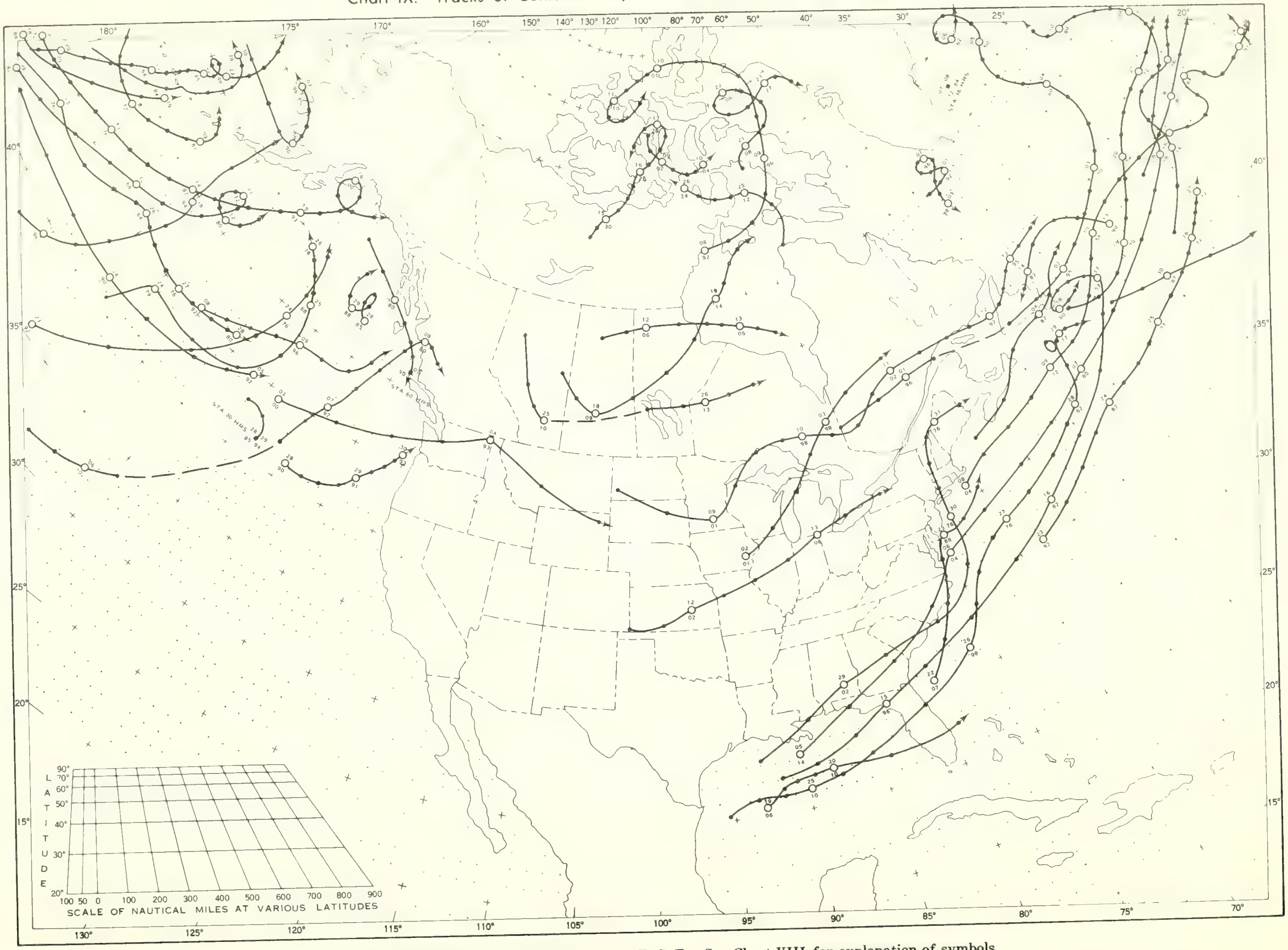
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, January 1966.



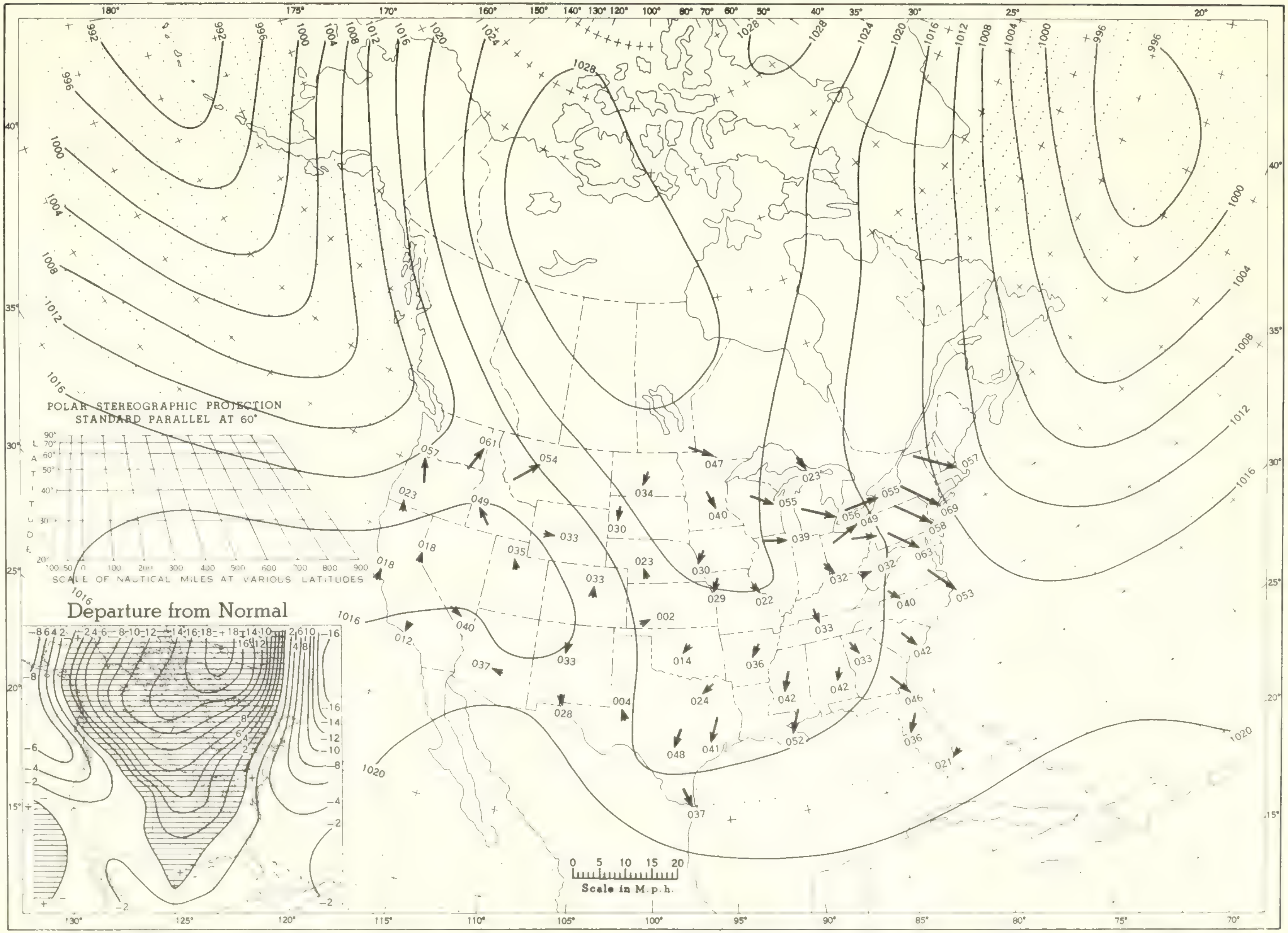
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, January 1966.



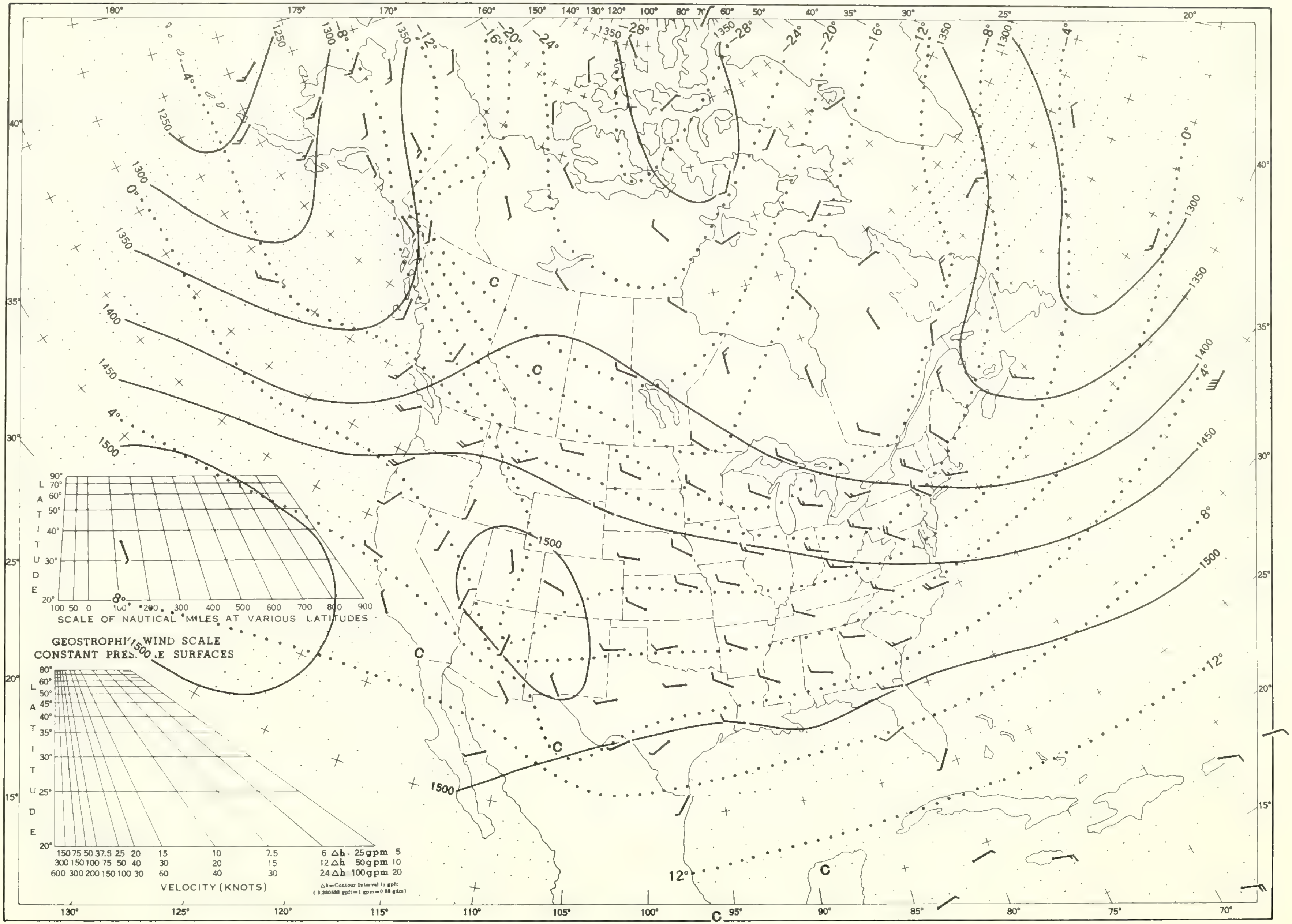
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, January 1966. Inset: Departure of Average Pressure (mb) from Normal, January 1966.



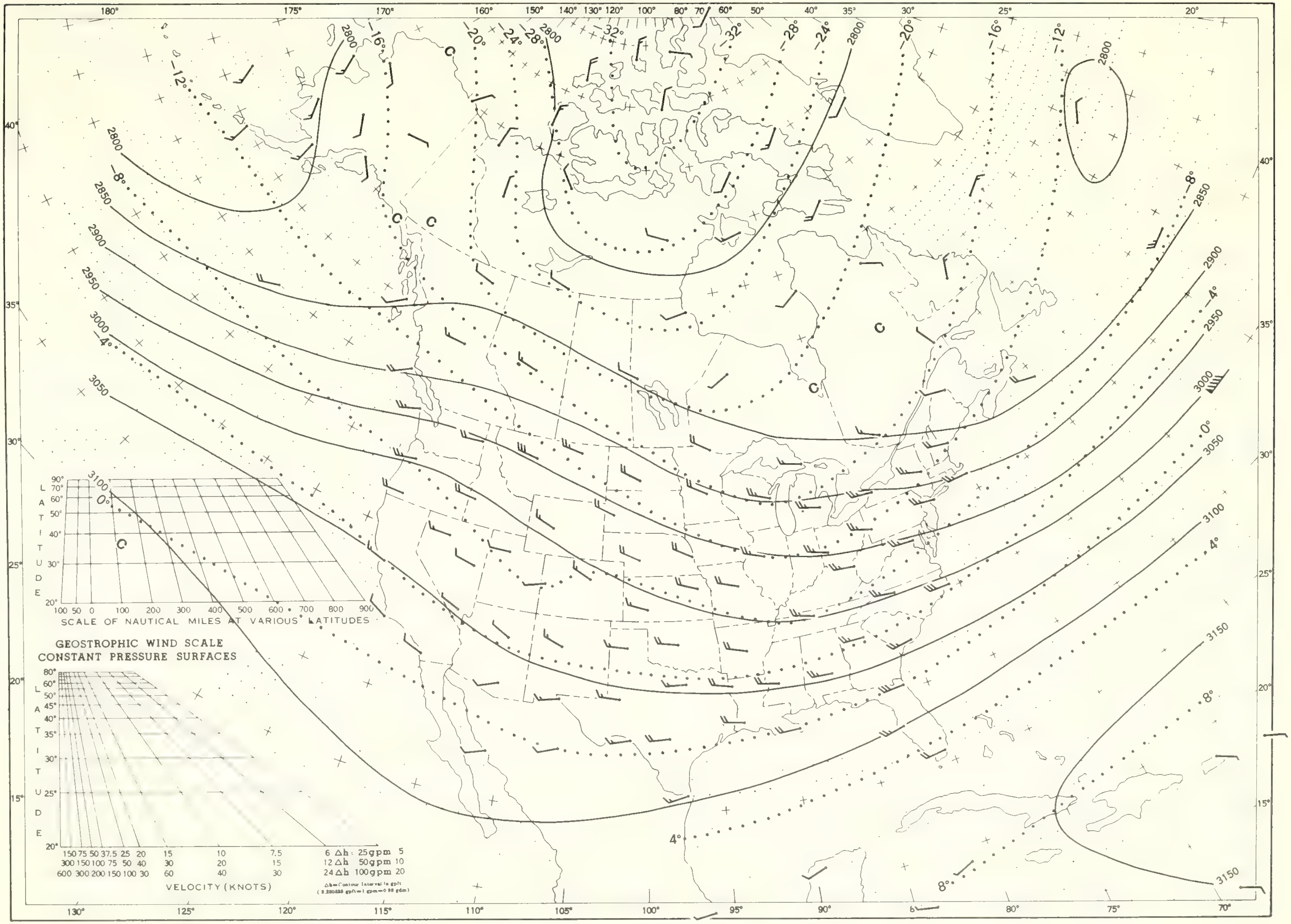
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed—average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, January 1966. Average Height and Temperature, and Resultant Winds.



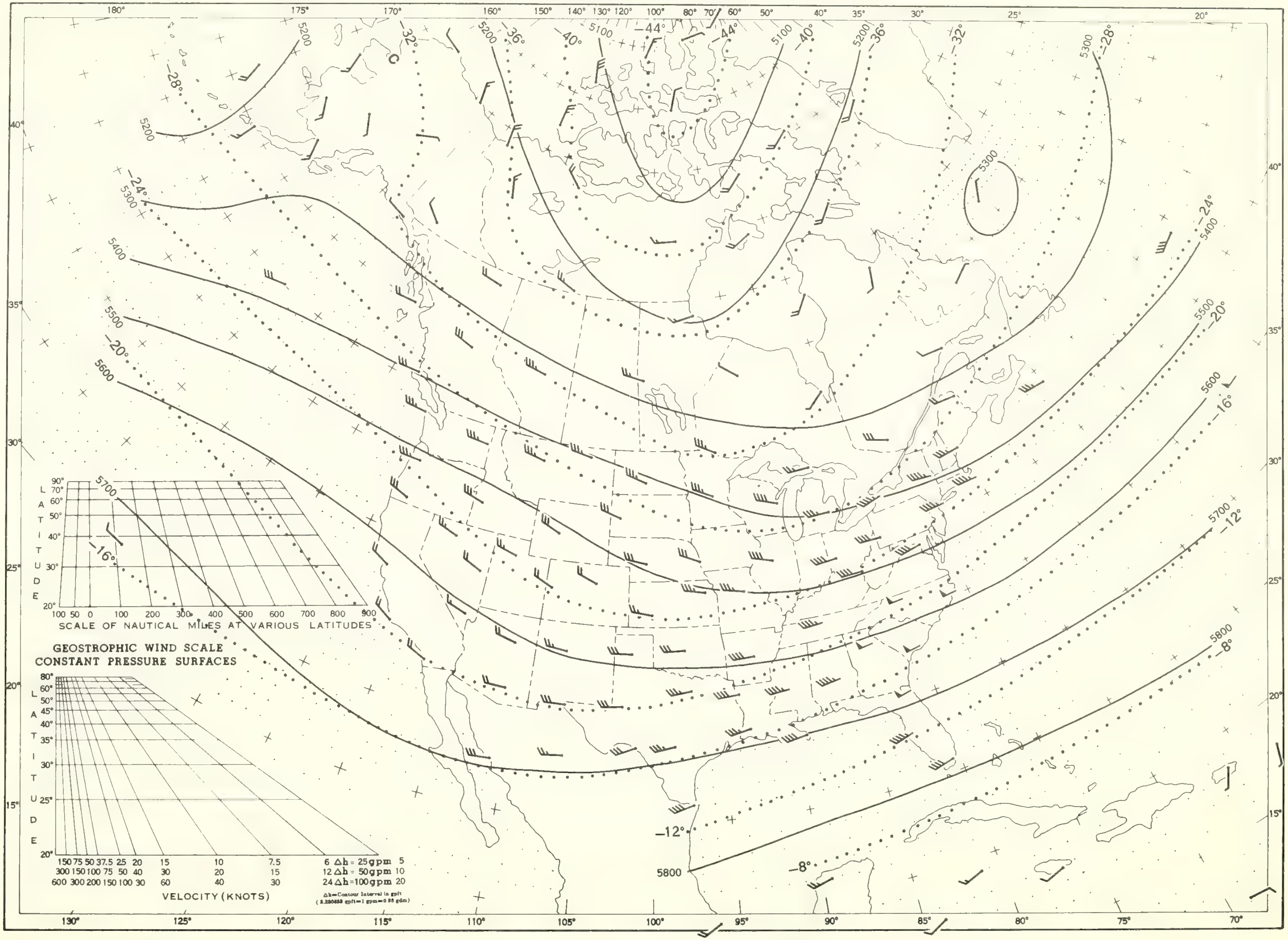
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, January 1966. Average Height and Temperature, and Resultant Winds.



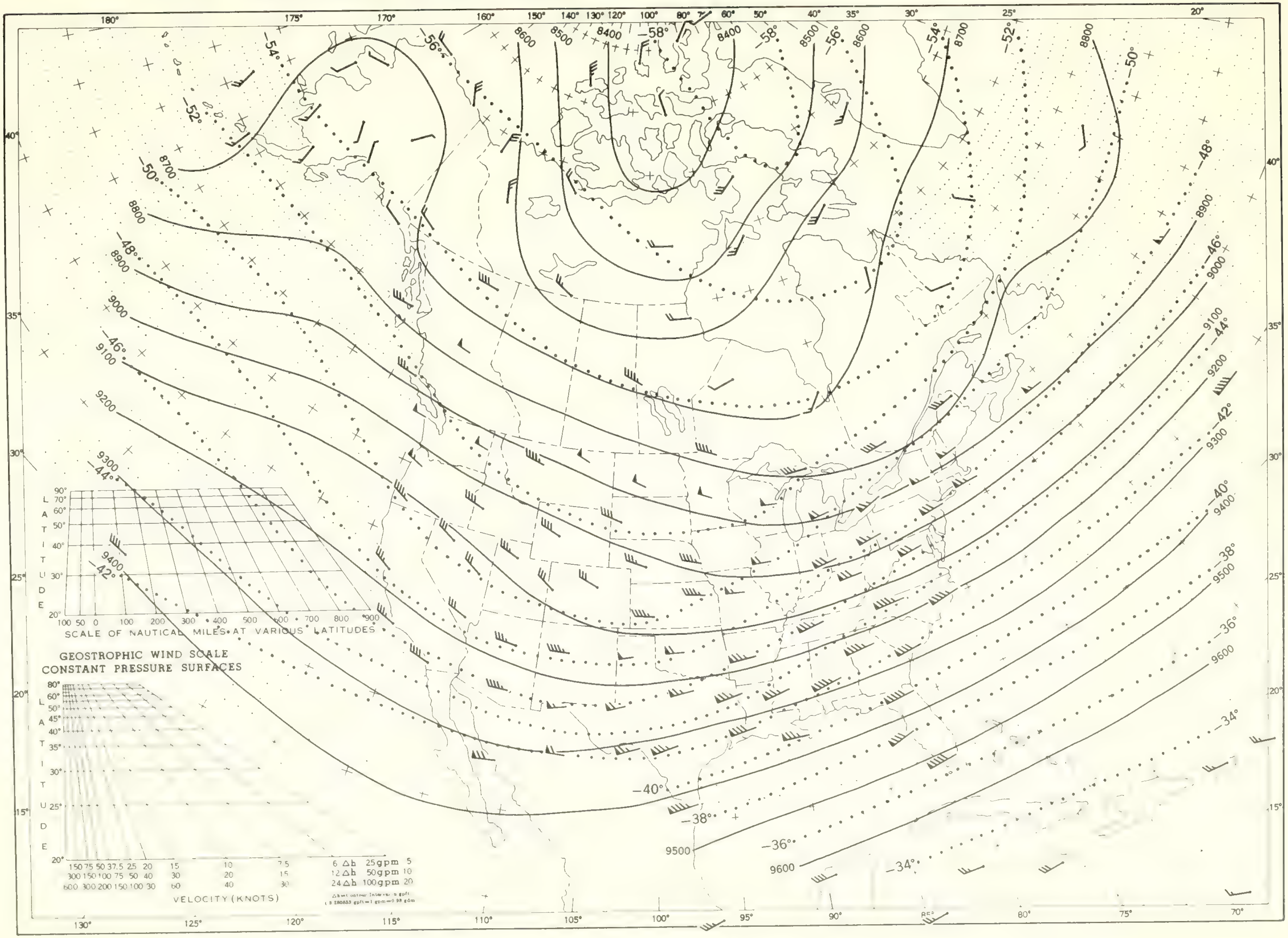
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, January 1966. Average Height and Temperature, and Resultant Winds.



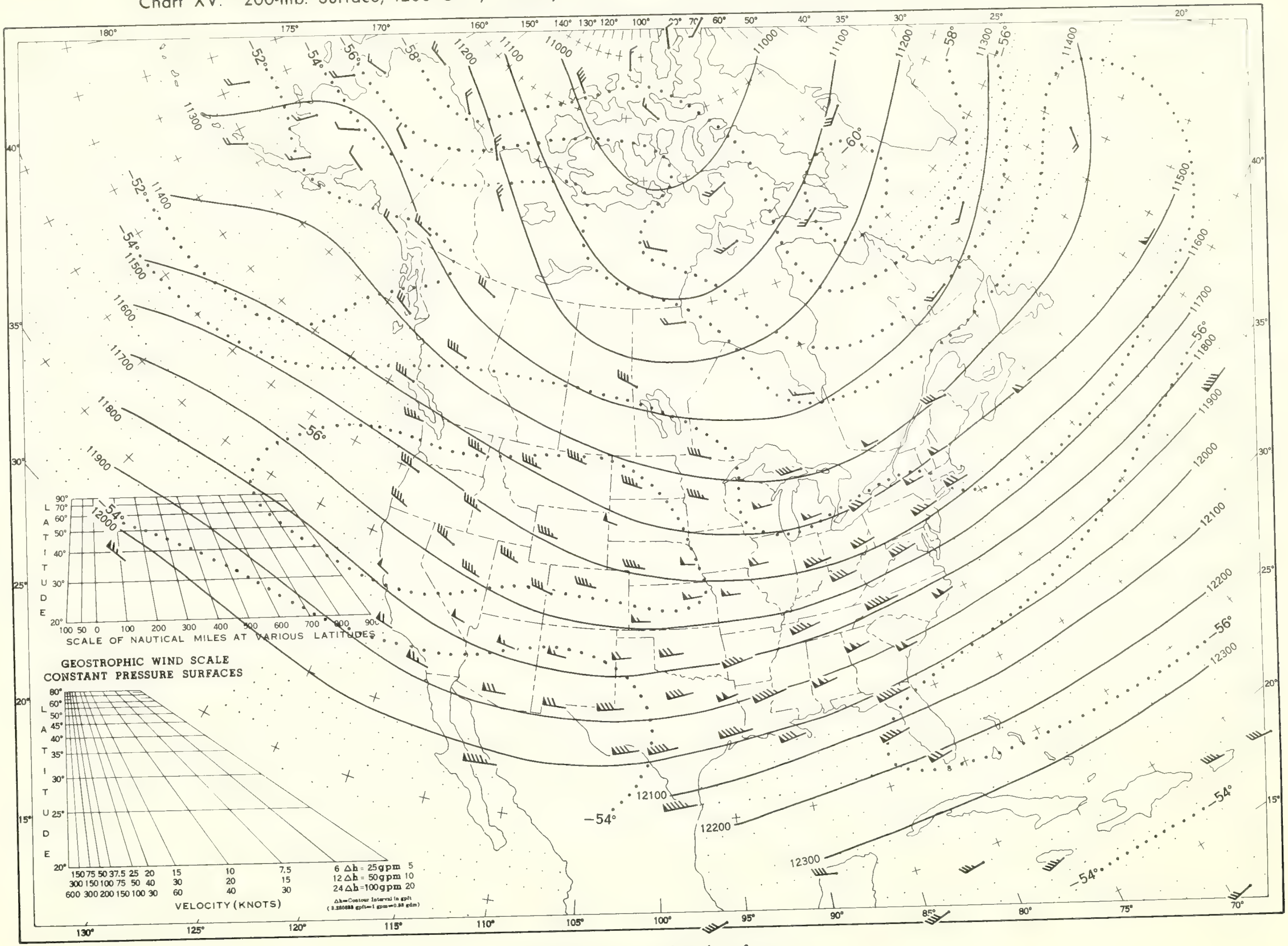
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, January 1966. Average Height and Temperature, and Resultant Winds.



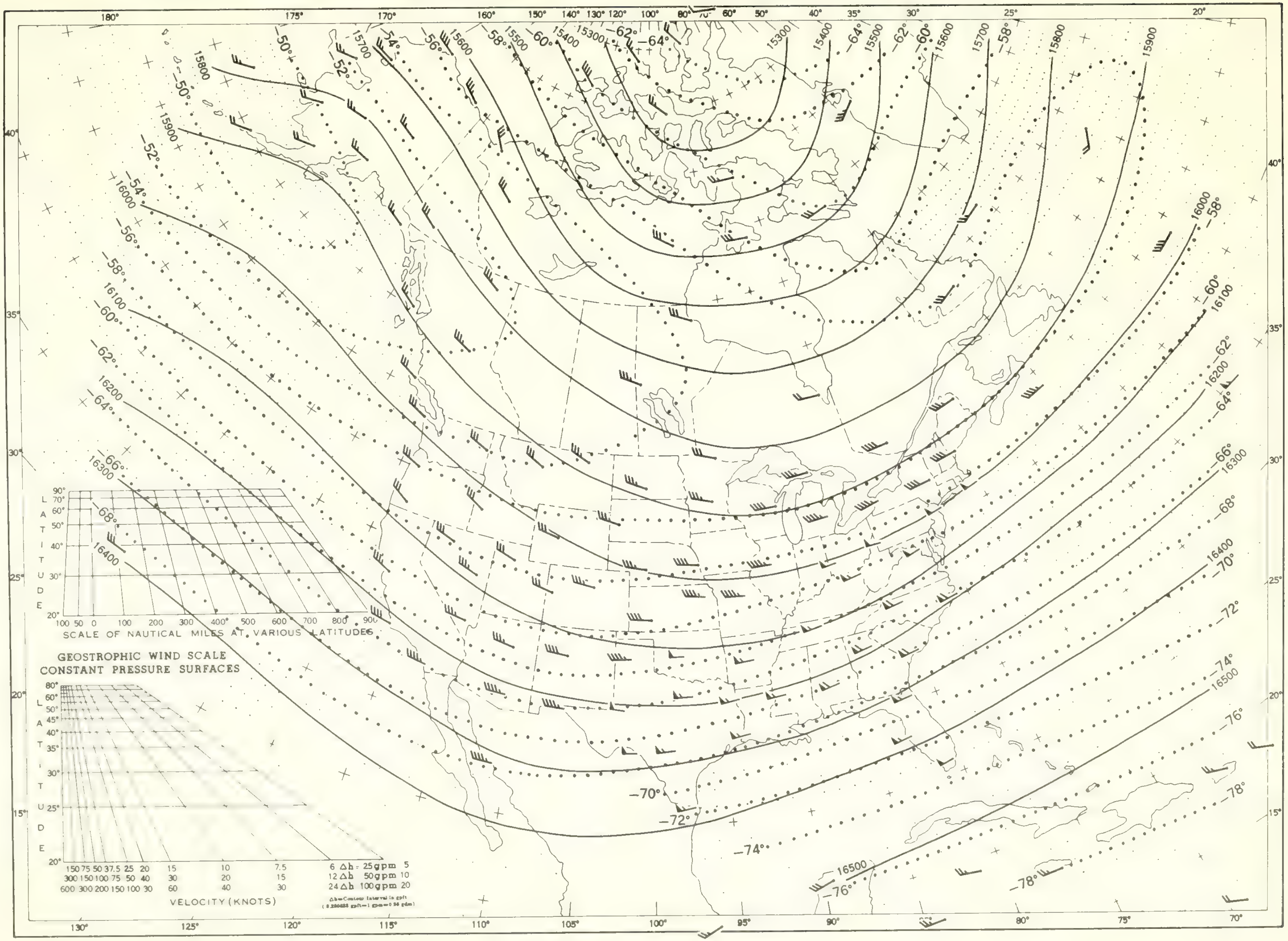
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, January 1966. Average Height and Temperature, and Resultant Winds.



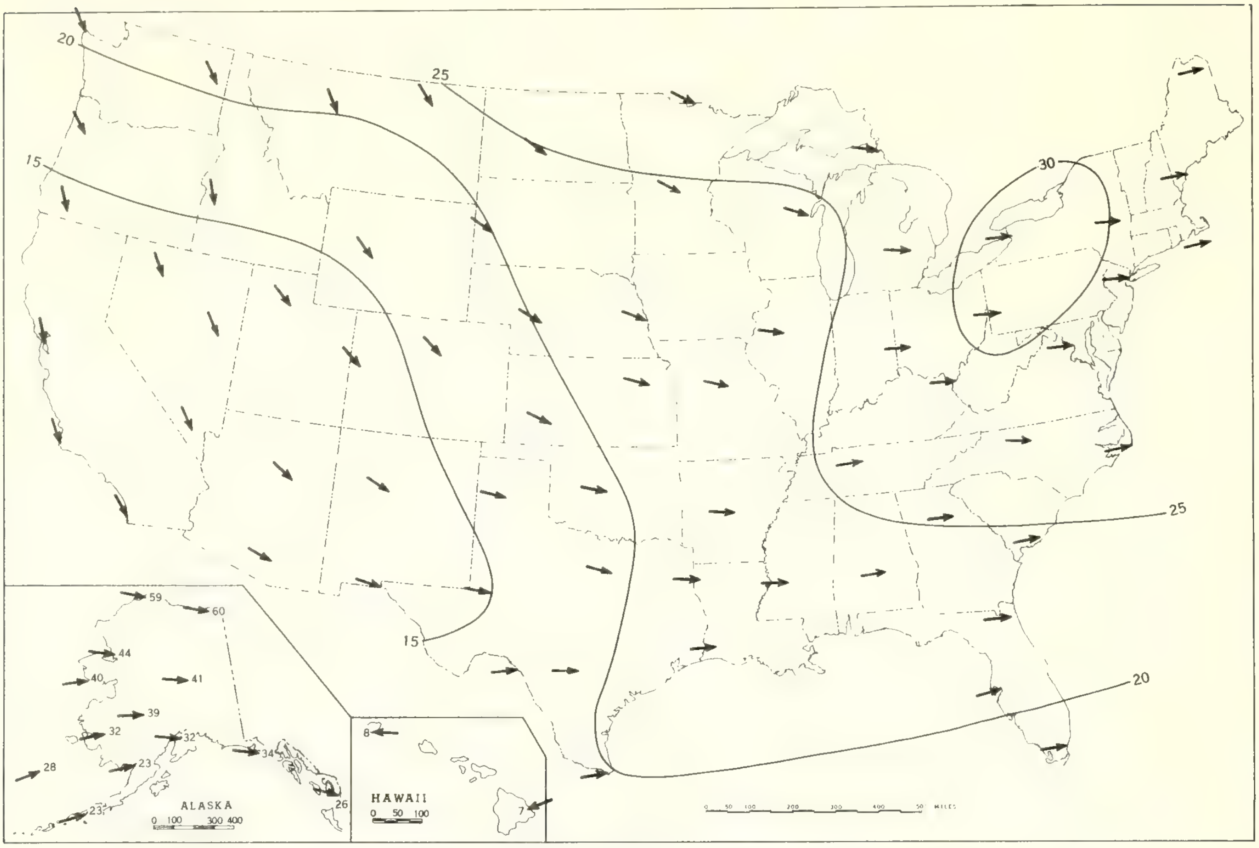
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, January 1966. Average Height and Temperature, and Resultant Winds.

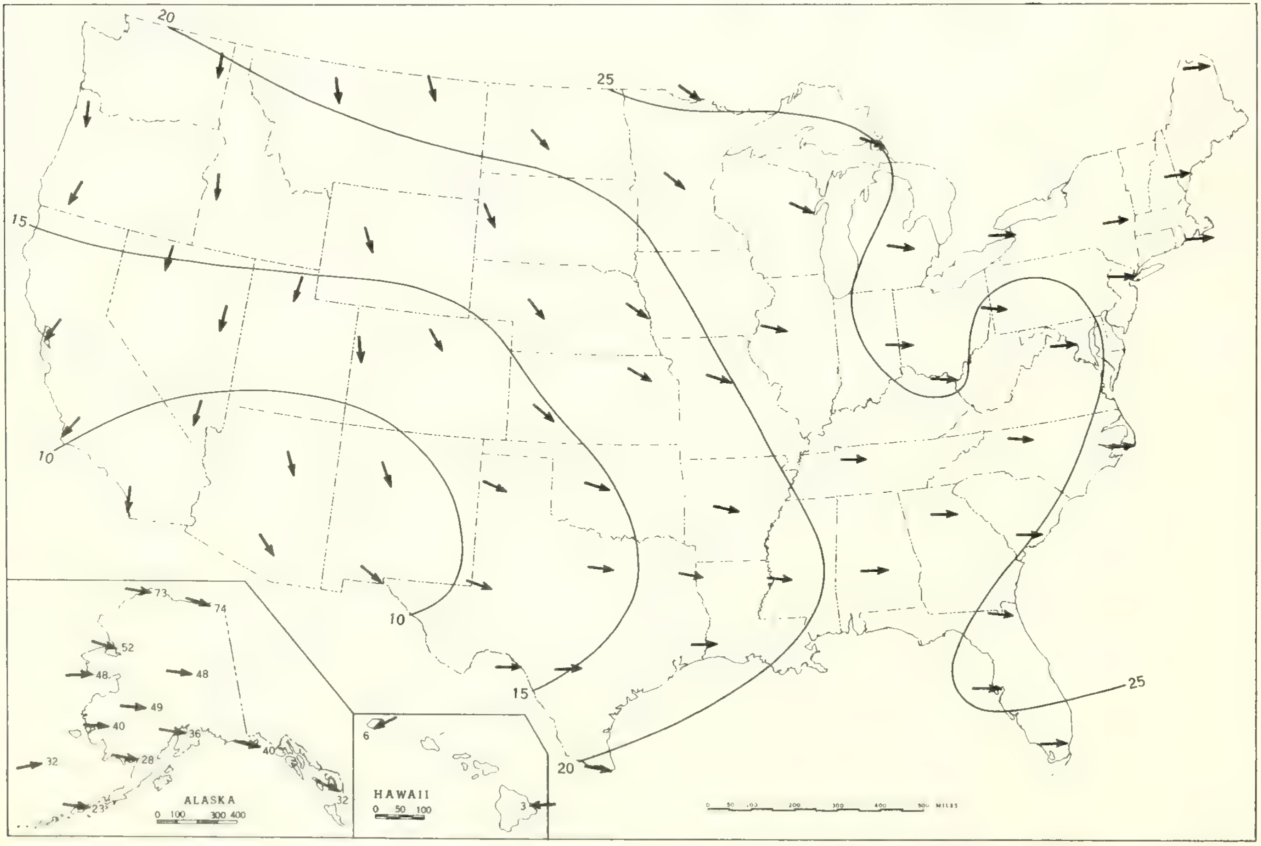


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, January 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, January 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

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U. S. DEPARTMENT OF COMMERCE
JOHN T. CONNOR, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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FEBRUARY 1966
Volume 17 No. 2

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 2 **FEBRUARY 1966**

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Heavy precipitation Southeast second consecutive month.

2. Substantial precipitation in Northeast Drought Area.

3. Wide temperature fluctuations during month.

TEMPERATURE.--Temperatures moderated in February, following a period of extremely cold weather the latter half of January. With alternate warm and cold periods offsetting each other, monthly averages were near normal -- slightly above in a few northern areas and slightly below elsewhere.

The first week of February was unusually cold from the Great Plains eastward, the third consecutive cold week from the Rockies to the Mississippi River, and the fourth consecutive cold week east of the Mississippi. Even though temperatures were slightly higher than during the last week of January, subzero minima were recorded in the Appalachians, northeastern interior, and from the Ohio Valley westward through central and northern Rockies. Freezing covered the 48 states except the southern tips of Florida and Texas and parts of the Pacific coast and Far Southwest. In the Far West, temperatures for the week averaged well above normal in most areas.

The temperature pattern for the second week was the reverse of that for the first week -- cold in the Far West, warm east of the Rockies. The long cold spell in the East was broken. Temperatures rose above freezing in the northern Great Plains and Great Lakes region for the first time in more than a month. At Detroit, Mich., the warmer weather broke the longest spell of subfreezing readings since 1912. An exception to the warm weather in the East was in northern Maine where unseasonable warmth prevailed for the fourth consecutive week.

Temperatures for the third week were below normal everywhere except in parts of the Pacific Northwest and in the east coastal States below New England. The 4-week warm spell in Maine ended. Freezing was general except at a few Gulf and west coast stations, and subzero minima covered most northern areas and much of the Rocky Mountain region. Temperatures rose in most areas the last week, and averaged near normal except several degrees below in the South.

Although temperature extremes were not record-breaking, the month was the second coldest February since 1877 at El Paso, Tex. The third week was one of the coldest such periods on record in northern Minnesota. Frost penetration in Iowa ranged from about 1 to 2 feet in southern portions to about 3 feet in the north.

PRECIPITATION.--Precipitation generally was above normal in the eastern half of the Country and below in the western half. In the Southeast rainfall was unusually heavy for the second consecutive month. Above normal amounts in most of the Northeast helped ease the drought situation there. The heavy rainfall in the Southeast and rain, snowmelt, and occassional icejams in other parts of the eastern half of the Country caused flooding in many areas.

Much above normal precipitation was most extensive in the Southeast. Monthly totals generally exceeded 4 inches from the lower Mississippi Valley to the Atlantic coast and 8 inches in southeastern Louisiana, southern Mississippi, most of Alabama, western Georgia, and northwestern Florida. Baton Rouge, La., measured 14.53 inches and Vicksburg, Miss., 13.69 inches, their greatest February totals. Much of this heavy rainfall fell during the second week when flooding in central and east-central Louisiana forced many families to evacuate their homes and drowned some livestock. Also snowmelt, rainfall, and icejams combined to produce considerable overflow in the upper Midwest, particularly in the upper Mississippi Basin in southeastern Minnesota, southern Wisconsin, east Iowa, northern and western Illinois, and in Missouri. Icejams were blamed for flooding at Norfolk, Nebr., and Warsaw, Ohio. Heavy rains were responsible for flooding in the Ohio River drainage and in many streams that drain into the Gulf, and along the south Atlantic slope.

The Northeast drought area received 2 to over 4 inches of moisture which improved water supplies. Boston, Mass., measured 3.48 inches for February and 8.77 inches (1.51 inches above normal) for the January-February period. Philadelphia, Pa., and Providence, R. I., reported above normal amounts for the first time in 14 to 13 months, respectively.

During the first week precipitation was heavy along the Pacific coast and in an area from southern Missouri through the lower Ohio Valley from a storm that moved out of the lower Rockies.

Much of the South received 4 to 8 inches and the Northeast drought area over 2 inches during the second week. Substantial amounts also fell in the southern Rockies.

Substantial amounts the third week were mostly limited to the South and East. Portions of Mississippi, Alabama, and Georgia received more than 2 inches. Heavy amounts the fourth week were limited mostly to coastal areas.

SNOW.--Snow cover was extensive at the beginning of February. Depths ranged up to 172 inches in the Cascades, 32 inches in northern Michigan, and 46 inches in New England. This cover receded to extreme northern areas east of the Rockies by midmonth, with little change during the remainder of the month. In the Far West snowfall for February was generally below normal, but seasonal snowfall ranged from about 70 to 100 percent of average. At the end of February the mountain snowpack was about twice normal in Arizona and New Mexico, below normal east of the Divide from Montana to southern Colorado, and parts of Wyoming and the Pacific Northwest.

The northeastern blizzard at the end of January left depths generally exceeding a foot and ranging locally up to 3 feet in northwestern New Jersey, much of Pennsylvania, New York State, and New England.

Some moderately heavy falls occurred in the central and southern Rockies during the second week. Snowfall during the last week was heavy in the Cascade Mountains and in a belt extending from central Texas to Maine. Falls ranged up to 10 inches in central Texas.

A coastal storm during the 24th-26th dumped up to about a foot of snow in West Virginia's eastern Panhandle, parts of northern Maryland, the Susquehanna Valley, and other parts of eastern Pennsylvania, and northeastern New Jersey. Falls in the eastern third of New York State were the heaviest of the winter there, ranging from 12 to 20 inches in the Hudson and parts of the Champlain Valley, 4 to 8 inches on Long Island, and lesser amounts elsewhere in the State. In New England falls generally ranged from 8 to 16 inches, mostly over 12 inches except up to 20 inches in some northern sections and tapering off to 5 to 7 inches on the south coast.

Snow fell in many parts of Texas the last week of February, and was quite heavy in some central portions. Austin measured 6 inches on the 22d and 23d, and up to a foot was reported northwest of the city. Dallas and Del Rio reported over 2 inches and San Antonio over 3 inches during the same storm.

SEVERE STORMS.--The principal outbreak of severe storms occurred during the second week. Most of these were associated with two storm systems. The first Low moved up through the Great Plains from the Texas Panhandle region and severe thunderstorms with hail and tornadoes were reported in Oklahoma and Mississippi. The second storm moved northward west of the Appalachians and tornadoes occurred in Georgia, North Carolina, and Virginia. Considerable flooding occurred in the Midwest, parts of the Central Plains, and Southeast.

On the 13th damaging windstorms were widespread in Georgia, with heaviest losses in northeast and south-central sections of the state. The poultry industry in northeastern Georgia suffered heavy losses. Heavy rains also occurred, causing flash floods in many parts of the State. Wind and rain damage totaled well over a million dollars.

CONDENSED CLIMATOLOGICAL SUMMARY

FEBRUARY 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	76	9	Russellville 2	-11	1	Melvin	13.75	Waterloo	4.39
Alaska	Data will be delayed									
Arizona	Tucson Univ of Arizona	81	20	Maverick	-23	14	Kitt Peak	6.11	Ehrenberg	.04
Arkansas	3 Stations	75	7	Gravette	-2	2	Dermott 3NE	11.36	Texarkana WBAP	2.63
California	Culver City	84	22	Bodie	-20	11	Honeydew 2WSW	13.15	2 Stations	.00
Colorado	Pueblo WBAP	61	28	Taylor Park	-36	11	Wolf Creek Pass 4W	3.55	Kauffman 4SSE	.00
Connecticut	Hartford Brainard Fld	58	11	Coventry	-16	7	Trap Falls Reservoir	4.48	Cream Hill	2.29
Delaware	3 Stations	65	13+	Georgetown 5SW	1	6	Wilmington Porter Resvr	5.13	Milford 3WNW	3.08
Florida	Loxahatchee	89	11	2 Stations	14	6+	Niceville	12.67	Fort Myers WBAP	1.06
Georgia	Savannah WBAP	84	16	Calhoun Exp Station	-7	1	Helen 1ESE	12.08	Savannah USDA Pl Grdn	2.10
Hawaii	Data will be delayed									
Idaho	Slate Creek RS	62	22	Stanley	-30	13	Burke 2ENE	4.31	Dubois 34W	T
Illinois	3 Stations	68	9	Olney 2S	-14	5	Waterloo 1WSW	5.19	New Boston Dam 17	.13
Indiana	VeVay	69	10	2 Stations	-18	5+	Paoli City Water Works	D 5.26	LaGrange Sewage Plant	.75
Iowa	Sidney	63	8	Saratoga 2E	-18	20	Dubuque WBAP	2.23	2 Stations	.03
Kansas	3 Stations	68	26+	Kirwin	-13	2	Pittsburg	2.52	Wakeeney 9N	.11
Kentucky	Barbourville	71	10	2 Stations	-15	5	Sebree	6.12	Vanceburg	2.80
Louisiana	7 Stations	76	12+	3 Stations	17	3	Amite	18.79	Hosston	3.41
Maine	Waterville Pump Sta	60	11	2 Stations	-42	21+	Rockland	4.30	Bridgewater	.49
Maryland	2 Stations	66	13	3 Stations	-8	20+	Westernport	D 5.30	Waldorf Police Brks	2.30
Massachusetts	Lawrence	57	11	Birch Hill Dam	-18	8	Ipswich	4.62	Nantucket WBAP	1.77
Michigan	2 Stations	60	9	Kenton US Forest	-39	19	Maple City	3.44	Crystal Falls 6NE	.28
Minnesota	Winona	54	10	Baudette 22S	-52	19	Caledonia	1.89	Cass Lake	.07
Mississippi	Onward	77	9	Booneville	9	1	Crandall 12N	17.85	Amory 4W	4.57
Missouri	Galena	70	8	Hermitage	-15	2	Summersville	6.97	Edina	.12
Montana	2 Stations	60	25+	2 Stations	-32	16+	Essex	3.26	3 Stations	.00
Nebraska	4 Stations	62	8+	Nenzel 20S	-18	1	Staplehurst	3.26	Lamar	.07
Nevada	Sunrise Manor Las Vegas	74	20	Charleston	-30	11	North Fork Mtnc Sta	1.53	3 Stations	T
New Hampshire	Conway 1N	58	11	Mount Washington	-36	21	Mount Washington	6.40	Whitefield	1.35
New Jersey	3 Stations	60	13	2 Stations	-14	8+	Jersey City	5.21	Blackwells Mills	2.04
New Mexico	2 Stations	74	21+	Gavilan	-27	16+	Wolf Canyon	1.95	5 Stations	.00
New York	do	60	12	Hinckley	-35	20	Tannersville 2E	D 6.79	2 Stations	.65
North Carolina	Sloan 3S	78	16	Cataloochee	-12	1	Lake Toxaway 2SW	15.72	Red Springs	2.15
North Dakota	2 Stations	49	6+	Grafton	-45	19	Selfridge 5W	1.93	Drake	.00
Ohio	Ironton	66	10	Tom Jenkins Dam	-12	1	Gallipolis 5W	4.67	Montpelier	.62
Oklahoma	Healdton 2N	73	7	2 Stations	-3	2	Daisy 2ENE	7.96	Kenton	.16
Oregon	Sitkum 1SW	69	21	Seneca	-21	13	Valsetz	11.15	Crowley Ranch	.09
Pennsylvania	Newell	68	12	2 Stations	-20	8+	Johnstown	D 7.59	Barnes	1.19
Puerto Rico	San German	94	28+	Cayey 1E	51	15+	Jajome Alto	6.31	4 Stations	.00
Rhode Island	Newport	53	12	Kingston	-6	9	Providence WBAP	4.30	Block Island WBAP	2.29
South Carolina	Ridgeland 2SE	81	16	Union 8SW	3	1	Caesars Head	13.48	Dillion 4SW	2.13
South Dakota	Pactola Dam	59	25	5 Stations	-28	18	Deadwood	D 1.43	Ludlow 2NW	.08
Tennessee	3 Stations	71	10+	Athens 2SE	-14	1	Cleveland 3NNE	7.82	Ashwood	3.17
Texas	Mission	89	10	Lipscomb	0	14+	Jasper 3SW	13.05	3 Stations	.00
Utah	Saint George PH	67	19	Strawberry Hwy Station	-31	16	Kamas	9.22	Ouray 4NE	.04
Vermont	Waterbury 1NNE	57	11	West Burke	-30	20	Somerset	3.92	Gilman	.82
Virginia	Boykins	71	13	Pennington Gap	-15	1	Meadows of Dam 5SW	7.44	Parramore Beach LBS	1.37
Washington	Port Angeles	71	22	Bumping Lake	-4	15	Aberdeen 20NNE	13.37	Coulee Dam 1SW	.03
West Virginia	4 Stations	68	12+	2 Stations	-14	6+	Rowlesburg 1	5.60	Gary	2.01
Wisconsin	2 Stations	54	9	do	-40	20	Two Rivers	2.97	Washington Is 1SSW	.32
Wyoming	Whalen Dam	60	25	Farson	-32	11	Big Sandy	2.54	3 Stations	.00

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
ALABAMA	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
BIRMINGHAM	620	997.6	1020.6	56	36	46.2	-2.5	72	9	15	5	0	12	35	69	8.67	3.39	3.25	10	0	T	T	0.8	14	36	SE	10	5	8	15	6.9	47
HUNTSVILLE	600	997.0	1020.6	55	36	45.3	0.2	71	9	14	5	0	12	34	67	4.93	-0.29	1.97	11	0	T	3	1.1	11	35	16	10	6	5	17	7.2	
MOBILE	211	1011.9	1020.0	62	44	52.8	-2.4	69	12	25	3	0	5	42	71	9.01	4.42	3.21	12	3	0.0	0	3.1	9	28	26	10	8	7	13	6.3	
MONTGOMERY	194	1013.5	1020.8	59	40	49.1	-1.2	74	9	22	6	0	6	38	70	8.06	3.70	2.31	11	1	T	0	1.3	9	37	W	13+	7	3	18	6.7	46
ALASKA																																
ANCHORAGE PRK STRIP	85			21	7	14.2	-3.8	40	1	-12	23	B 0	28			0.63	-0.08	0.15	7		9.4	19										
ANCHORAGE	141	1002.7	1007.8	24	6	14.7		41	11+	-13	23	0	28	9	74	0.80		0.23	8	0	10.7	21	0.5	4	28	19	11	5	6	17	7.1	49
ANNETTE	110	1007.1	1011.1	41	32	36.4	1.3	57	22	25	6	0	19	30	80	11.72	3.18	2.68	21	0	6.5	2	4.4	14	35	16	23	0	6	22	8.7	
BARROW	22	1016.9	1017.7	-17	-28	-22.4	-4.1	6	3	-42	13	0	28	-28	73	0.06	-0.11	0.02	5	0	0.6	16	3.4	9	26	10	14	14	3	11	4.5	
BARTER ISLAND	39	1014.9	1016.8	-18	-31	-24.5	-4.9	5	3	-47	21	0	28	-30	74	0.18	-0.17	0.13	4	0	5.6	26	5.6	25	43	28	28	10	8	10	5.4	
BETHEL	125	1002.0	1007.7	22	3	12.5	4.3	36	13+	-26	28	0	28	8	84	0.91	-0.21	0.19	13	0	14.8	16	1.1	14	44	21	11	2	5	21	8.4	
COLD BAY	94	1004.7	1008.5	36	28	31.7	3.7	46	11	17	2	0	26	26	81	1.59	-1.58	0.39	18	0	8.8	2	7.4	21	63	26	24	2	5	21	8.1	
FAIRBANKS	436	993.9	1012.2	3	-18	-7.6	-4.7	24	14	-42	21	0	28	-11	87	1.75	1.23	0.97	9	0	43.1	52	0.8	35	15	25	12	4	7	17	7.6	
JUNEAU	12	1008.5	1009.3	34	18	25.9	-0.9	47	23	-8	6	0	24	26	94	3.13	0.07	0.56	18	0	17.6	23	7.4	10	35	11	25+	4	6	18	7.9	34
KING SALMON	43	1005.8	1007.9	25	10	17.4	0.0	37	11+	-20	28	0	27	13	80	1.54	0.59	0.40	14	0	11.3	10	1.0	16	33	26	25	5	6	17	7.4	
KOTZEBUE	10	1010.2	1010.8	3	-12	-4.3	-0.3	25	14	-30	10	0	28	-9	77	0.18	-0.12	0.06	4	0	6.8	30	6.4	10	41	10	11	4	3	21	7.8	
MC GRATH	349	997.3	1010.7	11	-11	0.2	0.1	37	13	-47	22	0	28	-6	69	0.72	-0.42	0.45	8	0	21.8	43	0.6	26	31	26	11	4	4	20	8.0	
NOME	13	1006.8	1007.6	16	0	8.2	2.7	32	14+	-20	28	0	28	5	84	1.46	0.52	0.43	17	0	14.5	33	10.2	8	45	9	11	4	2	22	8.2	17
SHEMYA	122	993.2		34	26	29.7	-1.1	40	19	17	23	0	27	26	86	1.57	-0.71	0.25	24	0	13.1	10	18.5	22	69	24	6	0	5	23	8.7	
ST. PAUL ISLAND	22	1002.4	1003.4	35	26	30.4	7.1	40	10	10	27	0	27	28	86	2.65	1.42	0.35	21	0	16.0	6	11.1	21	62	28	25	1	5	22	8.5	
YAKUTAT	28	1005.1	1006.1	32	17	24.7	-3.9	38	16+	-8	28	0	28	24	93	8.61	0.41	1.32	20	0	54.3	44	5.1	10	26	13	25	2	2	24	8.8	
ARIZONA																																
FLAGSTAFF	6993	784.3	1018.0	39	11	25.1	-4.5	52	28+	-6	14	0	28	13	63	1.06	-0.72	0.38	6	0	10.8	11	0.7	16	23	22	6	15	1	12	4.9	
PHOENIX	1117	977.0	1016.4	64	36	49.7	-3.8	74	21	28	16+	0	6	33	57	0.95	0.10	0.54	4	0	0.0	0	2.3	12	31Y	ENE	22	14	4	10	4.1	79
TUCSON	2584	926.2	1015.5	60	36	47.8	-5.1	72	19	29	14	0	9	28	54	2.25	1.41	1.27	6	2	1.2	1	3.7	12	34	SE	22	13	6	9	4.3	78
WINSLOW	4895	851.0	1017.4	46	22	33.7	-3.8	62	19	11	16	0	27	19	61	0.66	0.18	0.36	6	1	4.9	3	2.0	24	23	24	14+	13	3	12	5.1	
YUMA	194	1009.5	1016.9	68	42	55.0	-2.3	78	21+	33	14	0	0	29	42	0.17	-0.19	0.14	2	1	0.0	0	3.9	1	29	N	13	17	3	8	3.7	86
ARKANSAS																																
FORT SMITH	449	1003.4	1020.4	52	30	41.3	-2.4	73	7	14	2	0	18	31	72	4.79	1.36	3.96	10	1	1.9	2	0.7	4	23	W	25+	5	8	15	6.8	49
LITTLE ROCK	257	1011.2	1020.9	52	34	42.9	-1.5	70	7	18	3	0	15	34	74	5.02	0.69	2.11	10	1	9.6	7	1.3	2	33	S	9	10	4	14	6.4	43
TEXARKANA	372	1006.8	1020.3	56	36	45.7	-2.8	70	7	21	3	0	13	35	71	2.63	-1.39	0.94	10	0	7.0	4	0.6	18				11	4	13	5.8	
CALIFORNIA																																
BAKERSFIELD	494	1001.7	1019.6	60	38	49.0	-3.0	75	22	32	14+	0	3	38	69	1.14	0.00	0.94	5	0	0.0	0	1.8	6	23	14	22	10	5	13	5.7	
BISHOP	4108			55	24	37.2	-2.0	63	21+	12	14	0	25			0.01	-0.97	0.01	1		T	0						10	10	8	5.0	
BLUE CANYON	5280			41	26	33.4	-3.7	56	21	17	7	0	26			5.41	-4.78	1.45	10		27.8	65			29	7	15	9	6	13	6.0	
BURBANK	724	991.5	1017.2	65	43	54.0	-1.2	76	22+	36	12	0	0	35	54	0.93	-2.29	0.83	2	0	0.0	0	0.5	22	23	18	26+	14	5	9	4.4	
EUREKA J	43			53	40	46.5	-1.7	63	22	32	13	0	1			3.12	-2.41	0.71	15		0.0	0			30	SE	22+	2	10	16	7.5	57
FRESNO	328	1007.8	1019.6	59	35	47.2	-3.3	75	22	30	15+	0	11	40	78	0.54	-1.65	0.12	9	0	0.0	0	0.7	6	23	NW	12+	9	7	12	5.6	80
LONG BEACH	34	1016.6	1017.9	64	43	53.6	-0.8	78	21	38	16+	0	0	40	64	1.65	-0.66	0.79	3	1	0.0	0	1.3	27	21	27	26	11	10	7	4.8	
LOS ANGELES	97	1013.9	1017.5	62	44	53.0	-2.2	79	21	38	13	0	0	38	61	1.40	-1.48	1.02	3	0	0.0	0	2.2	28	29Y	N	10	13	7	8	4.6	
LOS ANGELES U	270			66	46	56.2	-0.9	80	21	40	14+	0	0			1.51	-1.82	1.40	4		0.0	0			19	N	10	13	11	4	4.1	59
MT SHASTA R	3544			43	26	34.5	-2.5	54	17	16	7	0	25			3.89	-2.02	1.33	13		21.0	22										
OAKLAND	6	1019.3	1019.6	57	45	50.9	0.2	63	22+	38	16	0	0	42	73	2.12	-1.09	0.51	10	0	0.0	0	1.9	29	26	36	10	10	6	12	6.0	
RED BLUFF	341	1006.8	1019.7	57	36	46.6	-3.1	66	21+	27	17+	0	7	34	69	4.30	0.99	1.56	12	2	0.0	0	1.6	33	30	N	10	7	4	17	6.6	64
SACRAMENTO	17	1018.6	1019.6	57	38	47.5	-1.7	64	21	31	17+	0	3	38	75	1.56	-1.43	0.31	10	1	0.0	0	1.5	32	33	N	12	10	5	13	5.7	70
SANDBERG R	4517			44	31	37.4	-4.0	55	23	21	13	0	17			1.67	-0.91	1.38	4		2.8	3			33	7	22+	10	6	12	5.5	
SAN DIEGO	13	1016.6	1017.5	63	46	54.6	-1.6	74	22+	39	14	0	0	41	64	0.86	-1.29	0.68	4	1	0.0	0	2.5	32	23	NW	11+	12	8	8	4.6	84
SAN FRANCISCO	8	1019.3	1020.0	56	41	48.8	-2.1	62	22	35	16+	0	0	40	75	3.18	-0.30	1.21	10	0	0.0	0	3.1	30	36	WNW	9	8	8	12	6.1	
SAN FRANCISCO C	52			57	46	51.8	-1.2	63	13	43	26+	0	0			2.72	-0.94	1.01	10		0.0	0			23	NW	10					66
SANTA CATALINA	1568			58	47	52.2	-1.8	70	21	41	18	0	0			1.13	-2.03	1.09	3	1	0.0	0						11	10	7	4.6	
SANTA MARIA	236			61	35	48.1	-3.7	74	21	27	14	0	11			0.92	-1.58	0.49	5		0.0	0						12	6	10	4.9	
COLORADO																																
ALAMOSA	7536			33	-1	16.0	-7.5	41	28	-16	14	0	28			0.23	0.06	0.13	4		5.8	3						11	12	5	4.3	
COLORADO SPRINGS	6145	807.0	1017.6	39	15	26.8	-4.7	52	28	-5	16	0	28	12	59	0.49	0.16	0.32	9	0	9.7	6	3.5	3	25	35	13	7	7	14	6.3	
DENVER	5283	833.1	1015.8	42	15	28.4	-3.1	58	4	-6	15+	0	28	14	61	1.28	0.59	0.50	8	0	14.6	7	1.7	20	28	W	17	7	7	14	6.5	78

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
GRAND JUNCTION	4855	852.0	1019.5	41	20	30.6	- 2.0	51	28	8	16	0	26	19	66	0.44	- 0.25	0.20	11	0	5.9	4	1.1	4	19	NW	15+	8	8	12	6.1	65
PUEBLO	4684	853.0	1016.1	47	17	31.9	- 2.0	61	28	- 4	16	0	28	18	59	0.17	- 0.31	0.13	4	0	3.0	2	1.4	9	28	N	13	6	11	11	6.0	74
CONNECTICUT																																
BRIDGEPORT	7	1020.3	1021.0	36	22	29.3	- 1.2	51	11	2	20	0	25	21	73	3.80	0.84	2.05	8	0	9.5	7	6.7	32	36	7	13	11	4	13	6.0	
HARTFORD	169	1013.2	1019.9	37	21	28.8	1.7	54	11	- 2	8+	0	26	20	70	4.40	1.46	1.97	13	0	19.1	14	3.9	32	27	NW	17	5	8	15	6.8	61
NEW HAVEN	6			39	24	31.2	1.6	53	12	5	20	0	24			4.19	1.00	2.76	10		10.2	6			32	NW	17	9	5	14	6.0	62
DELAWARE																																
WILMINGTON	78	1018.6	1021.7	40	24	31.9	- 1.9	56	13	5	6	0	22	24	72	4.90	1.95	2.29	11	1	10.0	14	3.9	30	27	16	28	8	8	12	6.2	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1019.0	1021.4	44	28	36.2	- 1.6	62	13	10	6	0	18	26	67	3.57	1.10	1.28	11	1	6.9	9	3.4	32	35	SW	13	8	3	17	6.8	44
FLORIDA																																
APALACHICOLA U	13			60	46	52.7	- 4.1	69	16	29	4	0	3			6.23	2.32	1.91	12	3	0.0	0			35	S	13	7	6	15	6.8	45
DAYTONA BEACH	31	1019.3	1020.8	69	50	59.2	- 1.4	84	16	26	6	0	2	50	73	5.58	2.83	1.90	9	1	0.0	0	1.3	5	29	27	13	6	5	17	7.0	
FORT MYERS	15	1019.6	1019.9	75	55	65.2	0.0	86	27	35	6	0	0	58	82	1.06	- 1.15	0.54	5	0	0.0	0	2.6	8	23	18	28+	5	11	12	6.4	
JACKSONVILLE	20	1020.0	1020.9	65	45	54.8	- 2.7	81	16	25	6	0	6	47	78	5.97	3.06	1.67	11	1	0.0	0	1.5	35	40	NE	23	5	8	15	6.8	57
KEY WEST	4	1018.3	1018.8	73	65	69.1	- 1.3	80	18	49	6	0	0	62	80	3.04	1.06	2.54	5	1	0.0	0	7.0	8	31	SE	10	7	9	12	6.2	71
LAKELAND U	214			71	52	61.1	- 2.0	83	16	33	5	0	0			2.73	0.22	1.42	10		0.0	0						6	6	16	6.8	74
MIAMI	7	1019.0	1019.4	76	62	68.9	1.0	82	14	40	5	0	0	59	73	6.56	4.69	5.73	3	0	0.0	0	4.5	11	28	11	9	7	9	12	6.3	
ORLANDO	108	1016.3	1020.4	72	52	62.3	0.4	85	16	35	5	0	0	52	73	6.31	3.89	1.92	10	1	0.0	0	1.0	8	29	25	13	6	6	16	7.0	
PENSACOLA	112	1016.3	1020.4	61	44	52.5	- 3.6	69	22+	26	4+	0	5	44	76	11.66	7.41	3.10	13		0.0	0	2.3	9	38	SE	11					47
TALLAHASSEE	55	1018.6	1020.9	64	42	52.6	- 3.0	76	16	18	6	0	9	43	76	9.95	5.77	3.01	11	1	0.0	0	1.0	5	35	15	13	7	4	17	6.7	
TAMPA	19	1019.6	1019.9	70	50	59.9	- 2.8	79	15+	27	5	0	2	50	74	3.08	0.24	.90	9	0	0.0	0	2.3	7	25	7	23+	7	4	17	6.8	67
WEST PALM BEACH	15	1019.0	1019.6	75	59	67.0	- 0.6	83	18	38	5	0	0	57	74	6.88	4.53	4.70	5	1	0.0	0	4.4	12	33	10	9	5	8	15	6.9	
GEORGIA																																
ATHENS	802	991.5	1021.3	54	36	44.9	- 1.2	71	8	17	5	0	9	34	71	7.52	2.82	2.79	12	0	1.3	1	1.0	34	42	18	13	8	6	14	6.3	
ATLANTA	1010	983.1	1020.9	52	35	43.2	- 2.9	65	10+	16	5	0	12	33	72	7.04	2.53	3.95	10	0	T	T	0.8	1	31	SE	10	7	5	16	6.7	43
AUGUSTA	143	1015.6	1021.1	59	36	47.2	- 2.1	73	10	15	6	0	9	36	71	5.36	1.84	1.28	12	0	T	0	0.5	27	35	21	13	9	4	15	6.1	
COLUMBUS	385			58	37	47.7	- 2.0	71	10	19	6	0	9	37	71	8.45	3.82	3.44	11		T	0	1.4	5	35	25	13	8	3	17	6.9	
MACON	354	1008.1	1021.3	58	37	47.2	- 3.9	73	10	16	6	0	9	37	73	7.82	3.56	2.06	12	2	T	0	1.4	35	56	SW	13	8	5	15	6.4	49
ROME	637			54	32	42.9	- 1.5	69	8	14	6+	0	16			7.69	2.39	2.50	10		T	1										
SAVANNAH	46	1019.3	1021.2	63	39	51.2	- 1.9	84	16	19	6	0	9	40	73	3.66	- 0.02	1.60	11	1	0.0	0	0.2	25	40	SW	13	10	7	11	5.6	55
HAWAII																																
HILO	31	1013.2	1014.5	77	63	69.9	- 0.7	85	28	60	3	0	0	63	81	7.63	- 5.31	2.84	19	0	0.0	0	1.1	31	35	16	28	2	5	21	8.4	21
HONOLULU	7	1013.9	1014.3	79	65	72.0	- 0.4	84	13	57	21	0	0	61	72	3.71	0.41	1.59	13	0	0.0	0	3.5	5	32	SE	8	6	4	18	7.4	46
KAHULUI	48	1012.2		76	64	69.7	- 2.0	82	12	56	22+	0	0			4.31	1.77	1.08	19	1	0.0	0	5.2	5	30	SW	7	6	3	19	7.4	50
LIHUE	103	1009.8	1015.1	74	62	67.6	- 3.1	78	28+	56	21	0	0	61	82	6.44	1.12	1.76	16	0	0.0	0	4.2	2	24	SW	3	4	9	15	7.3	39
IDAHO																																
BOISE	2838	917.4	1019.7	43	24	33.3	- 1.2	53	22	3	15	0	23	25	73	0.73	- 0.60	0.34	8	0	7.1	3	2.9	15	29	SE	22	4	5	19	7.6	50
IDAHO FALLS 42NW R	4790			32	4	18.1	- 0.8	43	21	-11	9	0	28			0.30	- 0.19	0.18	4						31	SW	28					
IDAHO FALLS 46W R	4932			33	6	19.6	- 0.8	44	20	-12	10	0	28			0.63	- 0.14	0.32	8		7.5	4	1.2	24								
LEWISTON	1413			46	30	37.9	2.0	57	22	18	15	0	18			0.71	- 0.26	0.21	9		4.0	3						3	5	20	8.0	
POCATELLO	4454	863.2	1020.2	36	17	26.5	- 0.7	45	23	0	10+	0	27	19	75	0.51	- 0.41	0.16	7	0	8.7	5	6.5	21	28	SW	27+	4	4	20	7.9	56
ILLINOIS																																
CAIRO U	314			44	32	37.8	- 2.9	68	9	17	5	0	18			3.63	- 0.04	2.06	10		1.9	2			31	SE	9	5	5	18	7.5	36
CHICAGO O HARE	658	996.3	1021.7	35	17	26.1	- 0.1	55	9	- 5	20	0	25	18	69	1.75	0.24	0.83	9	0	4.3	4	1.6	30	29	27	16	6	8	14	6.8	
CHICAGO MIDWAY	607	998.3		35	21	27.9	0.2	55	9	0	20	0	24	18	67	1.78	0.18	0.68	10	0	6.0	5	1.6	28	33	W	16	5	8	15	7.0	38
MOLINE	582	999.3	1021.7	34	16	24.8	- 0.9	52	9+	0	5+	0	26	16	69	0.89	- 0.46	0.55	6	0	0.8	2	1.0	32	33	NW	16	8	8	12	6.1	54
PEORIA	652	997.0	1022.0	36	19	27.8	- 0.6	59	8	3	20+	0	24	19	72	2.60	0.89	1.74	5	0	2.0	1	0.8	34	32	S	9	8	8	12	6.1	58
ROCKFORD	724	993.2	1021.5	33	15	23.9	- 0.5	48	9	- 3	20	0	26	15	68	2.04	0.60	1.73	6	0	0.3	7	1.7	32	27	29	16	7	7	14	6.4	
SPRINGFIELD	588	998.6	1021.5	38	21	29.5	- 2.1	58	8	- 2	5+	0	23	21	72	2.20	0.38	1.34	6	0	8.6	5	0.4	34	30	S	9	7	8	13	6.3	55

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90° F. or above	Temperature: No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h							%
INDIANA																																
EVANSVILLE	381	1007.1	1021.7	43	23	32.8	- 4.8	66	9	-12	5	0	24	24	71	4.67	1.49	1.89	12	0	10.2	9	1.0	3	26	SW	10	5	4	19	7.6	35
FORT WAYNE	791	990.2	1021.4	36	20	27.8	- 0.5	59	9	0	5	0	23	21	76	1.77	- 0.47	0.99	10	0	5.0	3	1.6	27	30	W	16	5	5	18	7.4	48
INDIANAPOLIS	792	991.2	1021.5	38	23	30.4	- 0.7	60	9	- 5	5	0	22	22	71	2.91	0.63	1.56	9	0	6.3	5	0.4	7	27	S	10+	4	5	19	7.6	40
SOUTH BEND	773	992.2	1021.4	36	21	28.1	1.3	56	9	- 1	5	0	23	19	67	1.73	- 0.15	0.70	14	0	10.7	11	1.4	23	36	28	16	3	8	17	7.6	
IOWA																																
BURLINGTON	694			37	19	27.9	0.1	54	8	2	4	0	24	18	68	0.84	- 0.55		6	0	T		1.7	35	23	32	16+	9	10	9	5.3	
DES MOINES	938	985.8	1022.0	35	14	24.7	1.3	58	8	- 2	20+	0	26	16	74	0.25	- 0.85	0.14	3	2	0.5	2	1.4	36	35	NW	16	9	8	11	5.6	69
DUBUQUE	1065			31	12	21.6	- 0.4	51	9	- 7	20	0	26			2.23	0.83	1.44	6		1.5	7						8	4	16	6.5	
SIOUX CITY	1095	980.4	1021.9	34	14	23.9	1.7	57	28	- 5	2	0	27	13	67	1.18	0.29	1.04	5	1	0.9	3	0.8	2	27	NW	16+	8	10	10	6.1	72
WATERLOO	868	988.5	1021.9	32	10	21.3	- 0.1	53	9+	- 9	4	0	26	13	71	1.47	0.55	1.17	5	1	0.6	2	1.1	33	25	5	18+	8	7	13	6.1	
KANSAS																																
CONCORDIA	1470	965.5	1020.3	42	19	30.4	- 1.2	58	8	- 3	2	0	26	20	70	1.61	0.70	1.24	4	1	1.7	2	0.8	21	34	SE	8	10	10	8	4.9	72
DODGE CITY	2582	925.5	1019.3	41	20	30.9	- 4.1	59	25	0	2	0	25	22	75	0.43	- 0.27	0.23	5	1	1.1	3	0.5	26	33	N	13	8	11	9	5.8	72
GOODLAND	3645	887.9	1018.9	38	16	26.9	- 4.0	52	28+	- 5	1	0	28	19	76	0.23	- 0.28	0.10	6	0	2.4	4	3.3	23	31	33	15	7	7	14	6.3	
TOPEKA	876	988.2	1021.1	44	20	31.9	- 1.2	64	8	2	2	0	24	20	65	0.54	- 0.51	0.48	6	0	0.6	T	0.8	1	26	SW	17+	13	7	8	4.5	67
WICHITA	1321	970.9	1020.3	44	23	33.6	- 2.7	61	25	0	2	0	23	24	73	1.44	0.52	1.04	6	1	0.8	1	0.8	7	40	S	8	12	5	11	5.0	64
KENTUCKY																																
COVINGTON	869	988.5	1021.2	39	24	31.5	- 1.6	60	9	- 6	5	0	21	24	76	3.73	0.82	1.27	8	0	9.5	13	0.1	24	27	36	13	3	2	23	8.1	
LEXINGTON	966	985.1	1021.6	40	26	33.3	- 2.5	65	9	0	5	0	19	26	75	3.64	0.22	1.55	12	0	6.5	11	1.3	15	30	18	10	3	5	20	8.0	
LOUISVILLE	474	1003.4	1021.5	41	27	34.1	- 1.7	64	9	- 4	5	0	20	26	75	5.01	1.72	1.68	11	0	11.4	12	0.7	36	30	N	13	3	8	17	7.5	44
LOUISIANA																																
ALEXANDRIA	92	1015.9	1020.4	58	37	47.6	- 5.2	74	7	22	3	0	10	40	77	7.90	2.93	5.19	7	2	0.0	0	2.4	3	23	19	1	10	4	14	6.0	
BATON ROUGE	64	1017.3	1019.9	60	41	50.4	- 5.0	75	7	24	3	0	6	41	73	14.51	10.09	3.98	12	4	0.0	0	2.0	4	25	19	10	7	6	15	6.7	
LAKE CHARLES	14	1018.6	1019.7	62	43	52.5	- 3.8	74	7	29	3	0	4	44	76	6.17	1.66	1.82	11	2	0.0	0	3.6	6	30	16	9	9	5	14	6.1	
NEW ORLEANS	3	1018.6	1019.4	62	42	52.0	- 5.1	76	8	23	5+	0	6	44	76	10.11	6.12	2.49	12	2	0.0	0	2.9	4	39	15	12	7	3	18	6.9	
SHREVEPORT	252	1010.5	1019.9	57	38	47.5	- 2.8	75	7	24	3	0	11	37	70	3.45	- 0.64	2.30	7	3	1.3	1	0.8	5	35	33	9	9	6	13	6.1	51
MAINE																																
CARIBOU	624			26	5	15.3	2.8	46	11	-31	20	0	27			1.49	- 0.53	0.86	8		20.9	32						4	9	15	7.1	
PORTLAND	61	1015.9	1018.4	33	13	22.6	- 0.2	52	11	-12	20	0	27	13	66	3.43	- 0.37	1.60	7	0	21.3	28	3.5	30	28	NW	17	8	8	12	5.8	71
MARYLAND																																
BALTIMORE	148	1016.3	1022.0	39	22	30.5	- 5.2	55	13	2	6	0	23	21	69	4.24	1.35	1.74	8	1	11.4	14	3.5	30	44	S	13	8	5	15	6.5	48
MASSACHUSETTS																																
BLUE HILL OBS R	629			36	21	28.2	0.8	52	13+	- 4	20	0	25			4.54	0.81	1.90	11		20.5	18			46	ENE	25					48
BOSTON	15	1018.	1019.1	38	25	31.3	1.0	54	11	3	20	0	22	19	64	3.48	0.16	1.65	10	0	12.1	9	6.7	30	31	NE	25	8	4	16	6.4	56
NANTUCKET	43	1018.3	1018.7	38	23	30.5	- 0.9	53	12	9	20	0	26	24	79	1.77	- 1.99	0.82	11	0	1.9	1	4.5	29	34	E	25+	6	6	16	6.8	57
PITTSFIELD	1170			33	13	22.8	0.5	50	11	-12	20	0	27			2.81	0.30	1.25	15		15.2	21										
WORCESTER	986	980.7	1019.0	33	18	25.8	0.9	50	11	- 8	20	0	26	15	67	4.05	1.13	1.86	11	0	19.7	38	6.8	29	35	30	14	7	5	16	6.5	
MICHIGAN																																
ALPENA	689	994.2	1020.7	31	14	22.8	4.2	52	9	- 9	18	0	26	13	69	1.18	- 0.43	0.56	11	0	5.3	10	2.7	28	30	NW	20	3	6	19	7.8	35
DETROIT	619	998.0	1021.5	34	22	28.3	1.1	56	9	1	20	0	23	20	72	1.38	- 0.70	0.65	10	0	2.5	4	2.4	29	39	W	16	1	7	20	8.1	34
DETROIT M WAYNE CO	633	996.3	1021.4	35	20	27.4	0.3	58	9	- 2	20	0	26	19	72	1.64	- 0.31	0.94	8	0	3.9	3	1.8	28				2	7	19	7.8	
DETROIT WILLOW RUN	711	992.2	1021.7	34	19	26.6	- 0.8	59	9	- 1	20	0	27	18	69	0.81	- 1.14	0.39	6	0	1.6	2	2.4	28	28	26	16	2	8	18	7.7	
FLINT	770	992.2	1021.2	33	18	25.5	3.3	54	9	- 9	20	0	25	17	71	1.20	- 0.56	0.59	12	0	9.3	5	2.9	25	25	24	16	3	8	17	7.6	
GRAND RAPIDS	784	990.9	1021.2	34	17	25.5	1.2	54	10	-13	20	0	25	19	76	2.28	0.53	1.01	11	0	15.0	8	1.9	26	35	W	16	4	4	20	7.7	40
HOUGHTON LAKE	1150	977.0	1021.0	30	14	21.7		47	10	-14	19	0	27	16	79	1.02		0.40	13	0	7.3	7	2.5	26	23	28	16	4	4	20	7.7	
LANSING	841	988.5	1021.5	32	15	23.2	- 1.0	54	10	-19	20	0	25	19	81	1.52	- 0.43	0.75	10	0	9.5	6	2.5	24	36	W	16	5	7	16	7.4	44
MARQUETTE U	677			28	15	21.1	1.4	46	28	-13	18	0	27			0.72	- 0.93	0.33	9		13.0	16			29	S	8	6	3	19	7.3	49
MUSKEGON	627	997.6	1021.5	32	18	25.2	- 0.5	54	10	- 7	20	0	26	19	75	1.48	- 0.32	0.50	15	0	19.5	17	0.9	31	38	17	1	3	3	22	8.1	
SAULT STE MARIE	721	992.6	1021.4	26	12	19.0	3.3	43	10	-20	18	0	26	14	80	1.79	0.29	0.79	13	0	11.5	16	0.9	33	35	26	17	4	4	20	7.9	38

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
DULUTH	1428	967.5	1021.9	22	3	12.3	1.5	44	9	-28	19	0	27	1	62	1.31	0.35	0.97	9	0	4.3	18	3.4	27	32	E	8+	9	8	11	5.8	61
INTERNATIONAL FALLS	1179	976.6	1022.7	17	-10	3.3	- 3.8	41	28+	-44	20+	0	28	- 6	65	0.74	0.03	0.47	5	0	5.4	32	3.2	24	28	21	12	12	6	10	4.8	
MINNEAPOLIS	834	990.5	1022.8	25	7	16.3	0.6	52	9	-15	17	0	25	7	67	1.55	0.77	1.10	9	1	6.8	6	1.4	28	28	SW	9	9	6	13	5.9	66
ROCHESTER	1297	972.2	1022.5	25	5	15.2	- 1.0	49	9	-21	20	0	26	7	72	1.06	0.26	0.80	9	1	7.3	6	2.5	26	30	18	9	8	7	13	6.3	
ST CLOUD	1034	982.4	1022.4	22	2	12.3	- 1.1	48	9	-20	20+	0	27		67	1.17	0.37	0.94	6		2.1	5						9	8	11	5.4	
MISSISSIPPI																																
JACKSON	310	1008.1	1020.4	58	35	46.3	- 4.2	75	7	18	5	0	10	38	77	7.84	2.88	2.42	13	1	0.0	0	1.3	3	39	SE	9	8	3	17	6.5	48
MERIDIAN	290	1009.1	1020.5	59	36	47.4	- 3.2	72	7	18	5+	0	12	39	76	10.54	5.45	2.94	11	1	0.0	0	0.5	5	29	16	9	6	5	17	6.8	
VICKSBURG U	234			55	40	47.5	- 4.3	74	7	24	3	0	6			13.69	8.38	8.62	11		T				35	SE	9	9	5	14	5.9	48
MISSOURI																																
COLUMBIA	778	991.5	1020.8	41	23	32.2	- 1.6	64	8	4	2	0	21	22	70	2.11	0.30	0.70	10	1	9.0	6	0.9	10	29	NW	16	11	5	12	5.6	69
KANSAS CITY	742	992.9	1020.9	44	24	33.7	- 2.1	67	8	6	2	0	22	22	66	0.76	- 0.48	0.48	7	0	3.7	3	0.5	5	25	S	8	13	5	10	4.9	71
SAINT JOSEPH	811			46	20	33.0	1.9	64	8	2	2	0	24	19	62	0.25	- 0.84	0.09	4	0	1.2	1	1.2	1	28	15	8	14	7	7	4.3	
ST LOUIS	535	1000.7	1021.7	41	23	32.1	- 2.6	62	8	5	4	0	23	23	72	4.12	2.08	2.28	7	0	7.1	8	0.9	35	29	W	25	7	5	16	6.6	53
SPRINGFIELD	1268	973.9	1020.6	45	24	34.2	- 2.9	66	8	0	2	0	20	25	74	5.03	2.91	3.73	10	1	6.8	4	1.6	12	35	SE	8	7	7	14	6.4	51
MONTANA																																
BILLINGS	3567	888.9	1016.7	36	16	25.7	0.0	52	24	- 6	15	0	28	14	64	0.32	- 0.28	0.16	7	0	3.6	3	6.7	25	34	NW	27	2	10	16	7.6	64
GLASGOW	2284			17	- 2	7.8	- 5.8	38	27	-16	15	0	28			0.14	- 0.27	0.08	3		2.5	7						5	7	16	7.0	
GREAT FALLS	3662	885.2	1017.0	36	18	27.1	3.3	51	23	-10	15	0	26	18	70	0.51	- 0.23	0.19	8	0	5.8	3	7.4	23	43	SW	11	3	7	18	7.5	64
HAVRE	2582			25	3	14.0	- 2.3	43	5	-13	19	0	28			0.11	- 0.32	0.04	4		2.4	6			38	NW	27+	5	6	17	7.3	74
HELENA	3828	878.8	1018.0	38	16	27.0	3.8	45	26+	- 5	15	0	28	18	70	0.33	- 0.10	0.11	7	0	5.1	2	3.6	27	29	W	27	2	5	21	8.1	52
KALISPELL	2965	910.3	1017.9	33	14	23.9	- 0.6	42	5	-11	15	0	28	21	86	1.02	0.02	0.32	14	0	17.6	17	2.7	17	29	3	12	0	5	23	8.8	
MILES CITY	2629	921.8	1019.1	24	3	13.6	- 6.7	41	27	-16	15	0	28	8	78	0.53	0.16		8	0	5.9		0.7	33								
MISSOULA	3190	903.8	1019.0	35	18	26.5	1.5	42	26+	2	10	0	28	21	79	0.96	0.09	0.28	14	0	18.6	7	0.8	30	22	SW	27	2	2	24	8.7	36
NEBRASKA																																
GRAND ISLAND	1841	951.9	1020.9	38	14	25.8	- 0.3	56	28	- 7	2	0	26	17	72	0.78	0.04	0.53	7	1	1.0	2	1.1	26	23	36	18	8	6	14	6.3	
LINCOLN U	1150			39	17	28.3	- 0.4	60	6	- 2	2	0	27			1.10	0.01	0.91	3		1.5	1			37	S	8	10	7	11	5.6	70
NORFOLK	1544			34	11	22.7	- 0.2	55	28+	-10	2	0	26			1.52	0.74	1.33	6		1.5	4						7	9	12	6.0	
NORTH PLATTE	2775	917.7	1019.7	32	11	21.4	- 6.5	51	28	-11	2	0	28	15	79	0.15	- 0.37	0.13	4	0	1.7	5	1.0	28	30	N	15	6	6	16	6.9	48
OMAHA	978	984.8	1021.5	41	17	28.8	2.3	62	8	- 1	2	0	25	17	65	0.41	- 0.54	0.25	4	0	1.3	T	0.6	3	29	NW	15+	11	8	9	5.5	75
SCOTTSBLUFF	3957	877.8	1018.8	35	10	22.4	- 6.6	51	24	-13	16	0	28	16	79	0.21	- 0.19	0.14	6	0	2.7	3	2.1	35	29	30	28	7	9	12	6.0	
VALENTINE	2587			29	5	16.9	- 6.1	44	28+	-14	15	0	28			0.39	- 0.17	0.25	5		4.5	6			27	NE	12	7	7	14	6.5	64
NEVADA																																
ELKO	5050	845.2	1021.3	37	11	24.0	- 4.0	47	28	-13	11	0	28	16	73	0.37	- 0.52	0.17	8	0	7.2	3	0.8	27	25	26	6	3	6	19	7.8	
ELY	6253	807.3	1019.3	37	8	22.5	- 4.1	45	18+	-13	11	0	28	10	59	0.31	- 0.39	0.22	5	0	4.2	3	3.2	21	31	NW	12	5	6	17	7.2	69
LAS VEGAS	2162	940.4	1017.9	58	34	45.8	- 2.0	70	19	26	16+	0	11	20	39	0.07	- 0.37	0.05	3	0	T	0	2.4	32	44	N	12	9	8	11	5.4	81
RENO	4404	866.2	1018.8	50	19	34.8	- 0.8	64	18	10	13	0	27	18	54	0.20	- 0.82	0.12	4	0	1.4	1	1.0	27	37	NW	12	7	7	14	6.6	62
WINNEMUCCA	4299	868.3	1019.5	44	19	31.5	- 0.8	56	4	1	8	0	26	20	66	0.58	- 0.36	0.32	5	0	7.4	4	0.4	20	32	N	12	4	5	19	7.8	40
NEW HAMPSHIRE																																
CONCORD	342	1006.1	1019.5	36	9	22.5	- 0.2	57	11	-19	20	0	26	12	64	2.13	- 0.35	1.13	8	0	17.7	28	4.3	31	34	W	17	8	7	13	6.1	66
MT WASHINGTON OBS	6262			14	- 2	6.1	0.5	34	11	-36	21	0	28			6.40	1.19	3.14	14	0	51.5	15			108Y	W	20+	5	5	18	7.4	33
NEW JERSEY																																
ATLANTIC CITY	64	1019.3	1021.6	40	21	30.1	- 4.6	59	11	0	20+	0	20	22	73	5.17	2.04	2.59	11	0	8.0	11	4.7	31	37	18	13	7	6	15	6.6	56
ATLANTIC CITY U	11			40	28	34.3	- 1.4	54	12	12	20	0	19			4.84	1.46	2.40	12						44	S	13					
NEWARK	11	1020.0	1021.0	40	26	33.2	- 0.5	56	12	7	20	0	21	22	64	4.41	1.61	1.90	10	0	8.6	8	5.0	31	28	29	21	9	7	12	6.2	
TRENTON U	56			40	26	33.0	- 0.4	58	13	7	20	0	21			5.16	2.57	2.45	10	0	9.9	11			30	NW	17	10	5	13	5.9	61
NEW MEXICO																																
ALBUQUERQUE	5310	836.8	1017.6	45	21	33.2	- 6.7	58	6	10	14	0	26	14	50	0.30	- 0.08	0.20	3	0	1.0	T	1.9	34	31	S	8	14	7	7	4.1	76
CLAYTON	4969			46	19	32.5	- 3.5	60	5	6	14	0	28			0.07	- 0.30	0.03	3		1.5	1						8	14	6	5.4	
RATON	6379			47	15	30.7	- 2.0	61	6	- 1	16	0	27			0.26	- 0.16	0.19	4		2.8	2						12	11	5	4.5	
ROSWELL	3617			57	21	38.5	- 3.6	69	19+	8	24+	0	26			0.03	- 0.39	0.03	1	0	T	T			39	NW	27	14	5	9	4.5	69
SILVER CITY	5373			49	24	36.5	- 6.9	65	20	13	16	0	26			0.18	- 0.51	0.11	3		0.4	9						17	5	6	3.4	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
NEW YORK	Ft.	Mb.	Mb.	°F.	F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALBANY	275	1009.8	1021.0	34	13	23.3	- 0.4	54	11	-16	20	0	27	17	76	2.71	0.51	1.11	13	0	24.5	15	4.3	30	34	NW	17	3	9	16	7.3	42
BINGHAMTON	1590	959.4	1020.6	29	17	22.8	- 1.0	48	11	- 5	20+	0	27	17	79	3.62	1.44	2.16	15	0	16.8	23	4.0	28	33	W	14	2	5	21	8.4	47
BUFFALO	705	994.2	1020.9	31	19	24.9	0.8	54	9	0	20	0	25	21	84	2.11	- 0.61	0.73	19	0	15.2	28	5.3	25	32	W	20+	1	6	21	8.3	33
NEW YORK U	132	1017.3	1020.5	41	29	35.1	1.7	58	12	8	20	0	21	22	63	4.96	2.12	2.42	8	0	9.8	8	4.4	30	30	NW	17	9	7	12	5.9	50
J.F. KENNEDY	15	1020.0	1020.8	41	27	33.8	2.2	58	12	8	20	0	21	23	68	4.08	1.15	1.97	7	0	5.5	4	5.2	32	31	10	13	7	8	13	6.1	
NEW YORK LA GUARDIA	11	1019.3	1020.9	39	30	34.5	0.9	55	11	11	20	0	17	22	62	4.29	1.20	2.19	9	0	9.8	5	5.0	32	29	NE	13	10	7	11	6.0	
ROCHESTER	547	1000.7	1021.8	33	18	25.5	0.6	50	11+	- 8	7	0	25	19	74	2.51	- 0.02	0.80	14	0	21.0	34	4.9	25	32	W	20+	2	9	17	7.9	40
SYRACUSE	410	1005.1	1020.7	32	14	23.1	- 1.2	50	11+	-21	20	0	26	17	75	2.96	- 0.17	1.19	18	0	27.0	49	3.6	27	34	S	10	2	8	18	8.1	35
NORTH CAROLINA																																
ASHEVILLE	2140	942.8	1020.7	45	27	36.2	- 2.7	59	13	6	6	0	21	29	80	6.56	2.53	3.17	11	0	6.2	7	2.2	35	35	18	13+	6	8	14	6.6	42
CAPE HATTERAS R	7	1021.0	1021.5	52	38	44.6	- 1.9	70	16	24	22	0	9	37	77	4.24	0.31	1.39	11	1	0.0	0	2.7	35	58	SSW	13	8	3	17	6.6	41
CHARLOTTE	735	993.2	1021.2	50	35	42.2	- 2.0	63	13+	17	5	0	13	30	66	5.59	2.04	1.38	11	1	1.1	1	0.8	2	37	SW	13	8	8	12	6.3	51
GREENSBORO	897	988.8	1021.5	48	30	39.2	- 1.8	65	13	8	5	0	18	30	71	5.44	2.14	1.68	10	0	3.1	13	1.4	33	40	SW	13	7	5	16	6.6	47
RALEIGH	434	1005.1	1021.4	51	34	42.3	- 0.7	68	13+	15	6	0	15	28	61	4.76	1.53	1.61	8	0	T	7	1.2	32	40	22	13	9	3	16	6.4	48
WILMINGTON	28	1020.3	1021.7	58	38	48.0	- 0.7	77	16	24	6	0	9	37	70	5.54	2.12	2.68	12	0	0.0	0	1.3	32	47	SW	13	8	6	14	6.1	50
NORTH DAKOTA																																
BISMARCK	1647	958.7	1021.8	22	- 1	10.4	- 3.1	43	6	-22	19+	0	28	2	66	0.41	- 0.02	0.35	2	0	5.4	5	0.6	14	35	NW	12	5	10	13	6.8	57
FARGO	896	988.2	1023.1	16	- 4	6.2	- 4.5	37	28	-31	18	0	28	- 1	69	0.26	- 0.25	0.19	5	0	1.1	4	0.8	26	32	N	12	6	9	13	6.1	72
WILLISTON	1899			22	- 3	9.6	- 2.8	41	27	-25	16+	0	28			0.31	- 0.17	0.17	4		3.3	6			34	NW	12	5	10	13	6.5	56
OHIO																																
AKRON	1208	975.3	1021.3	35	21	28.4	- 0.3	53	11+	4	20+	0	23	22	79	2.20	- 0.10	0.80	15	0	6.8	9	1.8	25	25	31	16	2	4	22	8.4	
CINCINNATI OBS	761			40	26	32.9	- 2.2	62	9	6	5	0	20			3.17	0.37	1.04	8		7.8	11			24	N	13					34
CLEVELAND	777	991.2	1021.5	33	20	26.7	- 0.9	55	9	3	1	0	25	22	82	2.31	- 0.02	0.84	15	0	10.1	8	2.9	23	26	S	10	1	3	24	8.6	38
COLUMBUS	812	990.9	1022.1	36	23	29.4	- 1.7	58	9	- 2	1	0	22	22	73	2.59	0.28	0.73	15	0	6.7	8	0.8	31	28	N	13	2	3	23	8.5	33
DAYTON	1002	984.1	1021.6	37	23	30.3	- 0.6	60	9	- 4	5	0	23	23	76	2.64	0.32	1.29	7	0	8.4	10	1.3	24	30	N	13+	3	4	21	8.2	37
MANSFIELD	1295			34	21	27.1	- 0.7	53	9	3	20	0	24			2.17	- 0.43	1.12	12	0	5.8	5						2	2	24	8.7	
TOLEDO	676	995.6	1022.0	35	20	27.0	- 0.3	62	9	- 1	20	0	24	20	74	1.46	- 0.42	0.64	11	0	4.5	2	1.7	27	31	W	16	2	6	20	8.1	45
YOUNGSTOWN	1178	977.0	1021.2	34	21	27.3	- 0.3	51	11+	3	20	0	23	21	78	1.93	- 0.57	0.82	12	0	6.7	10	2.0	25	23	29	16	1	3	24	8.8	
OKLAHOMA																																
OKLAHOMA CITY	1280	971.9	1019.7	49	28	38.6	- 2.7	68	7	13	2	0	21	29	74	2.39	1.02	1.33	7	1	2.3	2	1.5	1	29	N	1	11	4	13	5.5	56
TULSA	650	995.3	1020.3	51	27	39.	- 1.6	70	7	8	2	0	22	27	69	2.35	0.58	1.00	10	1	5.1	2	0.3	10	34	S	8	10	6	12	5.5	65
OREGON																																
ASTORIA	6	1017.3	1017.9	49	36	42.6	- 0.2	62	21	27	10	0	7	38	83	5.53	- 4.36	1.00	19	0	T	0	2.8	20	32	31	8	1	3	24	9.0	
BURNS U	4151	872.7	1019.1	40	19	29.4	- 0.3	50	17	- 1	13	0	28	21	72	0.73	- 0.54	0.25	10		8.0	4	1.7	32				3	5	20	8.0	
EUGENE	359	1005.8	1019.5	50	34	42.1	- 0.5	59	20	28	16	0	9	37	86	1.83	- 3.14	0.42	13	0	0.3	T	4.2	20	29	23	28	2	4	22	8.5	
MEACHAM	4050			35	24	29.5	0.4	47	18	10	15	0	27			3.55	- 0.45	1.00	14		35.5	36						2	2	24	8.7	
MEDFORD	1298	971.6	1020.2	51	29	39.9	- 0.2	63	22	20	13	0	21	30	73	0.37	- 2.03	0.16	10	0	T	T	0.5	16	32	14	22	1	10	17	8.0	
PENDLETON	1482	963.8	1018.6	47	32	39.7	2.3	57	21	25	15	0	13	29	69	0.83	- 0.35	0.17	12	1	1.6	T	3.5	25	32	27	14	2	5	21	8.6	
PORTLAND	21	1017.6	1018.9	50	35	42.8	0.8	60	21	26	15	0	8	36	78	1.70	- 2.52	0.40	14	0	T	T	4.8	17	33	SE	22	3	1	24	8.7	41
SALEM	196	1011.5	1018.9	50	31	40.6	- 1.3	60	21	22	15	0	14	35	83	2.24	- 3.07	0.44	18	0	0.2	0	5.3	19	35	19	5	3	4	21	8.1	
SEXTON SUMMIT R	3836	884.2	1019.8	39	28	33.7	- 2.4	52	16	21	13	0	21			1.39	- 2.73	0.45	16		10.0	12			35	17	22	3	7	18	7.6	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	83.8	0.8	91	15	74	5	9	0			5.24	3.11	2.14	12		0.0	0						1	10	17	7.8	
ENIWETOK	13	1010.2	1010.8	85	76	80.7	- 0.2	87	23	73	14	0	0	71	74	0.94	- 0.90	0.24	13		0.0	0	17.8	5								
TAGUAC GUAM R	361			83	71	77.0	- 1.3	85	17+	65	18+	0	0			1.69	- 1.80	0.40	19		0.0	0			28	E	26					67
JOHNSTON	7	1012.5	1013.2	79	71	75.0	- 2.0	83	2+	68	22+	0	0	65	74	5.34	3.81	2.12	14	3	0.0	0	12.3	7	40	E	14	5	13	10	6.1	51
KOROR R	94	1007.1	1010.6	85	75	80.1	- 0.2	87	26+	72	13	0	0	73	80	3.31	- 3.82	1.21	17	0	0.0	0	9.1	7	25	NE	10	0	2	26	9.7	67
KWAJALEIN	8	1008.8	1009.9	87	77	81.8	1.8	88	27+	74	28+	0	0	71	74	0.40	- 1.75	0.15	8	0	0.0	0	18.2	6	30	6	28	2	11	15	7.6	
MAJURO WB AIRPORT	10	1009.1	1009.5	85	78	81.3	0.9	87	3	73	26	0	0	72	75	4.42	- 4.13	3.18	9	0	0.0	0	13.0	6	29	E	26	2	4	22	8.6	68
MARCUS ISLAND	20			78	67	72.7	1.5	82	18	63	3	0	0			0.79	- 1.92	0.66	6		0.0	0			28	E	21+	6	12	10	5.6	68
PONAPE R	123	1003.7	1009.3	86	77	81.4	0.9	88	27+	75	28+	0	0	72	75	1.71	- 8.03	0.63	16	0	0.0	0	10.3	5	21	NE	16	0	6	22	8.8	54
TRUK MOEN ISLAND	5	1008.8	1009.3	85	77	81.3	0.6	87	25+	75	25+	0	0	72	76	1.70	- 4.59	0.75	12	0	0.0	0	13.4	7	21	NE	24+	2	5	21	8.5	79
WAKE	11	1015.6	1015.9	80	71	75.8	- 1.3	82	14+	67	26	0	0	64	69	1.34	- 0.01	0.62	10	0	0.0	0	14.5	5	35	5	24	8	16	4	5.1	
YAP R	62	1008.5	1010.5	85	75	80.3	- 0.1	87	24	74	28+	0	0	73	80	1.29	- 3.35	0.32	19	0	0.0	0	11.7	4	28	NE	10	0	3	25	9.4	51

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1006.8	1021.4	37	20	28.4	-0.8	50	12	0	7	0	25	20	73	4.84	2.20	2.05	11	1	15.5	14	5.5	31	32	30	17	6	7	15	6.9	
ERIE	732	993.9	1021.7	32	21	26.6	0.2	53	10	-1	20	0	24	21	81	1.92	-0.40	0.65	14	0	8.7	13	3.1	24	28	17	10	1	7	20	8.3	
HARRISBURG	338	1008.5	1021.9	39	24	31.5	-1.1	56	11	9	6+	0	22	20	64	4.44	2.13	1.90	10	0	16.8	17	3.9	30	29	NW	17	4	8	16	7.2	52
PHILADELPHIA	5	1020.7	1021.5	39	24	31.5	-1.7	57	13	4	6	0	22	23	69	4.30	1.50	1.96	11	1	11.4	9	3.9	31	38	W	13	7	6	15	6.5	55
PITTSBURGH	1137	975.6	1021.2	37	24	30.3	1.1	57	11	3	1	0	22	24	78	3.23	1.04	1.72	14	0	6.9	15	2.9	26	32	29	16	2	2	24	8.8	30
READING U	266			40	26	33.1	-0.3	54	12	9	20	0	21			4.29	1.65	1.92	11		12.6	13			59	E	13	7	8	13	6.5	4[illegible]
SCRANTON	930	985.8	1021.5	34	20	27.2	-1.1	50	11	-4	7	0	23	19	72	2.31	0.32	0.90	12	0	17.5	12	3.0	29	33	E	13	2	6	20	8.0	47
WILLIAMSPORT	527	1001.7	1021.6	37	21	29.0	-0.2	50	28	-3	6	0	24	18	66	4.58	2.07	2.05	12	0	11.7	20	3.4	29	23	27	14	4	2	22	8.1	
RHODE ISLAND																																
BLOCK ISLAND	110			37	26	31.5	0.6	50	13	6	20	0	22			2.29	-1.00	0.94	10		4.6	2						10	6	12	5.7	
PROVIDENCE	51	1017.3	1019.6	38	21	29.9	0.2	52	13+	2	20	0	27	20	68	4.30	1.20	2.59	10	0	9.1	7	5.1	30	35	18	13	8	6	14	6.1	56
SOUTH CAROLINA																																
CHARLESTON	41	1019.6	1021.2	60	39	49.6	-1.9	78	16	19	6	0	8	38	70	4.61	1.32	2.59	11	1	0.0	0	0.4	35	59Y	NW	13	9	7	12	5.8	56
CHARLESTON U	9			58	43	50.2	-2.1	75	16	28	5	0	4			4.95	1.88	2.55	12		0.0	0			45	S	13					
COLUMBIA	217	1012.9	1021.1	57	37	46.9	-1.5	71	8	17	6	0	9	35	69	4.54	0.80	1.60	13	0	T	0	1.0	33	40	20	13	11	5	12	5.7	51
GNVLE-SPARTANBURG	957	985.8	1021.1	52	34	42.8	-2.3	67	8	17	5	0	15	32	70	6.78	2.71	2.33	11	0	3.4	2	1.8	1	44	SW	13	9	5	14	6.1	45
SOUTH DAKOTA																																
ABERDEEN	1296	972.6	1022.5	21	-3	9.2	-5.8	45	6	-25	18	0	28	1	68	0.52	-0.13	0.31	6	0	5.7	5	1.0	1	25	4	19	7	5	16	6.8	
HURON	1282	972.9	1022.2	26	4	15.0	-1.6	45	28	-17	18	0	27	8	73	0.82	0.22	0.37	5	0	8.4	7	0.2	9	24	NW	12	7	7	14	6.6	67
RAPID CITY	3165	903.2	1019.0	29	9	19.3	-4.8	50	5	-10	18	0	28	10	67	1.00	0.52	0.69	9	0	10.0	6	2.0	1	34	NW	12	3	6	19	8.0	51
SIOUX FALLS	1418	967.8	1022.0	28	7	17.3	-1.8	51	28	-16	4	0	27	9	71	0.99	0.06	0.80	6	0	1.8	2	0.3	36	30	6	18	8	7	13	6.0	
TENNESSEE																																
BRISTOL	1507	965.8	1021.3	46	30	37.9	-2.1	66	13	7	6	0	16	28	71	3.50	-0.06	1.33	13	1	0.3	9	0.7	28	33	24	13	5	2	21	7.7	
CHATTANOOGA	670	995.6	1020.9	51	32	41.3	-3.1	66	14	12	5	0	16	33	78	6.50	1.13	2.21	11	0	T	4	1.7	35	34	S	10	6	4	18	7.2	38
KNOXVILLE	980	985.4	1021.4	49	34	41.6	-1.5	66	10+	8	5	0	15	31	69	4.68	-0.13	1.91	11	1	T	6	1.7	35	40	W	13+	4	5	19	7.6	39
MEMPHIS	255	1010.5	1021.0	50	34	42.2	-1.9	68	9+	18	5+	0	15	32	71	6.88	2.19	3.63	12	0	T	T	1.1	6	35	SE	9	8	3	17	6.5	51
NASHVILLE	590	998.6	1020.8	50	33	41.3	-0.7	68	9+	10	5	0	15	31	71	3.63	-0.88	1.25	11	0	T	2	0.7	35	37	S	10	4	6	18	7.8	39
OAK RIDGE	905			49	31	39.7	-1.4	66	9	12	5	0	15			5.73	-0.07	2.65	11		T	4						5	2	21	7.8	
TEXAS																																
ABILENE	1762	955.6	1018.5	57	32	44.4	-4.0	75	6	15	24	0	16	29	61	0.40	-0.69	0.23	5	1	1.5	2	2.0	22	38	S	7	14	5	9	4.3	73
AMARILLO	3604	890.3	1016.7	47	21	34.1	-7.2	59	7+	8	1	0	25	21	68	0.69	0.07	0.61	4	0	0.4	1	2.5	23	32	N	13	13	4	11	4.6	72
AUSTIN	597	997.0	1019.3	59	38	48.9	-4.9	73	7+	25	2	0	11	37	68	3.23	0.65	1.06	9	1	6.0	6	2.2	2	26	NW	16+	11	6	11	5.4	63
BROWNSVILLE	16	1017.3	1017.8	65	49	56.7	-7.3	76	28+	36	23	0	0	51	84	0.83	-0.65	0.44	8	0	T	0	2.6	3	35	N	12	4	4	20	8.1	40
CORPUS CHRISTI	41	1016.9	1018.6	64	45	54.4	-6.0	76	28+	32	4	0	1	47	82	1.15	-0.55	0.51	8	0	0.0	0	4.6	6	34	N	14+	6	5	17	7.1	32
DALLAS	481	1002.0	1019.8	56	37	46.3	-3.2	72	7	22	17	0	11	35	68	3.30	0.75	2.33	7	1	2.2	2	1.3	17	34	SW	9	11	3	14	5.4	57
DEL RIO	1026	981.7	1018.6	63	39	51.0	-5.2	78	28	26	22	0	6	36	62	1.11	0.23	0.79	5	0	2.2	2	1.5	8	25	30	27+	14	5	9	4.6	
EL PASO	3918	882.2	1016.2	55	30	42.9	-6.2	68	20+	18	17	0	18	18	40	0.20	-0.21	0.17	2	0	T	T	2.2	29	36	W	8	17	4	7	3.6	86
FORT WORTH	537	999.0	1020.1	55	36	45.4	-3.8	71	7	21	3	0	12	34	68	2.84	0.60	1.85	8	2	2.9	2	0.6	20	37	22	9	11	5	12	5.3	
GALVESTON U	7			58	49	53.3	-3.5	65	28+	33	2	0	0			4.50	1.62	1.34	10		0.0	0			29	E	26					55
HOUSTON U	41			61	46	53.5	-3.6	70	9+	31	2	0	2			5.65	2.44	2.57	9		0.0	0										
HOUSTON	50	1017.3	1019.3	62	44	52.8	-3.0	73	7	30	4+	0	4	43	75	7.75	4.31	5.03	10	5	0.0	0	2.6	3	28	33	1	9	3	16	6.2	56
LUBBOCK	3254	903.2	1016.7	55	26	40.5	-2.6	74	5	11	23	0	22	21	53	0.06	-0.51	0.04	2	0	0.4	T	2.1	23	32	25	9	16	2	10	4.1	
MIDLAND	2851	916.7	1016.3	57	28	42.7	-5.6	73	6	14	23	0	23	26	60	0.20	-0.40	0.08	4	0	T	T	2.1	22	31	30	27	14	7	7	4.2	
PORT ARTHUR	16	1019.0	1019.5	62	43	52.9	-3.1	74	7	28	4	0	5	45	78	5.68	1.23	1.90	9	1	0.0	0	3.1	5	43	SE	9	11	2	15	6.0	57
SAN ANGELO	1903	950.2	1018.2	59	32	45.5	-5.0	77	6	14	24	0	15	30	61	0.58	-0.32	0.47	4	1	4.1	4	2.9	23	31	19	8	15	5	8	4.0	
SAN ANTONIO	788	990.5	1019.1	62	38	49.8	-5.6	75	7	23	3	0	12	40	73	2.30	0.65	0.75	11	1	3.5	3	2.4	4	27	N	22	11	7	10	5.2	58
VICTORIA	104	1015.2	1019.2	62	43	52.6	-5.4	74	9	30	4	0	3	45	78	2.30	-0.04	0.88	11	5	0.0	0	3.0	4	37Y	S	9	8	7	13	6.2	
WACO	500	1001.4	1019.7	57	35	46.2	-5.3	72	13	19	3	0	12	35	68	2.00	-0.42	0.76	8	2	4.8	5	1.1	22	40	18	9+	13	4	11	5.0	
WICHITA FALLS	994	981.7	1019.1	54	30	42.1	-4.7	70	7	15	2	0	18	32	73	1.41	0.03	0.60	5	2	0.8	T	1.0	28	32	30	1	13	4	11	4.9	
UTAH																																
MILFORD	5028			41	17	28.9	-0.8	50	28+	-5	16	0	27			0.88	0.18	0.47	10		9.2	4						6	4	18	7.1	
SALT LAKE CITY	4220	872.3	1020.0	40	19	29.4	-3.1	50	28+	-3	13	0	27	21	70	1.19	0.01	0.36	10	0	18.1	9	2.8	14	26	S	14	3	5	20	7.7	65
WENDOVER	4237			41	23	32.0	-0.8	50	20	15	16+	0	28			0.28	-0.02	0.16	3		0.6	1						6	7	15	6.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1007.5	1020.4	28	8	17.9	0.5	51	11	-15	7	0	26	10	70	2.49	0.70	1.32	11	0	28.5	22	1.2	27	34	NW	17	5	7	16	7.0	59
VIRGINIA																																
LYNCHBURG	916			45	28	36.4	-2.5	64	13	9	3	0	18			4.51	1.86	1.53	10	0	6.3	21			33	SW	13	6	3	19	7.1	49
NORFOLK	22	1020.7	1021.8	46	31	38.6	-3.0	66	13	17	21	0	15	29	71	3.83	0.62	1.04	12	0	0.5	6	1.9	36	45	SW	13	5	5	18	7.1	41
RICHMOND	162	1015.9	1022.1	46	29	37.7	-2.2	68	11	3	6	0	17	26	67	3.80	0.90	1.26	8	0	3.0	12	1.1	34	40	SW	13	6	6	16	7.0	50
ROANOKE	1149	978.3	1021.4	42	28	35.1	-4.1	60	13	14	21	0	18	23	65	4.78	1.92	2.09	10	0	8.4	15	3.9	30	28	31	13	7	4	17	7.0	
WASHINGTON																																
OLYMPIA	195	1010.5	1017.8	49	33	40.6	-0.3	60	22+	23	15	0	13	36	85	3.38	-3.24	0.89	18	1	2.0	T	5.2	21	28	23	22	1	3	24	8.9	
SEATTLE TACOMA	400	1000.7	1017.4	50	38	43.9	3.1	65	21	30	15	0	5	34	70	2.31	-1.93	0.73	18	1	T	T	4.1	18	29	19	11	1	5	22	8.6	35
SPOKANE	2356	931.6	1017.3	39	27	32.8	2.8	48	22	17	10	0	25	27	81	0.50	-1.36	0.25	8	0	1.6	1	2.7	21	30	SW	27	3	2	23	8.2	38
STAMPEDE PASS R	3958			30	24	27.3	0.7	38	22+	17	15	0	28			10.30	0.15	2.43	22		86.5	128						0	2	26	9.4	
TATOOSH ISLAND R	101	1012.9	1015.9	48	41	44.4	1.3	59	22	33	28	0	0	38	78	4.60	-4.10	1.20	21	0	1.4	1	3.7	13	48	SW	4	1	4	23	8.7	31
WALLA WALLA U	949			48	34	41.0	2.6	60	22	27	1	0	13			0.83	-0.69	0.27	10		1.2	T			23	S	22	2	1	25	8.7	28
YAKIMA	1052	979.0	1018.4	47	28	37.4	3.4	56	20	20	1	0	27	28	71	0.11	-0.76	0.04	4	0	0.8	3	4.2	28	29	28	9	3	8	17	7.5	
WEST INDIES																																
SAN JUAN P.R.	15	1015.6	1018.0	83	71	76.7	2.3	86	21+	66	5	0	0	67	74	1.64	-1.26	0.56	16	0	0.0	0	9.2	8	35	NE	10	5	13	10	5.8	50
SWAN ISLAND	28			82	75	78.2	-0.2	84	28+	70	6	0	0			1.00	-0.16	0.40	7	0	0.0	0						2	17	9	6.7	
WEST VIRGINIA																																
BECKLEY	2504	929.9	1022.0	39	23	30.9		57	11+	5	6	0	19	24	76	3.69		0.95	18	0	15.9	14	2.8	22	35	27	13	4	1	23	8.4	
CHARLESTON	939	986.1	1021.2	45	28	36.6	-0.9	66	10	7	21	0	16	27	71	2.78	-0.75	1.11	14	0	8.0	9	1.9	23	22	23	13	3	4	21	8.3	
ELKINS	1970	947.9	1021.3	41	20	30.8	-2.2	58	13+	-10	6	0	20	24	76	3.10	-0.17	0.67	19	1	21.0	13	3.4	25	31	31	17+	3	5	20	8.4	
HUNTINGTON	827	990.2	1021.4	42	27	34.3	-3.4	65	10	7	21	0	18	26	76	3.97	0.93	2.43	14	0	2.0	10	1.5	24	23	16	10	3	3	22	8.1	
PARKERSBURG U	615			41	26	33.4	-2.1	60	10	4	1	0	19			3.55	0.72	1.74	14		7.0	14			26	W	17					27
WISCONSIN																																
GREEN BAY	682	994.9	1021.7	30	13	21.8	3.7	45	12+	-9	20+	0	26	15	74	2.25	1.17	1.78	4	0	1.1	7	2.8	29	30	W	16	8	5	15	6.3	50
LA CROSSE	651	997.3	1023.3	31	8	19.5	0.1	51	9	-20	20	0	26	10	68	1.51	0.46	1.06	7	1	5.1	5	1.6	27	24	31	16	7	8	13	6.4	
MADISON	858	988.8	1021.8	31	12	21.3	1.8	50	9	-17	20	0	26	13	70	1.36	0.23	0.89	6	0	3.8	5	2.4	29	26	W	16	7	7	14	6.6	57
MILWAUKEE	672	995.9	1022.3	30	15	22.3	-0.1	50	1[illegible]	-7	20	0	26	17	77	1.27	-0.13	0.82	10	0	7.7	12	3.3	29	31	W	16	7	6	15	6.6	48
WYOMING																																
CASPER	5338	834.1	1016.6	34	15	24.3	-2.0	46	7	-9	13	0	28	13	63	0.43	-0.16	0.23	6	0	6.2	3	12.2	24	35	22	12	5	7	16	6.8	
CHEYENNE	6126	808.0	1016.9	38	16	26.8	-0.5	54	24	-1	15	0	27	9	52	0.22	-0.34	0.20	2	0	2.7	2	9.5	30	42	W	12	7	7	14	6.6	65
LANDER	5563	825.3	1017.0	36	12	24.2	0.1	48	20	-3	13	0	28	10	57	0.33	-0.36	0.18	4	0	7.0	6	2.2	23	31	W	28	5	11	12	6.4	79
SHERIDAN	3964	876.4	1018.0	36	11	23.4	-0.4	45	27+	-1	13	0	28	12	61	0.40	-0.34	0.28	8	0	5.3	5	3.5	29	35	NW	12	3	7	18	7.6	53

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station ⊙	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm			Mm.	Mm.	M.p.s.		M.p.s							%
ALABAMA																																
BIRMINGHAM	189	997.6	1020.6	13.3	2.2	7.9	-1.4	22.2	9	-9.4	5	0	12	1.7	69	220	86	83	10	0	T	T	0.4	14	16.1	SE	10	5	8	15	6.9	47
HUNTSVILLE	183	997.0	1020.6	12.8	2.2	7.4	0.1	21.7	9	-10.0	5	0	12	1.1	67	125	-7	50	11	0	T	76	0.5	11	15.6	16	10	6	5	17	7.2	
MOBILE	64	1011.9	1020.0	16.7	6.7	11.6	-1.3	20.6	12	-3.9	3	0	5	5.6	71	229	112	82	12	3	0	0	1.4	9	12.5	26	10	8	7	13	6.3	
MONTGOMERY	59	1013.5	1020.8	15.0	4.4	9.5	-0.7	23.3	9	-5.6	6	0	6	3.3	70	205	94	59	11	1	T	0	0.6	9	16.5	W	13+	7	3	18	6.7	46
ALASKA												B																				
ANCHORAGE PRK STRIP	26			-6.1	-13.9	-9.9	-2.1	4.4	1	-24.4	23	0	28			16	-2	4	7		239	483										
ANCHORAGE	43	1002.7	1007.8	-4.4	-14.4	-9.6		5.0	11+	-25.0	23	0	28	-12.8	74	20		6	8	0	272	533	0.2	4	12.5	19	11	5	6	17	7.1	49
ANNETTE	34	1007.1	1011.1	5.0	0.0	2.4	0.7	13.9	22	-3.9	6	0	19	-1.1	80	298	81	68	21	0	165	51	2.0	14	15.6	16	23	0	6	22	8.7	
BARROW	7	1016.9	1017.7	-27.2	-33.3	-30.2	-2.3	-14.4	3	-41.1	13	0	28	-33.3	73	2	-3	1	5	0	15	406	1.5	9	11.6	10	14	14	3	11	4.5	
BARTER ISLAND	12	1014.9	1016.8	-27.8	-35.0	-31.4	-2.7	-15.0	3	-43.9	21	0	28	-34.4	74	5	-4	3	4	0	142	660	2.5	25	19.2	28	28	10	8	10	5.4	
BETHEL	38	1002.0	1007.7	-5.6	-16.1	-10.8	2.4	2.2	13+	-32.2	28	0	28	-13.3	84	23	-5	5	13	0	376	406	0.5	14	19.7	21	11	2	5	21	8.4	
COLD BAY	29	1004.7	1008.5	2.2	-2.2	-0.2	2.1	7.8	11	-8.3	2	0	26	-3.3	81	40	-40	10	18	0	224	51	3.3	21	28.2	26	24	2	5	21	8.1	
FAIRBANKS	133	993.9	1012.2	-16.1	-27.8	-22.0	-2.6	-4.4	14	-41.1	21	0	28	-23.9	87	44	31	25	9	0	1095	1321	0.4	35	6.7	25	12	4	7	17	7.6	
JUNEAU	4	1008.5	1009.3	1.1	-7.8	-3.4	-0.5	8.3	23	-22.2	6	0	24	-3.3	94	80	2	14	18	0	447	584	3.3	10	15.6	11	25+	4	6	18	7.9	34
KING SALMON	13	1005.8	1007.9	-3.9	-12.2	-8.1	0.0	2.8	11+	-28.9	28	0	27	-10.6	80	39	15	10	14	0	287	254	0.4	16	14.8	26	25	5	6	17	7.4	
KOTZEBUE	3	1010.2	1010.8	-16.1	-24.4	-20.2	-0.2	-3.9	14	-34.4	10	0	28	-22.8	77	5	-3	2	4	0	173	762	2.9	10	18.3	10	11	4	3	21	7.8	
MC GRATH	106	997.3	1010.7	-11.7	-23.9	-17.7	0.1	2.8	13	-43.9	22	0	28	-21.1	69	18	-11	11	8	0	554	1092	0.3	26	13.9	26	11	4	4	20	8.0	
NOME	4	1006.8	1007.6	-8.9	-17.8	-13.2	1.5	0.0	14+	-28.9	28	0	28	-15.0	84	37	13	11	17	0	368	838	4.6	8	20.1	9	11	4	2	22	8.2	17
ST. PAUL ISLAND	7	1002.4	1003.4	1.7	-3.3	-0.9	3.9	4.4	10	-12.2	27	0	27	-2.2	86	67	36	9	21	0	406	152	5.0	21	27.7	28	25	1	5	22	8.5	
SHEMYA	37	993.2		1.1	-3.3	-1.2	-0.6	4.4	19	-8.3	23	0	27	-3.3	86	40	-18	6	24	0	333	254	8.3	22	30.8	24	6	0	5	23	8.7	
YAKUTAT	9	1005.1	1006.1	0.0	-8.3	-4.1	-2.2	3.3	16+	-22.2	28	0	28	-4.4	93	219	10	34	20	0	1379	1118	2.3	10	11.6	13	25	2	2	24	8.8	
ARIZONA																																
FLAGSTAFF	2131	784.3	1018.0	3.9	-11.7	-3.8	-2.5	11.1	28+	-21.1	14	0	28	-10.6	63	27	-18	10	6	0	274	279	0.3	16	10.3	22	6	15	1	12	4.9	
PHOENIX	340	977.0	1016.4	17.8	2.2	9.8	-2.1	23.3	21	-2.2	16+	0	6	0.6	57	24	3	14	4	0	0	0	1.0	12	13.9Y	ENE	22	14	4	10	4.1	79
TUCSON	788	926.2	1015.5	15.6	2.2	8.8	-2.8	22.2	19	-1.7	14	0	9	-2.2	54	57	36	32	6	2	30	25	1.7	12	15.2	SE	22	13	6	9	4.3	78
WINSLOW	1492	851.0	1019.4	7.8	-5.6	0.9	-2.1	16.7	19	-11.7	16	0	27	-7.2	61	17	5	9	6	1	124	76	0.9	24	10.3	24	14+	13	3	12	5.1	
YUMA	59	1009.5	1016.9	20.0	5.6	12.8	-1.3	25.6	21+	0.6	14	0	0	-1.7	42	4	-5	4	2	1	0	0	1.7	1	13.0	N	13	17	3	8	3.7	86
ARKANSAS																																
FORT SMITH	137	1003.4	1020.4	11.1	-1.1	5.2	-1.3	22.8	7	-10.0	2	0	18	-0.6	72	122	35	101	10	1	48	51	0.3	4	10.3	W	25+	5	8	15	6.8	49
LITTLE ROCK	78	1011.2	1020.9	11.1	1.1	6.1	-0.8	21.1	7	-7.8	3	0	15	1.1	74	128	18	54	10	1	244	178	0.6	2	14.8	S	9	10	4	14	6.4	43
TEXARKANA	113	1006.8	1020.3	13.3	2.2	7.6	-1.6	21.1	7	-6.1	3	0	13	1.7	71	67	-35	24	10	0	178	102	0.3	18				11	4	13	5.8	
CALIFORNIA																																
BAKERSFIELD	151	1001.7	1019.6	15.6	3.3	9.4	-1.7	23.9	22	0.0	14+	0	3	3.3	69	29	0	24	5	0	0	0	0.8	6	10.3	14	22	10	5	13	5.7	
BISHOP	1252			12.8	-4.4	4.0	-1.1	17.2	21+	-11.1	14	0	25			T	-25	T	1		T	0						10	10	8	5.0	
BLUE CANYON	1609			5.0	-3.3	0.8	-2.1	13.3	21	-8.3	7	0	26			137	-121	37	10		706	1651			13.0	7	15	9	6	13	6.0	
BURBANK	221	991.5	1017.2	18.3	6.1	12.2	-0.7	24.4	22+	2.2	12	0	0	1.7	54	24	-58	21	2	0	0	0	0.2	22	10.3	18	26+	14	5	9	4.4	
EUREKA U	13			11.7	4.4	8.1	-0.9	17.2	22	0.0	13	0	1			79	-61	18	15		0	0			13.4	SE	22+	2	10	16	7.5	57
FRESNO	100	1007.8	1019.6	15.0	1.7	8.4	-1.8	23.9	22	-1.1	15+	0	11	4.4	78	14	-42	3	9	0	0	0	0.3	6	10.3	NW	12+	9	7	12	5.6	80
LONG BEACH	10	1016.6	1017.9	17.8	6.1	12.0	-0.4	25.6	21	3.3	16+	0	0	4.4	64	42	-17	20	3	1	0	0	0.6	27	9.4	27	26	11	10	7	4.8	
LOS ANGELES	30	1013.9	1017.5	16.7	6.7	11.7	-1.2	26.1	21	3.3	13	0	0	3.3	61	36	-38	26	3	0	0	0	1.0	28	13.0Y	N	10	13	7	8	4.6	
LOS ANGELES U	82			18.9	7.8	13.4	-0.5	26.7	21	4.4	14+	0	0			38	-46	36	4		0	0			8.5	N	10	13	11	4	4.1	59
MT SHASTA R	1080			6.1	-3.3	1.4	-1.4	12.2	17	-8.9	7	0	25			99	-51	34	13		533	559										
OAKLAND	2	1019.3	1019.6	13.9	7.2	10.5	0.1	17.2	22+	3.3	16	0	0	5.6	73	54	-28	13	10	0	0	0	0.8	29	11.6	36	10	10	6	12	6.0	
RED BLUFF	104	1006.8	1019.7	13.9	2.2	8.1	-1.7	18.9	21+	-2.8	17+	0	7	1.1	69	109	25	40	12	2	0	0	0.7	33	13.4	N	10	7	4	17	6.6	64
SACRAMENTO	5	1018.6	1019.6	13.9	3.3	8.6	-0.9	17.8	21	-0.6	17+	0	3	3.3	75	40	-36	8	10	1	0	0	0.7	32	14.8	N	12	10	5	13	5.7	70
SANDBERG R	1377			6.7	-0.6	3.0	-2.2	12.8	23	-6.1	13	0	17			42	-23	35	4		71	76			14.8	7	22+	10	6	12	5.5	
SAN DIEGO	4	1016.6	1017.5	17.2	7.8	12.6	-0.9	23.3	22+	3.9	14	0	0	5.0	64	22	-33	17	4	1	0	0	1.1	32	10.3	NW	11+	12	8	8	4.6	84
SAN FRANCISCO	2	1019.3	1020.0	13.3	5.0	9.3	-1.2	16.7	22	1.7	16+	0	0	4.4	75	81	-8	31	10	0	0	0	1.4	30	16.1	WNW	9	8	8	12	6.1	
SAN FRANCISCO U	16			13.9	7.8	11.0	-0.7	17.2	13	6.1	26+	0	0			69	-24	26	10		0	0			10.3	NW	10					66
SANTA CATALINA	478			14.4	8.3	11.2	-1.0	21.1	21	5.0	18	0	0			29	-52	28	3	1	0	0						11	10	7	4.6	
SANTA MARIA	72			16.1	1.7	8.9	-2.1	23.3	21	-2.8	14	0	11			23	-40	12	5		0	0						12	6	10	4.9	
COLORADO																																
ALAMOSA	2297			0.6	-18.3	-8.9	-4.2	5.0	28	-26.7	14	0	28			6	2	3	4		147	76						11	12	5	4.3	
COLORADO SPRINGS	1873	807.0	1017.6	3.9	-9.4	-2.9	-2.6	11.1	28	-20.6	16	0	28	-11.1	59	12	4	8	9	0	246	152	1.6	3	11.2	35	13	7	7	14	6.3	
DENVER	1610	833.1	1015.8	5.6	-9.4	-2.0	-1.7	14.4	4	-21.1	15+	0	28	-10.0	61	33	15	13	8	0	371	178	0.8	20	12.5	W	17	7	7	14	6.5	78
GRAND JUNCTION	1480	852.0	1019.5	5.0	-6.7	-0.8	-1.1	10.6	28	-13.3	16	0	26	-7.2	66	11	-6	5	11	0	150	102	0.5	4	8.5	NW	15+	8	8	12	6.1	65
PUEBLO	1428	853.0	1016.1	8.3	-8.3	-0.1	-1.1	16.1	28	-20.0	16	0	28	-7.8	59	4	-8	3	4	0	76	51	0.6	9	12.5	N	13	6	11	11	6.0	74

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station		Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
	Elevation (ground)	Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1020.3	1021.0	2.2	- 5.6	- 1.5	-0.7	10.6	11	-16.7	20	0	25	- 6.1	73	97	21	52	8	0	241	178	3.0	32	16.1	7	13	11	4	13	6.0	
HARTFORD	52	1013.2	1019.9	2.8	- 6.1	- 1.8	0.9	12.2	11	-18.9	8+	0	26	- 6.7	70	112	37	50	13	0	485	356	1.7	32	12.1	NW	17	5	8	15	6.8	61
NEW HAVEN	2			3.9	- 4.4	- 0.4	0.9	11.7	12	-15.0	20	0	24			106	25	70	10		259	152			14.3	NW	17	9	5	14	6.0	62
DELAWARE																																
WILMINGTON	24	1018.6	1021.7	4.4	- 4.4	- 0.1	-1.1	13.3	13	-15.0	6	0	22	- 4.4	72	124	50	58	11	1	254	356	1.7	30	12.1	16	28	8	8	12	6.2	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1019.0	1021.4	6.7	- 2.2	2.3	-0.9	16.7	13	-12.2	6	0	18	- 3.3	67	91	28	33	11	1	175	229	1.5	32	15.6	SW	13	8	3	17	6.8	44
FLORIDA																																
APALACHICOLA U	4			15.6	7.8	11.5	-2.3	20.6	16	- 1.7	4	0	3			158	59	49	12	3	0	0			15.6	S	13	7	6	15	6.8	45
DAYTONA BEACH	9	1019.3	1020.8	20.6	10.0	15.1	-0.8	28.9	16	- 3.3	6	0	2	10.0	73	142	72	48	9	1	0	0	0.6	5	13.0	27	13	6	5	17	7.0	
FORT MYERS	5	1019.6	1019.9	23.9	12.8	18.4	0.0	30.0	27	1.7	6	0	0	14.4	82	27	- 29	14	5	0	0	0	1.2	8	10.3	18	28+	5	11	12	6.4	
JACKSONVILLE	6	1020.0	1020.9	18.3	7.2	12.7	-1.5	27.2	16	- 3.9	6	0	6	8.3	78	152	78	42	11	1	0	0	0.7	35	17.9	NE	23	5	8	15	6.8	57
KEY WEST	1	1018.3	1018.8	22.8	18.3	20.6	-0.7	26.7	18	9.4	6	0	0	16.7	80	77	27	65	5	1	0	0	3.1	8	13.9	SE	10	7	9	12	6.2	71
LAKELAND U	65			21.7	11.1	16.2	-1.1	28.3	16	0.6	5	0	0			69	6	36	10		0	0						6	6	16	6.8	74
MIAMI	2	1019.0	1019.4	24.4	16.7	20.5	0.6	27.8	14	4.4	5	0	0	15.0	73	167	119	146	3	0	0	0	2.0	11	12.5	11	9	7	9	12	6.3	
ORLANDO	33	1016.3	1020.4	22.2	11.1	16.8	0.2	29.4	16	1.7	5	0	0	11.1	73	160	99	49	10	1	0	0	0.4	8	13.0	25	13	6	6	16	7.0	
PENSACOLA	34	1016.3	1020.4	16.1	6.7	11.4	-2.0	20.6	22+	- 3.3	4+	0	5	6.7	76	296	188	79	13		0	0	1.0	9	17.0	SE	11					47
TALLAHASSEE	17	1018.6	1020.9	17.8	5.6	11.4	-1.7	24.4	16	- 7.8	6	0	9	6.1	76	253	147	76	11	1	0	0	0.4	5	15.6	15	13	7	4	17	6.7	
TAMPA	6	1019.6	1019.9	21.1	10.0	15.5	-1.6	26.1	15+	- 2.8	5	0	2	10.0	74	78	6	23	9	0	0	0	1.0	7	11.2	7	23+	7	4	17	6.8	67
WEST PALM BEACH	5	1019.0	1019.6	23.9	15.0	19.4	-0.3	28.3	18	3.3	5	0	0	13.9	74	175	115	119	5	1	0	0	2.0	12	14.8	10	9	5	8	15	6.9	
GEORGIA																																
ATHENS	244	991.5	1021.3	12.2	2.2	7.2	-0.7	21.7	8	- 8.3	5	0	9	1.1	71	191	72	71	12	0	33	25	0.4	34	18.8	18	13	8	6	14	6.3	
ATLANTA	308	983.1	1020.9	11.1	1.7	6.2	-1.6	18.3	10+	- 8.9	5	0	12	0.6	72	179	64	100	10	0	T	T	0.4	1	13.9	SE	10	7	5	16	6.7	43
AUGUSTA	44	1015.6	1021.1	15.0	2.2	8.4	-1.2	22.8	10	- 9.4	6	0	9	2.2	71	136	47	33	12	0	T	0	0.2	27	15.6	21	13	9	4	15	6.1	
COLUMBUS	117			14.4	2.8	8.7	-1.1	21.7	10	- 7.2	6	0	9	2.8	71	215	97	87	11		T	0	0.6	5	15.6	25	13	8	3	17	6.9	
MACON	108	1008.1	1021.3	14.4	2.8	8.4	-2.2	22.8	10	- 8.9	6	0	9	2.8	73	199	90	52	12	2	T	0	0.6	35	25.0	SW	13	8	5	15	6.4	49
ROME	194			12.2	0.0	6.1	-0.8	20.6	8	-10.0	6+	0	16			195	61	64	10		T	25										
SAVANNAH	14	1019.3	1021.2	17.2	3.9	10.7	-1.1	28.9	16	- 7.2	6	0	9	4.4	73	93	- 1	41	11	1	0	0	0.1	25	17.9	SW	13	10	7	11	5.6	55
HAWAII																																
HILO	9	1013.2	1014.5	25.0	17.2	21.1	-0.4	29.4	28	15.6	3	0	0	17.2	81	194	-135	72	19	0	0	0	0.5	31	15.6	16	28	2	5	21	8.4	21
HONOLULU	2	1013.9	1014.3	26.1	18.3	22.2	-0.2	28.9	13	13.9	21	0	0	16.1	72	94	10	40	13	0	0	0	1.6	5	14.3	SE	8	6	4	18	7.4	46
KAHULUI	15	1012.2		24.4	17.8	20.9	-1.1	27.8	12	13.3	22+	0	0			109	45	27	19	1	0	0	2.3	5	13.4	SW	7	6	3	19	7.4	50
LIHUE	31	1009.8	1015.1	23.3	16.7	19.8	-1.7	25.6	28+	13.3	21	0	0	16.1	82	164	28	45	16	0	0	0	1.9	2	10.7	SW	3	4	9	15	7.3	39
IDAHO																																
BOISE	865	917.4	1019.7	6.1	- 4.4	0.7	-0.7	11.7	22	-16.1	15	0	23	- 3.9	73	19	- 15	9	8	0	180	76	1.3	15	13.0	SE	22	4	5	19	7.6	50
IDAHO FALLS 42NW R	1460			0.0	-15.6	- 7.7	-0.4	6.1	21	-23.9	9	0	28			8	- 5	5	4						13.9	SW	28					
IDAHO FALLS 46W R	1503			0.6	-14.4	- 6.9	-0.4	6.7	20	-24.4	10	0	28			16	- 4	8	8		191	102	0.5	24								
LEWISTON	431			7.8	- 1.1	3.3	1.1	13.9	22	- 7.8	15	0	18			18	- 7	5	9		102	76						3	5	20	8.0	
POCATELLO	1358	863.2	1020.2	2.2	- 8.3	- 3.1	-0.4	7.2	23	-17.8	10+	0	27	- 7.2	75	13	- 10	4	7	0	221	127	2.9	21	12.5	SW	27+	4	4	20	7.9	56
ILLINOIS																																
CAIRO U	96			6.7	0.0	3.2	-1.6	20.0	9	- 8.3	5	0	18			92	- 1	52	10		48	51			13.9	SE	9	5	5	18	7.5	36
CHICAGO O HARE	201	996.3	1021.7	1.7	- 8.3	- 3.3	-0.1	12.8	9	-20.6	20	0	25	- 7.8	69	44	6	21	9	0	109	102	0.7	30	13.0	27	16	6	8	14	6.8	
CHICAGO MIDWAY	185	998.3		1.7	- 6.1	- 2.3	0.1	12.8	9	-17.8	20	0	24	- 7.8	67	45	5	17	10	0	152	127	0.7	28	14.8	W	16	5	8	15	7.0	38
MOLINE	177	999.3	1021.7	1.1	- 8.9	- 4.0	-0.5	11.1	9+	-17.8	5+	0	26	- 8.9	69	23	- 12	14	6	0	20	51	0.4	32	14.8	NW	16	8	8	12	6.1	54
PEORIA	199	997.0	1022.0	2.2	- 7.2	- 2.3	-0.3	15.0	8	-16.1	20+	0	24	- 7.2	72	66	23	44	5	0	51	25	0.4	34	14.3	S	9	8	8	12	6.1	58
ROCKFORD	221	993.2	1021.5	0.6	- 9.4	- 4.5	-0.3	8.9	9	-19.4	20	0	26	- 9.4	68	52	15	44	6	0	8	178	0.8	32	12.1	29	16	7	7	14	6.4	
SPRINGFIELD	179	998.6	1021.5	3.3	- 6.1	- 1.4	-1.2	14.4	8	-18.9	5+	0	23	- 6.1	72	56	10	34	6	0	218	127	0.2	34	13.4	S	9	7	8	13	6.3	55
INDIANA																																
EVANSVILLE	116	1007.1	1021.7	6.1	- 5.0	0.4	-2.7	18.9	9	-24.4	5	0	24	- 4.4	71	119	38	48	12	0	259	229	0.4	3	11.6	SW	10	5	4	19	7.6	35
FORT WAYNE	241	990.2	1021.4	2.2	- 6.7	- 2.3	-0.3	15.0	9	-17.8	5	0	23	- 6.1	76	45	- 12	25	10	0	127	76	0.7	27	13.4	W	16	5	5	18	7.4	48
INDIANAPOLIS	241	991.2	1021.5	3.3	- 5.0	- 0.9	-0.4	15.6	9	-20.6	5	0	22	- 5.6	71	74	16	40	9	0	160	127	0.2	7	12.1	S	10+	4	5	19	7.6	40
SOUTH BEND	236	992.2	1021.4	2.2	- 6.1	- 2.2	0.7	13.3	9	-18.3	5	0	23	- 7.2	67	44	- 4	18	14	0	272	279	0.6	23	16.1	28	16	3	8	17	7.6	
IOWA																																
BURLINGTON	212			2.8	- 7.2	- 2.3	0.1	12.2	8	-16.7	4	0	24	- 7.8	68	21	- 14		6	0	T		0.8	35	10.3	32	16+	9	10	9	5.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	C.	C.	C.	°C.		C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
IOWA																																
DES MOINES	286	985.8	1022.0	1.7	-10.0	- 4.1	0.7	14.4	8	-18.9	20+	0	26	- 8.9	74	6	- 22	4	3	2	13	51	0.6	36	15.6	NW	16	9	8	11	5.6	69
DUBUQUE	325			- 0.6	-11.1	- 5.8	-0.2	10.6	9	-21.7	20	0	26			57	21	37	6		38	178						8	4	16	6.5	
SIOUX CITY	334	980.4	1021.9	1.1	-10.0	- 4.5	0.9	13.9	28	-20.6	2	0	27	-10.6	67	30	7	26	5	1	23	76	0.4	2	12.1	NW	16+	8	10	10	6.1	72
WATERLOO	265	988.5	1021.9	0.0	-12.2	- 5.9	-0.1	11.7	9+	-22.8	4	0	26	-10.6	71	37	14	30	5	1	15	51	0.5	33	11.2	5	18+	8	7	13	6.1	
KANSAS																																
CONCORDIA	448	965.5	1020.3	5.6	- 7.2	- 0.9	-0.7	14.4	8	-19.4	2	0	26	- 6.7	70	41	18	31	4	1	43	51	0.4	21	15.2	SE	8	10	10	8	4.9	72
DODGE CITY	787	925.5	1019.3	5.0	- 6.7	- 0.6	-2.3	15.0	25	-17.8	2	0	25	- 5.6	75	11	- 7	6	5	1	28	76	0.2	26	14.8	N	13	8	11	9	5.8	72
GOODLAND	1111	887.9	1018.9	3.3	- 8.9	- 2.8	-2.2	11.1	28+	-20.6	1	0	28	- 7.2	76	6	- 7	3	6	0	61	102	1.5	23	13.9	33	15	7	7	14	6.3	
TOPEKA	267	988.2	1021.1	6.7	- 6.7	- 0.1	-0.7	17.8	8	-16.7	2	0	24	- 6.7	65	14	- 13	10	6	0	15	T	0.4	1	11.6	SW	17+	13	7	8	4.5	67
WICHITA	403	970.9	1020.3	6.7	- 5.0	0.9	-1.5	16.1	25	-17.8	2	0	23	- 4.4	73	37	13	26	6	1	20	25	0.4	7	17.9	S	8	12	5	11	5.0	64
KENTUCKY																																
COVINGTON	265	988.5	1021.2	3.9	- 4.4	- 0.3	-0.9	15.6	9	-21.1	5	0	21	- 4.4	76	95	21	32	8	0	241	330	0.0	24	12.1	36	13	3	2	23	8.1	
LEXINGTON	294	985.1	1021.6	4.4	- 3.3	0.7	-1.4	18.3	9	-17.8	5	0	19	- 3.3	75	92	6	39	12	0	165	279	0.6	15	13.4	18	10	3	5	20	8.0	
LOUISVILLE	144	1003.4	1021.5	5.0	- 2.8	1.2	-0.9	17.8	9	-20.0	5	0	20	- 3.3	75	127	44	43	11	0	290	305	0.3	36	13.4	N	13	3	8	17	7.5	44
LOUISIANA																																
ALEXANDRIA	28	1015.9	1020.4	14.4	2.8	8.7	-2.9	23.3	7	- 5.6	3	0	10	4.4	77	201	74	132	7	2	0	0	1.1	3	10.3	19	1	10	4	14	6.0	
BATON ROUGE	20	1017.3	1019.9	15.6	5.0	10.2	-2.8	23.9	7	- 4.4	3	0	6	5.0	73	369	256	101	12	4	0	0	0.9	4	11.2	19	10	7	6	15	6.7	
LAKE CHARLES	4	1018.6	1019.7	16.7	6.1	11.4	-2.1	23.3	7	- 1.7	3	0	4	6.7	76	157	42	46	11	2	0	0	1.6	6	13.4	16	9	9	5	14	6.1	
NEW ORLEANS	1	1018.6	1019.4	16.7	5.6	11.1	-2.8	24.4	8	- 5.0	5+	0	6	6.7	76	257	155	63	12	2	0	0	1.3	4	17.4	15	12	7	3	18	6.9	
SHREVEPORT	77	1010.5	1019.9	13.9	3.3	8.6	-1.6	23.9	7	- 4.4	3	0	11	2.8	70	88	- 16	58	7	3	33	25	0.4	5	15.6	33	9	9	6	13	6.1	51
MAINE																																
CARIBOU	190			- 3.3	-15.0	- 9.3	1.6	7.8	11	-35.0	20	0	27			38	- 13	22	8		531	813						4	9	15	7.1	
PORTLAND	19	1015.9	1018.4	0.6	-10.6	- 5.2	-0.1	11.1	11	-24.4	20	0	27	-10.6	66	87	- 9	41	7	0	541	711	1.6	30	12.5	NW	17	8	8	12	5.8	71
MARYLAND																																
BALTIMORE	45	1016.3	1022.0	3.9	- 5.6	- 0.8	-2.9	12.8	13	-16.7	6	0	23	- 6.1	69	108	34	44	8	1	290	356	1.6	30	19.7	S	13	8	5	15	6.5	48
MASSACHUSETTS																																
BLUE HILL OBS R	192			2.2	- 6.1	- 2.1	0.4	11.1	13+	-20.0	20	0	25			115	21	48	11		521	457			20.6	ENE	25					48
BOSTON	5	1018.0	1019.1	3.3	- 3.9	- 0.4	0.6	12.2	11	-16.1	20	0	22	- 7.2	64	88	4	42	10	0	307	229	3.0	30	13.9	NE	25	8	4	16	6.4	56
NANTUCKET	13	1018.3	1018.7	3.3	- 5.0	- 0.8	-0.5	11.7	12	-12.8	20	0	26	- 4.4	79	45	- 51	21	11	0	48	25	2.0	29	15.2	E	25+	6	6	16	6.8	57
PITTSFIELD	357			0.6	-10.6	- 5.1	0.3	10.0	11	-24.4	20	0	27			71	8	32	15		386	533										
WORCESTER	301	980.7	1019.0	0.6	- 7.8	- 3.4	0.5	10.0	11	-22.2	20	0	26	- 9.4	67	103	29	47	11	0	500	965	3.0	29	15.6	30	14	7	5	16	6.5	
MICHIGAN																																
ALPENA	210	994.2	1020.7	- 0.6	-10.0	- 5.1	2.3	11.1	9	-22.8	18	0	26	-10.6	69	30	- 11	14	11	0	135	254	1.2	28	13.4	NW	20	3	6	19	7.8	35
DETROIT	189	998.0	1021.5	1.1	- 5.6	- 2.1	0.6	13.3	9	-17.2	20	0	23	- 6.7	72	35	- 18	17	10	0	64	102	1.1	29	17.4	W	16	1	7	20	8.1	34
DETROIT M WAYNE CO	193	996.3	1021.4	1.7	- 6.7	- 2.6	0.2	14.4	9	-18.9	20	0	26	- 7.2	72	42	- 8	24	8	0	99	76	0.8	28				2	7	19	7.8	
DETROIT WILLOW RUN	217	992.2	1021.7	1.1	- 7.2	- 3.0	-0.4	15.0	9	-18.3	20	0	27	- 7.8	69	21	- 29	10	6	0	41	51	1.1	28	12.5	26	16	2	8	18	7.7	
FLINT	235	992.2	1021.2	0.6	- 7.8	- 3.6	1.8	12.2	9	-22.8	20	0	25	- 8.3	71	30	- 14	15	12	0	236	127	1.3	25	11.2	24	16	3	8	17	7.6	
GRAND RAPIDS	239	990.9	1021.2	1.1	- 8.3	- 3.6	0.7	12.2	10	-25.0	20	0	25	- 7.2	76	58	13	26	11	0	381	203	0.8	26	15.6	W	16	4	4	20	7.7	40
HOUGHTON LAKE	351	977.0	1021.0	- 1.1	-10.0	- 5.7		8.3	10	-25.6	19	0	27	- 8.9	79	26		10	13	0	185	178	1.1	26	10.3	28	16	4	4	20	7.7	
LANSING	256	988.5	1021.5	0.0	- 9.4	- 4.9	-0.6	12.2	10	-28.3	20	0	25	- 7.2	81	39	- 11	19	10	0	241	152	1.1	24	16.1	W	16	3	9	16	7.4	48
MARQUETTE U	206			- 2.2	- 9.4	- 6.1	0.8	7.8	28	-25.0	18	0	27			18	- 24	8	9		330	406			13.0	S	8	6	3	19	7.3	49
MUSKEGON	191	997.6	1021.5	0.0	- 7.8	- 3.8	-0.3	12.2	10	-21.7	20	0	26	- 7.2	75	38	- 8	13	15	0	495	432	0.4	31	17.0	17	10	3	3	22	8.1	
SAULT STE MARIE	220	992.6	1020.4	- 3.3	-11.1	- 7.2	1.8	6.1	10	-28.9	18	0	26	-10.0	80	45	7	20	13	0	292	406	0.4	33	15.6	26	17	4	4	20	7.9	38
MINNESOTA																																
DULUTH	435	967.5	1021.9	- 5.6	-16.1	-10.9	0.8	6.7	9	-33.3	19	0	27	-17.2	62	33	9	25	9	0	109	457	1.5	27	14.3	E	8+	9	8	11	5.8	61
INTERNATIONAL FALLS	359	976.6	1022.7	- 8.3	-23.3	-15.9	-2.1	5.0	28+	-42.2	20+	0	28	-21.1	65	19	1	12	5	0	137	813	1.4	24	12.5	21	12	12	6	10	4.8	
MINNEAPOLIS	254	990.5	1022.8	- 3.9	-13.9	- 8.7	0.3	11.1	9	-26.1	17	0	25	-13.9	67	39	20	28	9	1	173	152	0.6	28	12.5	SW	9	9	6	13	5.9	66
ROCHESTER	395	972.2	1022.5	- 3.9	-15.0	- 9.3	-0.6	9.4	9	-29.4	20	0	26	-13.9	72	27	7	20	9	1	185	152	1.1	26	13.4	18	9	8	7	13	6.3	
ST CLOUD	315	982.4	1022.4	- 5.6	-16.7	-10.9	-0.6	8.9	9	-28.9	20+	0	27		67	30	9	24	6		53	127						9	8	11	5.4	
MISSISSIPPI																																
JACKSON	94	1008.1	1020.4	14.4	1.7	7.9	-2.3	23.9	7	- 7.8	5	0	10	3.3	77	199	73	61	13	1	0	0	0.6	3	17.4	SE	9	8	3	17	6.5	48
MERIDIAN	88	1009.1	1020.5	15.0	2.2	8.6	-1.8	22.2	7	- 7.8	5+	0	12	3.9	76	268	138	75	11	1	0	0	0.2	5	13.0	16	9	6	5	17	6.8	
VICKSBURG U	71			12.8	4.4	8.6	-2.4	23.3	7	- 4.4	3	0	6			348	213	219	11		T				15.6	SE	9	9	5	14	5.9	48

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	991.5	1020.8	5.0	-5.0	0.1	-0.9	17.8	8	-15.6	2	0	21	-5.6	70	54	8	18	10	1	229	152	0.4	10	13.0	NW	16	11	5	12	5.6	69
KANSAS CITY	226	992.9	1020.9	6.7	-4.4	0.9	-1.2	19.4	8	-14.4	2	0	22	-5.6	66	19	-12	12	7	0	94	76	0.2	5	11.2	S	8	13	5	10	4.9	71
SAINT JOSEPH	247			7.8	-6.7	0.6	1.1	17.8	8	-16.7	2	0	24	-7.2	62	6	-21	2	4	0	30	25	0.5	1	12.5	15	8	14	7	7	4.3	
ST LOUIS	163	1000.7	1021.7	5.0	-5.0	0.1	-1.4	16.7	8	-15.0	4	0	23	-5.0	72	105	53	58	7	0	180	203	0.4	35	13.0	W	25	7	5	16	6.6	53
SPRINGFIELD	386	973.9	1020.6	7.2	-4.4	1.2	-1.6	18.9	8	-17.8	2	0	20	-3.9	74	128	74	95	10	1	173	102	0.7	12	15.6	SE	8	7	7	14	6.4	51
MONTANA																																
BILLINGS	1087	888.9	1016.7	2.2	-8.9	-3.5	0.0	11.1	24	-21.1	15	0	28	-10.0	64	8	-7	4	7	0	91	76	3.0	25	15.2	NW	27	2	10	16	7.6	64
GLASGOW	696			-8.3	-18.9	-13.4	-3.2	3.3	27	-26.7	15	0	28			4	-7	2	3		64	178						5	7	16	7.0	
GREAT FALLS	1116	885.2	1017.0	2.2	-7.8	-2.7	1.8	10.6	23	-23.3	15	0	26	-7.8	70	13	-6	5	8	0	147	76	3.3	23	19.2	SW	11	3	7	18	7.5	64
HAVRE	787			-3.9	-16.1	-10.0	-1.3	6.1	5	-25.0	19	0	28			3	-8	1	4		61	152			17.0	NW	27+	5	6	17	7.3	74
HELENA	1167	878.8	1018.0	3.3	-8.9	-2.8	2.1	7.2	26+	-20.6	15	0	28	-7.8	70	8	-3	3	7	0	130	51	1.6	27	13.0	W	27	2	5	21	8.1	52
KALISPELL	904	910.3	1017.9	0.6	-10.0	-4.5	-0.3	5.6	5	-23.9	15	0	28	-6.1	86	26	1	8	14	0	447	432	1.2	17	13.0	3	12	0	5	23	8.8	
MILES CITY	801	921.8	1019.1	-4.4	-16.1	-10.2	-3.7	5.0	27	-26.7	15	0	28	-13.3	78	13	4		8	0	150		0.3	33								
MISSOULA	972	903.8	1019.0	1.7	-7.8	-3.1	0.8	5.6	26+	-16.7	10	0	28	-6.1	79	24	2	7	14	0	472	178	0.4	30	9.8	SW	27	2	2	24	8.7	36
NEBRASKA																																
GRAND ISLAND	561	951.9	1020.9	3.3	-10.0	-3.4	-0.2	13.3	28	-21.7	2	0	26	-8.3	72	20	1	13	7	1	25	51	0.5	26	10.3	36	18	8	6	14	6.3	
LINCOLN U	351			3.9	-8.3	-2.1	-0.2	15.6	6	-18.9	2	0	27			28	0	23	3		38	25			16.5	S	8	10	7	11	5.6	70
NORFOLK	471			1.1	-11.7	-5.2	-0.1	12.8	28+	-23.3	2	0	26			39	19	34	6		38	102						7	9	12	6.0	
NORTH PLATTE	846	917.7	1019.7	0.0	-11.7	-5.9	-3.6	10.6	28	-23.9	2	0	28	-9.4	79	4	-9	3	4	0	43	127	0.4	28	13.4	N	15	6	6	16	6.9	48
OMAHA	298	984.8	1021.5	5.0	-8.3	-1.8	1.3	16.7	8	-18.3	2	0	25	-8.3	65	10	-14	6	4	0	33	T	0.3	3	13.0	NW	15+	11	8	9	5.5	75
SCOTTSBLUFF	1206	877.8	1018.8	1.7	-12.2	-5.3	-3.7	10.6	24	-25.0	16	0	28	-8.9	79	5	-5	4	6	0	69	76	0.9	35	13.0	30	28	7	9	12	6.0	
VALENTINE	789			-1.7	-15.0	-8.4	-3.4	6.7	28+	-25.6	15	0	28			10	-4	6	5		114	152			12.1	NE	12	7	7	14	6.5	64
NEVADA																																
ELKO	1539	845.2	1021.3	2.8	-11.7	-4.4	-2.2	8.3	28	-25.0	11	0	28	-8.9	73	9	-13	4	8	0	183	76	0.4	27	11.2	26	6	3	6	19	7.8	
ELY	1906	807.3	1019.3	2.8	-13.3	-5.3	-2.3	7.2	18+	-25.0	11	0	28	-12.2	59	8	-10	6	5	0	107	76	1.4	21	13.9	NW	12	5	6	17	7.2	69
LAS VEGAS	659	940.4	1017.9	14.4	1.1	7.7	-1.1	21.1	19	-3.3	16+	0	11	-6.7	39	2	-9	1	3	0	T	0	1.1	32	19.7	N	12	9	8	11	5.4	81
RENO	1342	866.2	1018.8	10.0	-7.2	1.6	-0.4	17.8	18	-12.2	13	0	27	-7.8	54	5	-21	3	4	0	36	25	0.4	27	16.5	NW	12	7	7	14	6.6	62
WINNEMUCCA	1310	868.3	1019.5	6.7	-7.2	-0.3	-0.4	13.3	4	-17.2	8	0	26	-6.7	66	15	-9	8	5	0	188	102	0.2	20	14.3	N	12	4	5	19	7.8	40
NEW HAMPSHIRE																																
CONCORD	104	1006.1	1019.5	2.2	-12.8	-5.3	-0.1	13.9	11	-28.3	20	0	26	-11.1	64	54	-9	29	8	0	450	711	1.9	31	15.2	W	17	8	7	13	6.1	66
MT WASHINGTON OBS	1909			-10.0	-18.9	-14.4	0.3	1.1	11	-37.8	21	0	28			163	30	80	14	0	1308	381			48.3Y	W	20+	5	5	18	7.4	33
NEW JERSEY																																
ATLANTIC CITY	20	1019.3	1021.6	4.4	-6.1	-1.1	-2.6	15.0	11	-17.8	20+	0	20	-5.6	73	131	52	66	11	0	203	279	2.1	31	16.5	18	13	7	6	15	6.6	56
ATLANTIC CITY U	3			4.4	-2.2	1.3	-0.8	12.2	12	-11.1	20	0	19			123	37	61	12						19.7	S	13					
NEWARK	3	1020.0	1021.0	4.4	-3.3	0.7	-0.3	13.3	12	-13.9	20	0	21	-5.6	64	112	41	48	10	0	218	203	2.2	31	12.5	29	21	9	7	12	6.2	
TRENTON U	17			4.4	-3.3	0.6	-0.2	14.4	13	-13.9	20	0	21			131	65	62	10	0	251	279			13.4	NW	17	10	5	13	5.9	61
NEW MEXICO																																
ALBUQUERQUE	1618	836.8	1017.6	7.2	-6.1	0.7	-3.7	14.4	6	-12.2	14	0	26	-10.0	50	8	-2	5	3	0	25	T	0.8	34	13.9	S	8	14	7	7	4.1	76
CLAYTON	1515			7.8	-7.2	0.3	-1.9	15.6	5	-14.4	14	0	28			2	-8	1	3		38	25						8	14	6	5.4	
RATON	1944			8.3	-9.4	-0.7	-1.1	16.1	6	-18.3	16	0	27			7	-4	5	4		71	51						12	11	5	4.5	
ROSWELL	1102			13.9	-6.1	3.6	-2.0	20.6	19+	-13.3	24+	0	26			1	-10	1	1	0	T	T			17.4	NW	27	14	5	9	4.5	69
SILVER CITY	1638			9.4	-4.4	2.5	-3.8	18.3	20	-10.6	16	0	26			5	-13	3	3		10	229						17	5	6	3.4	
NEW YORK																																
ALBANY	84	1009.8	1021.0	1.1	-10.6	-4.8	-0.2	12.2	11	-26.7	20	0	27	-8.3	76	69	13	28	13	0	622	381	1.9	30	15.2	NW	17	3	9	16	7.3	42
BINGHAMTON	485	959.4	1020.6	-1.7	-8.3	-5.1	-0.6	8.9	11	-20.6	20+	0	27	-8.3	79	92	37	55	15	0	427	584	1.8	28	14.8	W	14	2	5	21	8.4	47
BUFFALO	215	994.2	1020.9	-0.6	-7.2	-3.9	0.4	12.2	9	-17.8	20	0	25	-6.1	84	54	-15	19	19	0	386	711	2.4	25	14.3	W	20+	1	6	21	8.3	33
NEW YORK U	40	1017.3	1020.5	5.0	-1.7	1.7	0.9	14.4	12	-13.3	20	0	21	-5.6	63	126	54	61	8	0	249	203	2.0	30	13.4	NW	17	9	7	12	5.9	50
J.F. KENNEDY	5	1020.0	1020.8	5.0	-2.8	1.0	1.2	14.4	12	-13.3	20	0	21	-5.0	68	104	29	50	7	0	140	102	2.3	32	13.9	10	13	7	8	13	6.1	
NEW YORK LA GUARDIA	3	1019.3	1020.9	3.9	-1.1	1.4	0.5	12.8	11	-11.7	20	0	17	-5.6	62	109	30	56	9	0	249	127	2.2	32	13.0	NE	13	10	7	11	6.0	
ROCHESTER	167	1000.7	1021.8	0.6	-7.8	-3.6	0.3	10.0	11+	-22.2	7	0	25	-7.2	74	64	-1	20	14	0	533	864	2.2	25	14.3	W	20+	2	9	17	7.9	40
SYRACUSE	125	1005.1	1020.7	0.0	-10.0	-4.9	-0.7	10.0	11+	-29.4	20	0	26	-8.3	75	75	-4	30	18	0	686	1245	1.6	27	15.2	S	10	2	8	18	8.1	35
NORTH CAROLINA																																
ASHEVILLE	652	942.8	1020.7	7.2	-2.8	2.3	-1.5	15.0	13	-14.4	6	0	21	-1.7	80	167	64	81	11	0	157	178	1.0	35	15.6	18	13+	6	8	14	6.6	42
CAPE HATTERAS R	2	1021.0	1021.5	11.1	3.3	7.0	-1.1	21.1	16	-4.4	22	0	9	2.8	77	108	8	35	11	1	0	0	1.2	35	25.9	SSW	13	8	3	17	6.6	41
CHARLOTTE	224	993.2	1021.2	10.0	1.7	5.7	-1.1	17.2	13+	-8.3	5	0	13	-1.1	66	142	52	35	11	1	28	25	0.4	2	16.5	SW	13	8	8	12	6.3	51

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

FEBRUARY 1966

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Temperature: Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm. or more	Precipitation: No of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	988.8	1021.5	8.9	- 1.1	4.0	-1.0	18.3	13	-13.3	5	0	18	- 1.1	71	138	54	43	10	0	79	330	0.6	33	17.9	SW	13	7	5	16	6.6	47
RALEIGH	132	1005.1	1021.4	10.6	1.1	5.7	-0.4	20.0	13+	- 9.4	6	0	15	- 2.2	61	121	39	41	8	0	T	178	0.5	32	17.9	22	13	9	3	16	6.4	48
WILMINGTON	9	1020.3	1021.7	14.4	3.3	8.9	-0.4	25.0	16	- 4.4	6	0	9	2.8	70	141	54	68	12	0	0	0	0.6	32	21.0	SW	13	8	6	14	6.1	50
NORTH DAKOTA																																
BISMARCK	502	958.7	1021.8	- 5.6	-18.3	-12.0	-1.7	6.1	6	-30.0	19+	0	28	-16.7	66	10	- 1	9	2	0	137	127	0.3	14	15.6	NW	12	5	10	13	6.8	57
FARGO	273	988.2	1023.1	- 8.9	-20.0	-14.3	-2.5	2.8	28	-35.0	18	0	28	-18.3	69	7	- 6	5	5	0	28	102	0.4	26	14.3	N	12	6	9	13	6.1	72
WILLISTON	579			- 5.6	-19.4	-12.4	-1.6	5.0	27	-31.7	16+	0	28			8	- 4	4	4		84	152			15.2	NW	12	5	10	13	6.5	56
OHIO																																
AKRON	368	975.3	1021.3	1.7	- 6.1	- 2.0	-0.2	11.7	11+	-15.6	20+	0	23	- 5.6	79	56	- 3	20	15	0	173	229	0.8	25	11.2	31	16	2	4	22	8.4	
CINCINNATI OBS	232			4.4	- 3.3	0.5	-1.2	16.7	9	-14.4	5	0	20			81	9	26	8		198	279			10.7	N	13					34
CLEVELAND	237	991.2	1021.5	0.6	- 6.7	- 2.9	-0.5	12.8	9	-16.1	1	0	25	- 5.6	82	59	- 1	21	15	0	257	203	1.3	23	11.6	S	10	1	3	24	8.6	38
COLUMBUS	247	990.9	1022.1	2.2	- 5.0	- 1.4	-0.9	14.4	9	-18.9	1	0	22	- 5.6	73	66	7	19	15	0	170	203	0.4	31	12.5	N	13	2	3	23	8.5	33
DAYTON	305	984.1	1021.6	2.8	- 5.0	- 0.9	-0.3	15.6	9	-20.0	5	0	23	- 5.0	76	67	8	33	7	0	213	254	0.6	24	13.4	N	13+	3	4	21	8.2	37
MANSFIELD	395			1.1	- 6.1	- 2.7	-0.4	11.7	9	-16.1	20	0	24			55	- 11	28	12	0	147	127						2	2	24	8.7	
TOLEDO	206	995.6	1022.0	1.7	- 6.7	- 2.8	-0.2	16.7	9	-18.3	20	0	24	- 6.7	74	37	- 11	16	11	0	114	51	0.8	27	13.9	W	16	2	6	20	8.1	45
YOUNGSTOWN	359	977.0	1021.2	1.1	- 6.1	- 2.6	-0.2	10.6	11+	-16.1	20	0	23	- 6.1	78	49	- 14	21	12	0	170	254	0.9	25	10.3	29	16	1	3	24	8.8	
OKLAHOMA																																
OKLAHOMA CITY	390	971.9	1019.7	9.4	- 2.2	3.7	-1.5	20.0	7	-10.6	2	0	21	- 1.7	74	61	26	34	7	1	58	51	0.7	1	13.0	N	1	11	4	13	5.5	56
TULSA	198	995.3	1020.3	10.6	- 2.8	3.9	-0.9	21.1	7	-13.3	2	0	22	- 2.8	69	60	15	25	10	1	130	51	0.1	10	15.2	S	8	10	6	12	5.5	65
OREGON																																
ASTORIA	2	1017.3	1017.9	9.4	2.2	5.9	-0.1	16.7	21	- 2.8	10	0	7	3.3	83	140	-111	25	19	0	T	0	1.3	20	14.3	31	8	1	3	24	9.0	
BURNS U	1265	872.7	1019.1	4.4	- 7.2	- 1.4	-0.2	10.0	17	-18.3	13	0	28	- 6.1	72	19	- 14	6	10		203	102	0.8	32				3	5	20	8.0	
EUGENE	109	1005.8	1019.5	10.0	1.1	5.6	-0.3	15.0	20	- 2.2	16	0	9	2.8	86	46	- 80	11	13	0	8	T	1.9	20	13.0	23	28	2	4	22	8.5	
MEACHAM	1234			1.7	- 4.4	- 1.4	0.2	8.3	18	-12.2	15	0	27			90	- 11	25	14		902	914						2	2	24	8.7	
MEDFORD	396	971.6	1020.2	10.6	- 1.7	4.4	-0.1	17.2	22	- 6.7	13	0	21	- 1.1	73	9	- 52	4	10	0	T	T	0.2	16	14.3	14	22	1	10	17	8.0	
PENDLETON	452	963.8	1018.6	8.3	0.0	4.3	1.3	13.9	21	- 3.9	15	0	13	- 1.7	69	21	- 9	4	12	1	41	T	1.6	25	14.3	27	14	2	5	21	8.6	
PORTLAND	6	1017.6	1018.9	10.0	1.7	6.0	0.4	15.6	21	- 3.3	15	0	8	2.2	78	43	- 64	10	14	0	T	T	2.1	17	14.8	SE	22	3	1	24	8.7	41
SALEM	60	1011.5	1018.9	10.0	- 0.6	4.8	-0.7	15.6	21	- 5.6	15	0	14	1.7	83	57	- 78	11	18	0	5	0	2.4	19	15.6	19	5	3	4	21	8.1	
SEXTON SUMMIT R	1169	884.2	1019.8	3.9	- 2.2	0.9	-1.3	11.1	16	- 6.1	13	0	21			35	- 69	11	16		254	305			15.6	17	22	3	7	18	7.6	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.8	0.4	32.8	15	23.3	5	9	0			133	79	54	12		0	0						1	10	17	7.8	
ENIWETOK	4	1010.2	1010.8	29.4	24.4	27.1	-0.1	30.6	23	22.8	14	0	0	21.7	74	24	- 23	6	13		0	0	8.0	5								
TAGUAC GUAM R	110			28.3	21.7	25.0	-0.7	29.4	17+	18.3	18+	0	0			43	- 46	10	19		0	0			12.5	E	26					67
JOHNSTON	2	1012.5	1013.2	26.1	21.7	23.9	-1.1	28.3	2+	20.0	22+	0	0	18.3	74	136	97	54	14	3	0	0	5.5	7	17.9	E	14	5	13	10	6.1	51
KOROR R	29	1007.1	1010.6	29.4	23.9	26.7	-0.1	30.6	26+	22.2	13	0	0	22.8	80	84	- 97	31	17	0	0	0	4.1	7	11.2	NE	10	0	2	26	9.7	67
KWAJALEIN	2	1008.8	1009.9	30.6	25.0	27.7	1.0	31.1	27+	23.3	28+	0	0	21.7	74	10	- 44	4	8	0	0	0	8.1	6	13.4	6	28	2	11	15	7.6	
MAJURO WB AIRPORT	3	1009.1	1009.5	29.4	25.6	27.4	0.5	30.6	3	22.8	26	0	0	22.2	75	112	-105	81	9	0	0	0	5.8	6	13.0	E	26	2	4	22	8.6	68
MARCUS ISLAND	6			25.6	19.4	22.6	0.8	27.8	18	17.2	3	0	0			20	- 49	17	6		0	0			12.5	E	21+	6	12	10	5.6	68
PONAPE R	37	1003.7	1009.3	30.0	25.0	27.4	0.5	31.1	27+	23.9	28+	0	0	22.2	75	43	-204	16	16	0	0	0	4.6	5	9.4	NE	16	0	6	22	8.8	54
TRUK MOEN ISLAND	2	1008.8	1009.3	29.4	25.0	27.4	0.3	30.6	25+	23.9	25+	0	0	22.2	76	43	-117	19	12	0	0	0	6.0	7	9.4	NE	24+	2	5	21	8.5	79
WAKE	3	1015.6	1015.9	26.7	21.7	24.3	-0.7	27.8	14+	19.4	26	0	0	17.8	69	34		16	10	0	0	0	6.5	5	15.6	5	24	8	16	4	5.1	
YAP R	19	1008.5	1010.5	29.4	23.9	26.8	-0.1	30.6	24	23.3	28+	0	0	22.8	80	33	- 85	8	19	0	0	0	5.2	4	12.5	NE	10	0	3	25	9.4	51
PENNSYLVANIA																																
ALLENTOWN	118	1006.8	1021.4	2.8	- 6.7	- 2.0	-0.4	10.0	12	-17.8	7	0	25	- 6.7	73	123	56	52	11	1	394	356	2.5	31	14.3	30	17	6	7	15	6.9	
ERIE	223	993.9	1021.7	0.0	- 6.1	- 3.0	0.1	11.7	10	-18.3	20	0	24	- 6.1	81	49	- 10	17	14	0	221	330	1.4	24	12.5	17	10	1	7	20	8.3	
HARRISBURG	103	1008.5	1021.9	3.9	- 4.4	- 0.3	-0.6	13.3	11	-12.8	6+	0	22	- 6.7	64	113	54	48	10	0	427	432	1.7	30	13.0	NW	17	4	8	16	7.2	52
PHILADELPHIA	2	1020.7	1021.5	3.9	- 4.4	- 0.3	-0.9	13.9	13	-15.6	6	0	22	- 5.0	69	109	38	50	11	1	290	229	1.7	31	17.0	W	13	7	6	15	6.5	55
PITTSBURGH	347	975.6	1021.2	2.8	- 4.4	- 0.9	0.6	13.9	11	-16.1	1	0	22	- 4.4	78	82	26	44	14	0	175	381	1.3	26	14.3	29	16	2	2	24	8.8	30
READING U	81			4.4	- 3.3	0.6	-0.2	12.2	12	-12.8	20	0	21			109	42	49	11		320	330			26.4	E	13	7	8	13	6.5	49
SCRANTON	283	985.8	1021.5	1.1	- 6.7	- 2.7	-0.6	10.0	11	-20.0	7	0	23	- 7.2	72	59	8	23	12	0	445	305	1.3	29	14.8	E	13	2	6	20	8.0	47
WILLIAMSPORT	161	1001.7	1021.6	2.8	- 6.1	- 1.7	-0.1	10.0	28	-19.4	6	0	24	- 7.8	66	116	53	52	12	0	297	508	1.5	29	10.3	27	14	4	2	22	8.1	
RHODE ISLAND																																
BLOCK ISLAND	34			2.8	- 3.3	- 0.3	0.3	10.0	13	-14.4	20	0	22			58	- 25	24	10		117	51						10	6	12	5.7	
PROVIDENCE	16	1017.3	1019.6	3.3	- 6.1	- 1.2	0.1	11.1	13+	-16.7	20	0	27	- 6.7	68	109	30	66	10	0	231	178	2.3	30	15.6	18	13	8	6	14	6.1	56

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1019.6	1021.2	15.6	3.9	9.8	-1.1	25.6	16	- 7.2	6	0	8	3.3	70	117	34	66	11	1	0	0	0.2	35	26.4Y	NW	13	9	7	12	5.8	56
CHARLESTON U	3			14.4	6.1	10.1	-1.2	23.9	16	- 2.2	5	0	4			126	48	65	12		0	0			20.1	S	13					
COLUMBIA	66	1012.9	1021.1	13.9	2.8	8.3	-0.8	21.7	8	- 8.3	6	0	9	1.7	69	115	20	41	13	0	T	0	0.4	33	17.9	20	13	11	5	12	5.7	51
GNVLE SPARTANBURG	292	985.8	1021.1	11.1	1.1	6.0	-1.3	19.4	8	- 8.3	5	0	15	0.0	70	172	69	59	11	0	86	51	0.8	1	19.7	SW	13	9	5	14	6.1	45
SOUTH DAKOTA																																
ABERDEEN	395	972.6	1022.5	- 6.1	-19.4	-12.7	-3.2	7.2	6	-31.7	18	0	28	-17.2	68	13	- 3	8	6	0	145	127	0.4	1	11.2	4	18	7	5	16	6.8	
HURON	391	972.9	1022.2	- 3.3	-15.6	- 9.4	-0.9	7.2	28	-27.2	18	0	27	-13.3	73	21	6	9	5	0	213	178	0.1	9	10.7	NW	12	7	7	14	6.6	67
RAPID CITY	965	903.2	1019.0	- 1.7	-12.8	- 7.1	-2.7	10.0	5	-23.3	18	0	28	-12.2	67	25	13	18	9	0	254	152	0.9	1	15.2	NW	12	3	6	19	8.0	51
SIOUX FALLS	432	967.8	1022.0	- 2.2	-13.9	- 8.2	-1.0	10.6	28	-26.7	4	0	27	-12.8	71	25	2	20	6	0	46	51	0.1	36	13.4	6	18	8	7	13	6.0	
TENNESSEE																																
BRISTOL	459	965.8	1021.3	7.8	- 1.1	3.3	-1.2	18.9	13	-13.9	6	0	16	- 2.2	71	89	- 2	34	13	1	8	229	0.3	28	14.8	24	13	5	2	21	7.7	
CHATTANOOGA	204	995.6	1020.9	10.6	0.0	5.2	-1.7	18.9	14	-11.1	5	0	16	0.6	78	165	29	56	11	0	T	102	0.8	35	15.2	S	10	6	4	18	7.2	38
KNOXVILLE	299	985.4	1021.4	9.4	1.1	5.3	-0.8	18.9	10+	-13.3	5	0	15	- 0.6	69	119	- 3	49	11	1	T	152	0.8	35	17.9	W	13+	4	5	19	7.6	39
MEMPHIS	78	1010.5	1021.0	10.0	1.1	5.7	-1.1	20.0	9+	- 7.8	5+	0	15	0.0	71	175	56	92	12	0	T	T	0.5	6	15.6	SE	9	8	3	17	6.5	51
NASHVILLE	180	998.6	1020.8	10.0	0.6	5.2	-0.4	20.0	9+	-12.2	5	0	15	- 0.6	71	92	- 22	32	11	0	T	51	0.3	35	16.5	S	10	4	6	18	7.8	39
OAK RIDGE	276			9.4	- 0.6	4.3	-0.8	18.9	9	-11.1	5	0	15			146	- 2	67	11		T	102						5	2	21	7.8	
TEXAS																																
ABILENE	537	955.6	1018.5	13.9	0.0	6.9	-2.2	23.9	6	- 9.4	24	0	16	- 1.7	61	10	- 18	6	5	1	38	51	0.9	22	17.0	S	7	14	5	9	4.3	73
AMARILLO	1098	890.3	1016.7	8.3	- 6.1	1.2	-4.0	15.0	7+	-13.3	1	0	25	- 6.1	68	18	2	15	4	0	10	25	1.1	23	14.3	N	13	13	4	11	4.6	72
AUSTIN	182	997.0	1019.3	15.0	3.3	9.4	-2.7	22.8	7+	- 3.9	2	0	11	2.8	68	82	17	27	9	1	152	152	1.0	2	11.6	NW	16+	11	6	11	5.4	63
BROWNSVILLE	5	1017.3	1017.8	18.3	9.4	13.7	-4.1	24.4	28+	2.2	23	0	0	10.6	84	21	- 17	11	8	0	T	0	1.2	3	15.6	N	12	4	4	20	8.1	40
CORPUS CHRISTI	12	1016.9	1018.6	17.8	7.2	12.4	-3.3	24.4	28+	0.0	4	0	1	8.3	82	29	- 14	13	8	0	0	0	2.1	6	15.2	N	14+	6	5	17	7.1	32
DALLAS	147	1002.0	1019.8	13.3	2.8	7.9	-1.8	22.2	7	- 5.6	17	0	11	1.7	68	84	19	59	7	1	56	51	0.6	17	15.2	SW	9	11	3	14	5.4	57
DEL RIO	313	981.7	1018.6	17.2	3.9	10.6	-2.9	25.6	28	- 3.3	22	0	6	2.2	62	28	6	20	5	0	56	51	0.7	8	11.2	30	27+	14	5	9	4.6	
EL PASO	1194	882.2	1016.2	12.8	- 1.1	6.1	-3.4	20.0	20+	- 7.8	17	0	18	- 7.8	40	5	- 5	4	2	0	T	T	1.0	29	16.1	W	8	17	4	7	3.6	86
FORT WORTH	164	999.0	1020.1	12.8	2.2	7.4	-2.1	21.7	7	- 6.1	3	0	12	1.1	68	72	15	47	8	2	74	51	0.3	20	16.5	22	9	11	5	12	5.3	
GALVESTON U	2			14.4	9.4	11.8	-1.9	18.3	28+	0.6	2	0	0			114	41	34	10		0	0			13.0	E	26					55
HOUSTON U	12			16.1	7.8	11.9	-2.0	21.1	9+	- 0.6	2	0	2			144	62	65	9		0	0										
HOUSTON	15	1017.3	1019.3	16.7	6.7	11.6	-1.7	22.8	7	- 1.1	4+	0	4	6.1	75	197	109	128	10	5	0	0	1.2	3	12.5	33	1	9	3	16	6.2	56
LUBBOCK	992	903.2	1016.7	12.8	- 3.3	4.7	-1.4	23.3	5	-11.7	23	0	22	- 6.1	53	2	- 13	1	2	0	10	T	0.9	23	14.3	25	9	16	2	10	4.1	
MIDLAND	869	916.7	1016.3	13.9	- 2.2	5.9	-3.1	22.8	6	-10.0	23	0	23	- 3.3	60	5	- 10	2	4	0	T	T	0.9	22	13.9	30	27	14	7	7	4.2	
PORT ARTHUR	5	1019.0	1019.5	16.7	6.1	11.6	-1.7	23.3	7	- 2.2	4	0	5	7.2	78	144	31	48	9	1	0	0	1.4	5	19.2	SE	9	11	2	15	6.0	57
SAN ANGELO	580	950.2	1018.2	15.0	0.0	7.5	-2.8	25.0	6	-10.0	24	0	15	- 1.1	61	15	- 8	12	4	1	104	102	1.3	23	13.9	19	8	15	5	8	4.0	
SAN ANTONIO	240	990.5	1019.1	16.7	3.3	9.9	-3.1	23.9	7	- 5.0	3	0	12	4.4	73	58	17	19	11	1	89	76	1.1	4	12.1	N	22	11	7	10	5.2	58
VICTORIA	32	1015.2	1019.2	16.7	6.1	11.4	-3.0	23.3	9	- 1.1	4	0	3	7.2	78	58	- 1	22	11	5	0	0	1.3	4	16.5Y	S	9	8	7	13	6.2	
WACO	152	1001.4	1019.7	13.9	1.7	7.9	-2.9	22.2	13	- 7.2	3	0	12	1.7	68	51	- 11	19	8	2	122	127	0.5	22	17.9	18	9+	13	4	11	5.0	
WICHITA FALLS	303	981.7	1019.1	12.2	- 1.1	5.6	-2.6	21.1	7	- 9.4	2	0	18	0.0	73	36	1	15	5	2	20	T	0.4	28	14.3	30	1	13	4	11	4.9	
UTAH																																
MILFORD	1533			5.0	- 8.3	- 1.7	-0.4	10.0	28+	-20.6	16	0	27			22	5	12	10		234	102						6	4	18	7.1	
SALT LAKE CITY	1286	872.3	1020.0	4.4	- 7.2	- 1.4	-1.7	10.0	28+	-19.4	13	0	27	- 6.1	70	30	0	9	10	0	460	229	1.3	14	11.6	S	14	3	5	20	7.7	65
WENDOVER	1291			5.0	- 5.0	0.0	-0.4	10.0	20	- 9.4	16+	0	28			7	- 1	4	3		15	25						6	7	15	6.9	
VERMONT																																
BURLINGTON	101	1007.5	1020.4	- 2.2	-13.3	- 7.8	0.3	10.6	11	-26.1	7	0	26	-12.2	70	63	18	34	11	0	724	559	0.5	27	15.2	NW	17	5	7	16	7.0	59
VIRGINIA																																
LYNCHBURG	279			7.2	- 2.2	2.4	-1.4	17.8	13	-12.8	3	0	18			115	47	39	10	0	160	533			14.8	SW	13	6	3	19	7.1	49
NORFOLK	7	1020.7	1021.8	7.8	- 0.6	3.7	-1.7	18.9	13	- 8.3	21	0	15	- 1.7	71	97	16	26	12	0	13	152	0.8	36	20.1	SW	13	5	5	18	7.1	41
RICHMOND	49	1015.9	1022.1	7.8	- 1.7	3.2	-1.2	20.0	11	-16.1	6	0	17	- 3.3	67	97	23	32	8	0	76	305	0.5	34	17.9	SW	13	6	6	16	7.0	50
ROANOKE	350	978.3	1021.4	5.6	- 2.2	1.7	-2.3	15.6	13	-10.0	21	0	18	- 5.0	65	121	49	53	10	0	213	381	1.7	30	12.5	31	13	7	4	17	7.0	
WASHINGTON																																
OLYMPIA	59	1010.5	1017.8	9.4	0.6	4.8	-0.2	15.6	22+	- 5.0	15	0	13	2.2	85	86	- 82	23	18	1	51	T	2.3	21	12.5	23	22	1	3	24	8.9	
SEATTLE TACOMA	122	1000.7	1017.4	10.0	3.3	6.6	1.7	18.3	21	- 1.1	15	0	5	1.1	70	59	- 49	19	18	1	T	T	1.8	18	13.0	19	11	1	5	22	8.6	35
SPOKANE	718	931.6	1017.3	3.9	- 2.8	0.4	1.6	8.9	22	- 8.3	10	0	25	- 2.8	81	13	- 35	6	8	0	41	25	1.2	21	13.4	SW	27	3	2	23	8.2	38
STAMPEDE PASS R	1206			- 1.1	- 4.4	- 2.6	0.4	3.3	22+	- 8.3	15	0	28			262	4	62	22		2197	3251						0	2	26	9.4	
TATOOSH ISLAND R	31	1012.9	1015.9	8.9	5.0	6.9	0.7	15.0	22	0.6	28	0	0	3.3	78	117	-104	30	21	0	36	25	1.7	13	21.5	SW	4	1	4	23	8.7	31
WALLA WALLA U	289			8.9	1.1	5.0	1.4	15.6	22	- 2.8	1	0	13			21	- 18	7	10		30	T			10.3	S	22	2	1	25	8.7	28
YAKIMA	321	979.0	1018.4	8.3	- 2.2	3.0	1.9	13.3	20	- 6.7	1	0	27	- 2.2	71	3	- 19	1	4	0	20	76	1.9	28	13.0	28	9	3	8	17	7.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	5	1015.6	1018.0	28.3	21.7	24.8	1.3	30.0	21+	18.9	5	0	0	19.4	74	42	- 32	14	16	0	0	0	4.1	8	15.6	NE	10	5	13	10	5.8	50
SWAN ISLAND	9			27.8	23.9	25.7	-0.1	28.9	28+	21.1	6	0	0			25	- 4	10	7	0	0	0						2	17	9	6.7	
WEST VIRGINIA																																
BECKLEY	763	929.9	1022.0	3.9	- 5.0	- 0.6		13.9	11+	-15.0	6	0	19	- 4.4	76	94		24	18	0	404	356	1.3	22	15.6	27	13	4	1	23	8.4	
CHARLESTON	286	986.1	1021.2	7.2	- 2.2	2.6	-0.5	18.9	10	-13.9	21	0	16	- 2.8	71	71	- 19	28	14	0	203	229	0.8	23	9.8	23	13	3	4	21	8.3	
ELKINS	600	947.9	1021.3	5.0	- 6.7	- 0.7	-1.2	14.4	13+	-23.3	6	0	20	- 4.4	76	79	- 4	17	19	1	533	330	1.5	25	13.9	31	17+	3	5	20	8.4	
HUNTINGTON	252	990.2	1021.4	5.6	- 2.8	1.3	-1.9	18.3	10	-13.9	21	0	18	- 3.3	76	101	24	62	14	0	51	254	0.7	24	10.3	16	10	3	3	22	8.1	
PARKERSBURG U	187			5.0	- 3.3	0.8	-1.2	15.6	10	-15.6	1	0	19			90	18	44	14		178	356			11.6	W	17					27
WISCONSIN																																
GREEN BAY	208	994.9	1021.7	- 1.1	-10.6	- 5.7	2.1	7.2	12+	-22.8	20+	0	26	- 9.4	74	57	30	45	4	0	28	178	1.3	29	13.4	W	16	8	5	15	6.3	50
LA CROSSE	198	997.3	1023.3	- 0.6	-13.3	- 6.9	0.1	10.6	9	-28.9	20	0	26	-12.2	68	38	12	27	7	1	130	127	0.7	27	10.7	31	16	7	8	13	6.4	
MADISON	262	988.8	1021.8	- 0.6	-11.1	- 5.9	1.0	10.0	9	-27.2	20	0	26	-10.6	70	35	6	23	6	0	97	127	1.1	29	11.6	W	16	7	7	14	6.6	57
MILWAUKEE	205	995.9	1022.3	- 1.1	- 9.4	- 5.4	-0.1	10.0	10	-21.7	20	0	26	- 8.3	77	32	- 3	21	10	0	196	305	1.5	29	13.9	W	16	7	6	15	6.6	48
WYOMING																																
CASPER	1627	834.1	1016.6	1.1	- 9.4	- 4.3	-1.1	7.8	7	-22.8	13	0	28	-10.6	63	11	- 4	6	6	0	157	76	5.5	24	15.6	22	12	5	7	16	6.8	
CHEYENNE	1867	808.0	1016.9	3.3	- 8.9	- 2.9	-0.3	12.2	24	-18.3	15	0	27	-12.8	52	6	- 9	5	2	0	69	51	4.2	30	18.8	W	12	7	7	14	6.6	65
LANDER	1696	825.3	1017.0	2.2	-11.1	- 4.3	0.1	8.9	20	-19.4	13	0	28	-12.2	57	8	- 9	5	4	0	178	152	1.0	23	13.9	W	28	5	11	12	6.4	79
SHERIDAN	1208	876.4	1018.0	2.2	-11.7	- 4.8	-0.2	7.2	27+	-18.3	13	0	28	-11.1	61	10	- 9	7	8	0	135	127	1.6	29	15.6	NW	12	3	7	18	7.5	53

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

FEBRUARY 1966

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	520	2432	2071
HUNTSVILLE	548	2467	2479
MOBILE	333	1375	1307
MONTGOMERY	438	1964	1885
ALASKA			
ANCHORAGE	1402	7873	
ANNETTE	795	4911	4767
BARROW	2453	13368	13360
BARTER ISLAND	2512	13732	13165
BETHEL	1465	9128	9160
COLD BAY	924	6200	6425
FAIRBANKS	2039	11801	10695
JUNEAU	1090	6741	6210
KING SALMON	1328	8267	7885
KOTZEBUE	1941	10808	10778
MC GRATH	1813	11357	10497
NOME	1586	9731	9584
ST. PAUL ISLAND	963	6761	7174
SHEMYA	978	6216	6258
YAKUTAT	1121	7432	6143
ARIZONA			
FLAGSTAFF	1109	5098	4973
PHOENIX	423	1436	1473
TUCSON	473	1552	1477
WINSLOW	866	3865	3794
YUMA	273	1049	869
ARKANSAS			
FORT SMITH	659	2619	2670
LITTLE ROCK	611	2501	2650
TEXARKANA	534	1964	2078
CALIFORNIA			
BAKERSFIELD	443	1931	1731
BISHOP	718	3300	3203
BLUE CANYON	877	3828	3542
BURBANK	305	1176	1170
EUREKA U	510	2998	3043
FRESNO	492	2218	1967
LONG BEACH	313	1122	1168
LOS ANGELES	328	1131	1183
LOS ANGLES U	244	888	938
MT SHASTA R	849	4036	3953
OAKLAND	388	1871	1992
RED BLUFF	507	2268	1959
SACRAMENTO	485	2168	2089
SANDBERG U	767	3213	2842
SAN DIEGO	284	1052	994
SAN FRANCISCO	449	2305	2033
SAN FRANCISCO U	362	2009	1984
SANTA CATALINA	352	1453	1180
SANTA MARIA	467	2054	1924
STOCKTON	497	2276	2106
COLORADO			
ALAMOSA	1364	6297	6205
COLORADO SPRINGS	1061	4567	4545
DENVER	1017	4319	4484
GRAND JUNCTION	959	4008	4358
PUEBLO	917	4046	4072
CONNECTICUT			
BRIDGEPORT	996	3857	4019
HARTFORD	1008	4480	4577
NEW HAVEN	942	4138	4193
DELAWARE			
WILMINGTON	921	3857	3690
DIST.OF COLUMBIA			
WASH NATL AP	800	3237	3236
FLORIDA			
APALACHICOLA U	340	1215	1095
DAYTONA BEACH	192	695	724
FORT MYERS	74	269	380
JACKSONVILLE	294	1108	1044
KEY WEST	26	54	99
LAKELAND U	148	542	562
MIAMI	41	127	195
ORLANDO	122	469	655
PENSACOLA	346	1411	1244
TALLAHASSEE	347	1320	1247
TAMPA	172	641	581
WEST PALM BEACH	63	200	222
GEORGIA			
ATHENS	556	2451	2335
ATLANTA	605	2609	2353
AUGUSTA	492	2163	1957
COLUMBUS	478	2027	1949
MACON	493	2167	1778
ROME	610	2793	2647
SAVANNAH	387	1749	1520
IDAHO			
BOISE	884	4113	4323
IDAHO FALLS 42NW R	1307	6227	6416
IDAHO FALLS 46W R	1267	6012	6156
LEWISTON	754	3613	4093
POCATELLO	1072	5133	5113
ILLINOIS			
CAIRO U	753	2971	3040
CHICAGO O HARE	1079	4774	4834
CHICAGO MIDWAY	1031	4505	4526
MOLINE	1119	4847	4812
PEORIA	1037	4573	4534
ROCKFORD	1142	5057	5057
SPRINGFIELD	987	4101	4152
INDIANA			
EVANSVILLE	894	3640	3510
FORT WAYNE	1034	4430	4616
INDIANAPOLIS	962	4127	4242
SOUTH BEND	1028	4602	4682
IOWA			
BURLINGTON	1033	4435	4619
DES MOINES	1122	4798	5102
DUBUQUE	1209	5424	5466
SIOUX CITY	1144	5133	5226
WATERLOO	1219	5470	5483
KANSAS			
CONCORDIA	963	4026	4159
DODGE CITY	948	3809	3780
GOODLAND	1060	4649	4472
TOPEKA	922	3793	3994
WICHITA	871	3416	3612
KENTUCKY			
COVINGTON	931	4061	3946
LEXINGTON	883	3850	3568
LOUISVILLE	857	3601	3549
LOUISIANA			
ALEXANDRIA	483	1819	1592
BATON ROUGE	403	1515	1319
LAKE CHARLES	345	1262	1225
NEW ORLEANS	361	1398	1154
SHREVEPORT	485	1772	1799
MAINE			
CARIBOU	1388	6946	6950
PORTLAND	1183	5364	5311
MARYLAND			
BALTIMORE	961	3816	3558
MASSACHUSETTS			
BLUE HILL OBS R	1020	4638	4517
BOSTON	936	4165	4031
NANTUCKET	959	4289	3861
PITTSFIELD	1177	5513	5424
WORCESTER	1093	5056	4977
MICHIGAN			
ALPENA	1174	5912	5909
DETROIT	1023	4464	4512
DETROIT M WAYNE CO	1046	4783	4530
DETROIT WILLOW RUN	1068	4960	4544
FLINT	1100	4883	5263
GRAND RAPIDS	1102	4889	5024
HOUGHTON LAKE	1205	5900	
LANSING	1164	5143	4977
MARQUETTE U	1223	5936	5790
MUSKEGON	1107	4806	4719
SAULT STE MARIE	1284	6484	6283
MINNESOTA			
DULUTH	1473	7398	7117
INTERNATIONAL FALLS	1728	8168	7747
MINNEAPOLIS	1358	6219	6226
ROCHESTER	1393	6207	6121
ST CLOUD	1469	6850	6561
MISSISSIPPI			
JACKSON	520	2059	1817
MERIDIAN	486	2115	1898
VICKSBURG U	485	1767	1690
MISSOURI			
COLUMBIA	911	3597	3873
KANSAS CITY	869	3372	3626
ST JOSEPH	890	3614	4219
ST LOUIS	915	3696	3748
SPRINGFIELD	854	3408	3499
MONTANA			
BILLINGS	1094	5466	5122
GLASGOW	1599	7037	6676
GREAT FALLS	1054	5659	5475
HAVRE	1425	7029	6362
HELENA	1058	5623	5860
KALISPELL	1144	5881	5919
MILES CITY	1434	6361	5712
MISSOULA	1075	5479	5924
NEBRASKA			
GRAND ISLAND	1091	4810	4904
LINCOLN U	1026	4435	4427
NORFOLK	1178	5348	5217
NORTH PLATTE	1213	5265	4930
OMAHA	1008	4413	4748
SCOTTSBLUFF	1187	5060	4840
VALENTINE	1341	5669	5429
NEVADA			
ELKO	1142	5544	5300
ELY	1188	5654	5403
LAS VEGAS	529	2127	2257
RENO	838	4331	4547
WINNEMUCCA	933	4607	4835
NEW HAMPSHIRE			
CONCORD	1184	5533	5342
MT WASHINGTON OBS	1645	9628	9372
NEW JERSEY			
ATLANTIC CITY	971	4036	3503
ATLANTIC CITY U	854	3503	3331
NEWARK	882	3765	3631
TRENTON U	888	3767	3695
NEW MEXICO			
ALBUQUERQUE	882	3616	3384
CLAYTON	905	3801	3778
RATON	956	4410	4487
ROSWELL	734	3100	3080
SILVER CITY	793	3075	2839
NEW YORK			
ALBANY	1162	4973	5035
BINGHAMTON	1173	5348	5184
BUFFALO	1114	4888	4971
NEW YORK U	830	3436	3576
J.F. KENNEDY	868	3664	3745
NEW YORK LA GUARDIA	846	3623	3517
ROCHESTER	1098	4785	4810
SYRACUSE	1168	5125	4889
NORTH CAROLINA			
ASHEVILLE	800	3574	3401
CAPE HATTERAS R	565	2146	1970
CHARLOTTE	631	2770	2532
GREENSBORO	714	3052	2972
RALEIGH	629	2813	2692
WILMINGTON	470	1954	1894
NORTH DAKOTA			
BISMARCK	1525	7056	6557
FARGO	1649	7540	6843
WILLISTON	1547	7284	6802
OHIO			
AKRON	1019	4473	4436
CINCINNATI OBS	892	3768	3642
CLEVELAND	1067	4476	4555
COLUMBUS	989	4247	4227
DAYTON	965	4311	4187
MANSFIELD	1054	4780	4631
TOLEDO	1058	4850	4725
YOUNGSTOWN	1049	4689	4648
OKLAHOMA			
OKLAHOMA CITY	734	2610	2975
TULSA	722	2690	3061
OREGON			
ASTORIA	621	3326	3476
BURNS U	995	5079	4988
EUGENE	634	3082	3297
MEACHAM	991	5130	5299
MEDFORD	696	3334	3614
PENDLETON	702	3402	3846
PORTLAND	620	3020	3303
SALEM	679	3332	3309
SEXTON SUMMIT R	872	4243	4083
PENNSYLVANIA			
ALLENTOWN	1017	4412	4299
ERIE	1068	4522	4545
HARRISBURG	932	4108	3953
PHILADELPHIA	931	3918	3840
PITTSBURGH	963	4472	4399
PITTSBURGH U	914	3976	3764
READING U	887	3770	3733
SCRANTON	1053	4637	4635
WILLIAMSPORT	1002	4517	4409
PHODE ISLAND			
BLOCK ISLAND	931	4086	3872
PROVIDENCE	975	4234	4265
SOUTH CAROLINA			
CHARLESTON	427	1872	1688
CHARLESTON U	407	1586	1479
COLUMBIA	502	2247	2046
GNVLE-SPARTANBURG	616	2675	2435
SOUTH DAKOTA			
ABERDEEN	1560	6809	6341
HURON	1396	6265	6123
RAPID CITY	1273	5424	5227
SIOUX FALLS	1331	6132	5836
TENNESSEE			
BRISTOL	755	3488	3216
CHATTANOOGA	656	2988	2626
KNOXVILLE	650	2886	2760
MEMPHIS	634	2630	2607
NASHVILLE	657	2892	2837
OAK RIDGE	702	3173	2981
TEXAS			
ABILENE	570	1973	2163
AMARILLO	857	3318	[illegible]
AUSTIN	449	1484	[illegible]
BROWNSVILLE	239	664	526
CORPUS CHRISTI	300	911	805
DALLAS	520	1873	[illegible]
DEL RIO	388	1265	1339
EL PASO	612	2324	2276
FORT WORTH	542	1843	1987
GALVESTON U	[illegible]	936	1016
HOUSTON U	316	[illegible]	1074
HOUSTON	334	1107	1168
LUBBOCK	677	2525	[illegible]
MIDLAND	621	2259	[illegible]
PORT ARTHUR	336	1192	[illegible]
SAN ANGELO	538	1921	[illegible]
SAN ANTONIO	426	1462	[illegible]
VICTORIA	341	1097	[illegible]
WACO	522	1775	[illegible]
WICHITA FALLS	[illegible]	2430	[illegible]
UTAH			
MILFORD	1005	4687	[illegible]
SALT LAKE CITY	[illegible]	4256	[illegible]
WENDOVER	918	4425	4413
VERMONT			
BURLINGTON	1313	5842	5925
VIRGINIA			
LYNCHBURG	795	3432	3216
NORFOLK	734	2888	2635
RICHMOND	[illegible]	3332	3047
ROANOKE	[illegible]	3465	3210
WASHINGTON			
OLYMPIA	676	[illegible]	[illegible]
SEATTLE TACOMA	584	[illegible]	3560
SPOKANE	[illegible]	4666	4867
STAMPEDE PASS R	1051	5951	6206
TATOOSH ISLAND R	573	[illegible]	[illegible]
WALLA WALLA U	664	[illegible]	[illegible]
YAKIMA	767	[illegible]	4504
WEST VIRGINIA			
BECKLEY	946	[illegible]	
CHARLESTON	793	[illegible]	[illegible]
ELKINS	951	4430	[illegible]
HUNTINGTON	[illegible]	[illegible]	3405
PARKERSBURG U	877	[illegible]	[illegible]
WISCONSIN			
GREEN BAY	1207	[illegible]	5800
LA CROSSE	1267	5767	5665
MADISON	1220	[illegible]	5720
MILWAUKEE	1189	5211	5432
WYOMING			
CASPER	1132	[illegible]	[illegible]
CHEYENNE	1061	4896	[illegible]
LANDER	[illegible]	5377	[illegible]
SHERIDAN	[illegible]	5458	5471

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

FEBRUARY 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS
Alabama										0	0	5	0																
Alaska *																													
Arizona *																													
Arkansas *																													
California										0	1	4	0	0	0	3	0												
Colorado *																													
Connecticut																		0	1	4	0					0	0	4	0
Delaware										0	0	4	0	0	0	3	0												
Florida										0	0	5	0	0	1	0	0												
Georgia	7	2	0	3	5					0	10	6	5													0	0	R 5	4
Hawaii *																													
Idaho																		3	1										
Illinois *																													
Indiana *																													
Iowa *																													
Kansas *																													
Kentucky *																													
Louisiana	3	2	0	0	4					3	5	?	0													0	0	?	?
Maine																		0	0	4	0					0	0	R 4	0
Maryland	1	1	0	0	4					0	2	4	0																
Massachusetts																		0	0	4	0					0	0	RF5	0
Michigan *																													
Minnesota																						0	0	4	0	0	0	5	0
Mississippi	8	1	0	0	5					0	0	4	4																
Missouri														0	0	4	0												
Montana *																													
Nebraska *																													
Nevada *																													
New Hampshire																		0	0	4	0	0	0	4	0	0	0	R 4	0
New Jersey *																													
New Mexico *																													
New York																													
North Carolina	1	1	0	0	4					1	0	6	0													0	0	4 5	4
North Dakota *																													
Ohio *																													
Oklahoma	1	1	0	2	5					0	0	4	0	0	0	4	0												
Oregon *																													
Pacific Area *																													
Pennsylvania *																													
Puerto Rico *																													
Rhode Island																		0	0	4	0					0	0	4	0
South Carolina	1	1	0	0	3					0	0	4	0																
South Dakota *																													
Tennessee										1	0	5	0													0	0	FF6	0
Texas	4	3	0	0	5	0	0	5	5	0	7	5	0													0	0	5	0
Utah *																													
Vermont																		0	0	4	0					0	0	RF4	0
U. S. Virgin Is. *																													
Virginia	2	1	0	0	4					0	0	3	0																
Washington *																													
West Virginia																										0	0	F 6	0
Wisconsin														0	1	4	0									0	0	6	0
Wyoming *																													

R	Rain
F	Floods
RF	Rain, floods
FF	Flash flood

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

FEBRUARY 1966

Elmer R. Nelson
Office of Hydrology

The rise in the upper Mississippi River during February was the highest of record for February. The Rock River at Joslin, Ill., exceeded the previous high crest of March 1948. The third highest stage of record occurred on the Mississippi River at Davenport, Iowa, due to an ice-jam. Many streams in the East Gulf of Mexico Drainage reached the highest level since April 1964.

ST. LAWRENCE DRAINAGE

Lake Ontario.--Heavy rains on the 13th, together with snowmelt, produced moderate flooding in the Genesee Basin in New York between the 13th and 16th. Canaseraga Creek crested at Groveland, N. Y., on the 13th, 1.5 feet above flood stage. Black Creek at Churchville, N. Y., went out of its banks on the 14th and continued in flood to the 16th. The crest on the 15th was 0.6 foot above flood stage. The Genessee at Scio, N. Y., was out of its banks on the 13th and 14th. It crested nearly 0.5 foot above flood stage on the 13th.

ATLANTIC SLOPE DRAINAGE

Rainfall on the 13th, ranging from 1.5 to 2.5 inches, produced up to nearly 4 feet of overflow on some New Jersey streams between the 13th and 15th. Light damage was reported along Assunpink Creek and Raritan River. There was minor damage along small streams and at urban locations where storm drainage was unable to cope with rainfall intensities.

Minor flooding occurred along Neshaminy Creek at Langhorne, Pa., and Brandywine Creek at Chadds Ford, Pa., on the 13th and 14th. There was also some minor flooding on Wissahickon and Darby Creeks. This flooding was due to approximately 2 inches of rain on the 13th plus runoff from snowmelt. A temporary bridge on Darby Creek was washed out. Several homes were reported flooded and some road washouts occurred.

Minor flooding occurred on the Monocacy River at Frederick, Md., on the 14th due to snowmelt and 1.25 to 1.50 inches of rain on the 12th and 13th. In the Rappahannock Basin, the Rapidan River rose to bankfull stage at Rapidan, Va., on the 13th. The rainfall in the Rappahannock Basin averaged 1.5 to 2.0 inches during this storm. A snow survey on the 8th indicated an average water equivalent in the snowpack of 2.59 inches in the Potomac Basin and 2.82 inches in the Rappahannock Basin. Warm, moist air on the 10th and 11th caused rapid melting of the snow cover. No damages were reported from the flooding.

Light flooding occurred on the Jackson and lower James Rivers in Virginia from the 13th to the 16th. Stages in the upper James reached approximately three-quarters bankfull. The water equivalent of the snow cover averaged about 3 inches. Mild weather on the 10-11th caused rapid melting of the snow cover. Heavy rainfall (1.35 inches) on the 12-13th caused heavy runoff. Damages were minor and were confined to lowland flooding of farm- and pastureland downstream from Scottsville.

The flooding that occurred on streams in eastern North Carolina beginning on the 14th was due to heavy rain plus snowmelt. There was still much snow on the ground the beginning of the month. The rivers were running near normal level on February 1, but were rising slowly from snowmelt. Sharp rises resulted on all streams from the 1 to 2 inches of rain on the 12th and 13th. The lower Cape Fear River rose to around 4 feet above flood stage. Minor overflow occurred along the Dan River in Virginia and the Neuse River in North Carolina. The precipitation on the 15th (1 to 2 inches) produced stages of a little over 6 feet above flood stage on the lower Cape Fear. The rains on the 24th caused the upper and middle Neuse Rivers to rise a little above flood stage. The lower portion was already 1 to 2 feet out of its banks. Minor flooding resulted on the lower Cape Fear. No damage resulted from the overflows.

Minor overflow of low swamps, that began the latter part of January, on the Lumber River at Lumberton, N. C., subsided on February 6. The heavy rain on the 13th and 14th produced light flooding on the Yadkin River at Elkin, N. C., and 5 feet of overflow at Yadkin College, N. C., on the 15th. The USE Kerr Scott Reservoir and Dam prevented overflow in the Wilkesboro, N. C., area. Before this runoff could subside another heavy rain brought the Yadkin at Yadkin College and the Rocky River at Norwood, N. C., to near bankfull. Flooding followed on the Pee Dee with 5 feet of overflow at Cheraw, S. C., on the 18th and 3 feet of overflow downstream at Peedee, S. C., on the 23d. The Lumber River at Lumberton, N. C., began overflowing again on the 22d. The heavy rain on the 24-25th prolonged the flooding on the Pee Dee. The heavy rain on the 28th caused about 6 feet of flooding on the Pee Dee at Cheraw on March 2. The heaviest damage resulted in the Mt. Airy, N. C., area where the Ararat River and Lovills Creek overflowed considerable amount of business property. At least one family had to leave their home due to the high water. No loss or damage resulted on the other streams.

General rains of 2 to 3 inches on the 12th and 13th caused flooding on the Saluda River at Pelzer, S. C., on the 14th and 15th, and on the Broad River at Gaffney and Blair, S. C., beginning on the 14th. The rain over the upper Broad River was heavier and ranged from 5 to 6 inches. General rains of up to 2 inches fell again over the middle and upper reaches of the Santee on the 16-17th. The Broad River crested more than 7 feet above flood stage at Blair, S. C., on the 15th, flooding some pastureland. The Congaree at Columbia, S. C., crested 2 feet under flood stage on the 15th. Considerable flooding occurred below Columbia over low-lying crop and pastureland. The Wateree at Camden, S. C., crested about 6 feet below flood stage on the 19th. Some flooding occurred below Camden, principally in wooded swamplands. The heaviest losses occurred along the Congaree below Columbia and along the Wateree below Camden. There was serious disruption of lumbering operations along both rivers.

Minor flooding occurred along the Ogeechee and lower Savannah Rivers in Georgia during the latter part of February. Minor damages resulted.

Light flooding was in progress on the Altamaha at Charlotte, Ga., and on the Satilla at Atkinson, Ga., in the beginning of the month. The Altamaha receded within its banks on February 1 and went out of its banks again on the 21st. It crested 6.2 feet above flood stage on the 26th and was still in flood at the end of the month. The Satilla River continued in flood at Atkinson, Ga., until the 12th. Another rise brought the Satilla above flood stage again on the 24th and it was still out of its banks at the end of the month. The Oconee River at Milledgeville, Ga., reached bankfull stage on the 14th. It again reached flood stage on the 16th, cresting 6.7 feet above flood stage on the 17th. It was back within its banks on the 18th. In the reach below, the Oconee exceeded flood stage by 2.5 feet at Dublin, Ga., on the 21st and at Mt. Vernon, Ga., by 2.7 feet on the 23d. The Ocmulgee River went above flood stage on the 13th at Macon, Ga., and was still in flood at Lumber City, Ga., at the end of the month.

EAST GULF OF MEXICO DRAINAGE

Heavy rain on the 12-13th caused flooding on the Chattahoochee and Flint Rivers in Georgia and on the Apalachicola River in Florida between the 14th and the end of the month. The rainfall exceeded 4 inches, except in the Apalachicola and extreme lower portion of the Chattahoochee and Flint Rivers where it exceeded 3 inches. Totals in excess of 5 inches occurred in the headwater area of the Chattahoochee River and over a small area from Goat Rock Dam to Woodbury, Ga. Additional rain of 2 to 3 inches occurred over the upper and middle streams with near 1 inch totals in the lower portion. The most important flooding occurred along the Flint River at Albany, Ga., where flood stage was exceeded by 10 feet. The Apalachicola River rose to more than 8 feet above flood stage at Blountstown, Fla. The total losses are estimated to exceed $1/2 million.

General rains (6 to 9 inches) between the 10th and 16th resulted in moderate flooding along the Alabama River and tributaries beginning on the 13th. The main stem of the Alabama River at Claiborne, Ala., continued through March 2. On most streams, the water reached the highest level since April 1964. The heaviest rain occurred on the 13th with amounts from 2 to 4 inches, falling in less than 24 hours. A few stations in northern Georgia recorded more than 4 inches. The damages were mostly agricultural and will total close to $1 million.

Rains averaging about 2.25 inches over the headwaters of the Warrior and Tombigbee Rivers in Alabama between the 10th and 16th, resulted in minor to moderate flooding. The heaviest rain occurred on the 10th, 12th, and 15th. Damage was not too extensive. However, stages were near the level at which extensive damage begins. Several hundred acres of farmland and timberland were inundated. Grazing areas were inundated and covered with silt. There was some damage to highways and bridge abutments.

Heavy rain between the 10th and 17th caused moderate flooding in the Pascagoula and Pearl River Basins in Mississippi. The heaviest rain occurred in the lower Pearl, Bogue Chitto, and Leaf Rivers. Flood damage was limited mostly to stoppage of construction on highway and levee projects in the Jackson, Miss., area and to agriculture. The heaviest damage occurred along the Pearl River where the total damages equalled nearly $3/4 million.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Heavy rainfall of 1 to 2 inches occurred over the Upper Mississippi Basin on February 8-9. The heaviest rainfall occurred in southeastern Minnesota, northeastern Iowa, and southwestern Wisconsin. This rainfall was equivalent to a normal February's total for most areas. Daily temperatures were as much as 25° or more above normal before and during this storm. Excessive runoff from snowmelt and rain produced flooding on streams in southeastern Minnesota, eastern Iowa, and southern Wisconsin. The normal flow was complicated by icejams. The warm temperatures during the period from the 7th to the 12th extended into the headwaters in Minnesota and Wisconsin, melting the 6-inch average snow cover. The communities in the Kickapoo River Valley in Wisconsin were hard hit. The Baraboo River which empties into the Wisconsin River, downstream from Portage, Wis., suffered serious flooding due to icejams at and near the cities of Reedsburg, Rock Springs, and Baraboo.

The Turkey River at Garber, Iowa, crested nearly 8 feet above flood stage on the 9th. This was 1.2 feet below the March 1965 crest and 3.3 feet below the record 28.06 feet crest of February 1922. The East Branch Pecatonica at Blanchardville, Wis., crested 3 feet above flood stage on the 9th. This was nearly 1 foot lower than in March 1965. The Pecatonica River at Darlington, Wis., crested nearly 5 feet above flood stage; this was more than 4 feet lower last March. Downstream at Martintown, Wis., the crest was 6.5 feet above flood stage on the 12th. At Freeport, Ill., the crest was 1.2 feet above flood stage on the 14th. The Rock River at Joslin, Ill., reached a record crest of 16.4 ft., on the 13th. The previous record stage was 16.23 feet in March 1948.

Tributaries to the upper Cedar in Iowa rose rapidly following the heavy rains. The crest stages were affected by ice action at several places and ranged from 0.2 foot above flood stage on the West Branch at Finchford, Iowa, to nearly 3 feet above flood stage on Blackhawk Creek at Hudson, Iowa.

The first appreciable snowfall of the season, ranging from 2 to 9 inches, on February 1, over Missouri and Illinois was followed by a general heavy rain on the 8th and 9th. Rainfall during this period averaged between 1 and 2 inches. The wet condition of the soil and the partially frozen ground contributed to appreciable runoff with rapid rises on most streams with considerable overflow. Extensive flooding occurred in all reaches of the Meramec River Basin in Missouri. Crests along the main stem of the Meramec ranged from 9 to 11 feet above flood stage. Flood damage was limited to areas where there was inundation of good farmland normally planted in winter grains. There was also some damage to farm buildings, roads, railroads, and bridges.

The resulting rise in the upper Mississippi River was the highest of record for February, particularly since the locks and dams have been in place (1935-36). The average monthly stage at La Crosse, Wis., was 7.7 feet; dating back to 1900 this was the highest of record. The previous highest February average stage was 5.5 feet in 1952. The long-term mean stage for La Crosse is 4.4 feet.

The only flooding along the main stem of the Mississippi occurred at Davenport, Iowa, Keithsburg, Ill., and Burlington, Iowa. The most serious flooding occurred around Davenport in the "Quad" City area. The warm temperatures during the period February 7-12 loosened the ice, moving it into pools 14 and 15. Ten miles below Dam 15, the ice began jamming. Before it could break loose sudden cold temperatures beginning on the 16th solidified the icejam, piling up floating ice until it was backed up to Dam 15. The snowmelt water plus a 1-inch rainfall runoff reached the icejam before it had solidified. This created a head of 10 feet above the jam raising the stage at dam 15 to 19.0 feet on February 22. This was the third highest stage of record recorded at Davenport. Flood damage (including flood fighting and cost of evacuation) in the Quad City area was near $1 million.

Missouri Basin.--Three to 5 inches of wind-packed snow covered the central Missouri Basin on February 1. It extended from the Black Hills of South Dakota to southwestern Minnesota. Heavy melting occurred on the 5th and 6th when maximum temperatures ranged up to 45° to 50° (except 35° to 45° in southwestern Minnesota). By the 8th, the snow cover had been reduced to 1 to 2 inches in South Dakota and 2 to 4 inches in southwestern Minnesota, and mostly drifts in northwestern Iowa. Heavy, warm rains during the 8th and 9th on frozen ground melted most of the old snow and caused unusual winter flooding on the Floyd, Rock, and Big Sioux Rivers. The flood on the Big Sioux was a strong threat to the Sioux City, S. Dak., area because of an adverse ice breakup. The ice broke up, from near the Iowa-Minnesota state line on both the Rock and Big Sioux Rivers down to Hawarden, Iowa, on the 9th. The ice continued to hold from the mouth of the Big Sioux at Sioux City to about 30 miles upstream. By the 11th, about 2 miles of solid ice at the mouth of the Big Sioux backed up a large icejam to about 15 miles upstream. In comparison with previous floods, the flood on the Big Sioux was moderate. Shallow lowland flooding occurred along the Rock below Rock Rapids, Iowa. Only minor damage resulted from the overflows.

Heavy rains were general on the 8th over practically all of the Elkhorn Valley of Nebraska. The resultant rapid runoff and breakup of ice in streams caused damaging floods in the vicinity of icejams along the Elkhorn and its tributaries. The soil over this area was frozen to depths of 8 to 20 inches, and practically all of the rainfall drained into the streams within a few hours. Rainfall in excess of 1 inch was recorded from Oakdale and Meadow Grove, Nebr., eastward to the Missouri River. Snowmelt was not an important factor in runoff, since average snow depths were only 1 to 2 inches on the morning of the 8th. Heavy damage resulted from these floods to bridges, parks, highways, and fences. Rapid rises of stream levels behind icejams caused flooding of several feed lots and the drowning of many cattle.

The flooding in the Little Sioux River Basin in northwestern Iowa from the 9th to the 11th was due to heavy rain during the night of the 8-9th. The rain, averaging 1 inch over central and northern portions, fell on frozen ground, resulting in rapid surface runoff. The flooding was confined to local lowlands and some farm fields.

Minor flooding occurred on the lower flood plains along Lincoln Creek and in the upper Big Blue River in Nebraska from the 9th to the 13th. The flooding was due to 2 to 3 inches of rainfall on the 8-9th. The previous snow cover of 4 to 7 inches in southwestern Nebraska had melted prior to the beginning of the rains on the 8th so was not a contributing factor. Losses were due principally to erosion and silting.

Minor flooding occurred on the Chariton River in Missouri on the 9-10th from the heavy rains on the 8-9th. The rain, combined with unseasonably warm temperatures, caused breakup of ice on the streams. Sharp rises occurred on other tributaries, notably the Grand River, but crests were well below flood stage.

Minor flooding occurred on the extreme upper Chariton River at Chariton, Iowa, on the 9th and 10th. No significant damage resulted.

The month of February began with a carryover of subfreezing temperatures, which began the latter part of January, continuing through February 6. The Missouri River had floating ice from above Sioux City, Iowa, to above Decatur, Nebr. In the reach from Decatur, Nebr., to just above Kansas City, Mo., the Missouri River was frozen over or bridged. Intermittent ice bridges and open reaches existed from Kansas City to the mouth. Ice action created irregular stage fluctuations during this period. A return to seasonal normal temperatures beginning on the 7th stopped the formation of new ice and within a few days the ice was moving out at all points. The only flooding that resulted was at Waverly, Mo., on the 9th.

Ohio Basin.--A warming trend beginning on the 8th resulted in a gradual depletion of the heavy snow cover over western Pennsylvania and eastern West Virginia. The water equivalent of the snow cover early in February ranged from 1.7 to 5.3 inches over the Allegheny Basin and from 1 to 7 inches over the Monongahela Basin. Rainfall averaging 0.25 inch on the 10th further depleted the snow cover and resulted in moderate to high base flows prior to the moderate to heavy rainfall on the 12th and 13th. The rainfall, ranging from 0.50 inch to 2.50 inches, produced flooding on the Monongahela and Allegheny Rivers between the 13th and 15th. An ice gorge on the Allegheny River in the East Brady, Pa., area caused backwater flooding to summer cottages and homes. The secondary and main thoroughfares to East Brady were closed, isolating the city for a 24-hour period. The highway bridge at East Brady, Pa., was damaged slightly and was closed until highway engineers approved its safety. This ice gorge was reported by local residents as being more serious and damaging than the historic ice gorge of March 1913. This gorge broke on the 14th and released backwater resulting in flood stages being exceeded along the lower Allegheny River. Serious flooding occurred along Chartiers Creek, at McKees Rocks, Pa. This highly industrialized area suffered severe damages at Heidelberg, Canonsburg, Bridgeville, and Carnegie, Pa.

There was 20 to 30 inches of snow on the ground in some of the mountainous areas of Virginia and West Virginia during the first part of February. Some of this snow began melting slowly on the 7th, but most of it did not melt until about the 10th, especially in the mountains. Little or no increase in flow of rivers occurred until about the 11th. By the time the rain began on the 12th, the ground was well saturated and most of the streams were still 1/4 to 1/2 full from snowmelt. Most of the rain causing the flood fell in the 24-hour period from 7 p.m., February 12 to 7 p.m., February 13, and averaged about 2 inches. On the New River, amounts ranged from 5.12 inches at Boone, N. C., to 1.72 inches at Radford, Va.

The Muskingum River went above flood stage at McConnelsville, Ohio, on the 13th and continued in flood at Marietta, Ohio, until the 16th. Flood stage at the latter point crested 4.3 feet above flood stage on the 15th. Flooding below the flood control reservoirs was minor. Flooding on the Hocking River at Athens and Enterprise, Ohio, was minor. The New River at Radford, Va., crested about 0.9 foot above flood stage on the 14th. Very heavy rain caused considerable flooding in the extreme headwaters near Boone, N. C. Minor to moderate flooding occurred on Paint and Beaver Creeks, tributaries of the Big Sandy River. Some flooding occurred on the Little Sandy River in Kentucky. Heavy damages resulted from the flooding.

On the Hocking River, many highways were cut off by high water. Low-lying farmlands along the river were flooded. The water in Athens, Ohio, covered some low-lying areas, particularly the West Green of Ohio University. Some garages had to be evacuated. Waters covered low-lying sections of several streets.

In Chauncey, Ohio, on Sunday Creek, a tributary of Hocking River, 28 homes were affected. Evacuation was necessary for a dozen families while others moved furniture from first to second floors in their homes. Damages on Hocking River totalled $209,000.

Rutland, Ohio, a small town in Meigs County on Leading

Creek, was hit by a flash flood the morning of February 13. Considerable damage occurred to flooded homes. Meigs County Agricultural Agent reported water in basements in many homes. The flooding was partially caused by creek channel being filled with sand from strip mining operations. Damages were estimated at $41,800 by the County Agent.

New Martinsville, W. Va., had about a foot of water on Main Street in the area of the Post Office. Martin Avenue was covered with water in its entirety and North Street from near the Moose Lodge to Main Street. Many stores moved out merchandise, but water did not get in stores.

Most of the damage to commercial property in Wood County, W. Va., was in Vienna. This was caused by backwater. The flooding entered a number of commercial buildings and damaged some merchandise and equipment but the main damage was to the buildings and in post-flood cleaning and repair. The Wood County Extension Agricultural Agent estimated total damage in Wood County, W. Va., as $104,000.

About 46 families in the Marietta, Ohio, area moved out of the lowland areas. Several downtown streets were inundated. Merchants moved merchandise and equipment from basements.

Paint Creek, a tributary of Big Sandy River, overflowed its banks and blocked Fishtrap Road in Johnson County and U. S. Highway 460 between Salyersville and Paintsville. Middle Fork Road on Jenny's Creek, which flows into Paint Creek, was covered by water.

Beaver Creek, a tributary of Big Sandy River, overflowed bottom lands along the creek. Small amount of erosion of soil. No major damage.

Watauga County, N. C., headwaters of New River had considerable flooding, along river bottoms. Some damage resulted to highways and bridges. Some residents had flooded basements. Watauga County Extension Agricultural Agent estimated damages in Watauga County at $129,700.

The water equivalent of the snow cover in the Scioto Basin in Ohio averaged 0.8 inch the beginning of the month. The snow began melting on the 5th and 6th and disappeared rapidly on the 7th and 8th. Heavy rain occurred over the basin on the 10th, and on repeated intervals through the 17th. Considerable ice covered the upper Scioto when the rain began on the 10th. The ice was 4 to 8 inches thick and broke up readily without any jamming as the stream flow increased. Some lowlands and secondary roads were flooded in the lower Scioto drainage from the 11th to the 17th. There was also some minor flooding on the upper Scioto near La Rue, Ohio.

A snowstorm, the last of January and the first 2 days of February, deposited a 6- to 14-inch snow cover with a water equivalent of 1 to 1-1/4 inches over the Green River Basin. The snow melted slowly during the next few days saturating the ground. Heavy rains (1 1/2 to 2 inches) on the 10-11th followed by 1/2 to 1 inch rains on the 13th produced minor flooding on the Green River at Woodbury, Ky., on the 15th and at Calhoun, Ky., on the 15-20th. Minor flooding also occurred on the Skillet Fork and Saline Rivers in Illinois. Damages, if any, were small.

Minor overflow occurred along the Muscatatuck River at Austin, Ill., from the 10th to the 15th and along the lower White at Edwardsport, Ind., on the 13th and at Petersburg, Ind., on the 13-17th. This flooding was due to snowmelt and heavy rain, (1.5 inches) over the lower White and East Fork on the 10th and 11th.

The flooding in the upper Cumberland Basin in Kentucky on the 13th and 14th was due to heavy rains (2 to 3 inches) during the night of the 12th and morning of the 13th. The ground was thoroughly saturated prior to this rain due to melting snow and rain on the 11th so runoff was heavy. Minor damage occurred to homes in the Baxter, Ky., area.

Considerable damage was reported to bridges and highways in the Cumberland, Ky., area. One death resulted in Letcher County when a boy fell from his bicycle into the flood waters.

Heavy rains over the French Broad Basin during the night of the 12th and morning of the 13th caused flooding between the 13th and 15th. The rainfall averaged from 2.5 inches at Marshall, N. C., to 6.3 inches at Rosman, N. C. From Asheville to Rosman, N. C., the rainfall averaged near 5 inches. The main stem of the French Broad River exceeded flood stage by 1.1 foot at Asheville, N. C., to 4.5 above bankfull stage at Rosman, N. C. Approximately two-thirds of the homes at Rosman were flooded and several of the homes had to be evacuated. Mud slides blocked several highways in western North Carolina while high water across other roads made them impassable. The airport at Franklin, N. C., was completely under water. The school on Blannerhassett Island at Marshall had water 2 feet deep in the basement. All Equipment was removed before the flood waters reached the basement.

Rains beginning on early morning of the 12th and continuing through noon of the 13th produced serious flash flooding in the city of Gatlinburg, Tenn., and flooding on the Little Pigeon River at Sevierville, Tenn. The rainfall averaged 1.5 to 3.0 inches in east Tennessee. Snowmelt from the snow cover in the Smoky Mountains added additional runoff. Flash flooding on the Little River inside the park between Gatlinburg and Townsend, Tenn., seriously damaged Highway #73 inside the park. Minor flooding occurred on the Tuckasegee River at Bryson City, N. C., on the 13th. Two distinct rises occurred on South Chickamauga Creek at Chickamauga, Tenn. The first occurred between the 13th and 15th with a crest of 13.15 feet on the 14th. Flood stage is 10 feet. The second occurred on the 16-17th with a crest about 2 feet lower. The only flooding along the main stem of the Tennessee occurred at Whitesburg, Tenn., from the 13th to the 19th and at Gilbertsville, Ky., from the 14th to the 26th. The crests ranged from 3.6 feet above flood stage at Whitesburg to 5.4 feet above flood stage at Gilbertsville, Ky.

The main stem of the Ohio went above flood stage between the 13th and 18th and continued in flood until the 27th at Shawneetown, Ill., and Fords Ferry, Ky. Flood stage was exceeded by up to 9 feet at Dam 50, Fords Ferry, Ky. In comparison with other Ohio River floods, this flood was considered comparatively minor.

White Basin.--The Cache River at Patterson, Ark., went above flood stage on January 2 and was still in flood at the end of February. The crest on January 14 was over 4 feet above flood stage. The one on February 16 was 2 feet lower.

The other streams in the basin went out of their banks on the 9th and 10th due to heavy rains between the 8th and 10th. Buffalo River at Gilbert, Ark., rose sharply to a crest 39.3 feet on the 9th (flood stage, 30 feet). This was the third highest crest of record. The Black River at Black Rock, Ark., went above flood stage on the 10th and continued in flood until the 25th. The crest on the 10th was 8.3 feet above flood stage. The main stem of the White was out of its banks on the 10th and 11th at Calico Rock and Batesville, Ark. Flood stage was not reached until the 16th at Clarendon, Ark. The only flooding in the reach between occurred at Georgetown, Ark., from the 19th to 26th. St. Charles, Ark., did not reach flood stage until the 27th. Several highways were temporarily closed by high water and landslides. The airport at Harrison, Ark., was temporarily closed due to flooding and runway cave-in. The damage to private and public property totalled near $300,000.

Arkansas Basin.--The only flooding in the Arkansas Basin during February occurred on the Illinois and Poteau Rivers between the 9th and 12th. Since there were no growing crops in the flooded area, little damage occurred except to roads and streets. This flooding was due to heavy rain on the 9th and 10th.

Red Basin.--The Sulphur went out of its banks at Naples, Tex., on the 14th and continued in flood until the 19th. The crest on the 16th was 3.5 feet above flood stage. This flooding was due to 1 to 2 inches of rain on the 9th and 10th.

Lower Mississippi Basin.--The middle portion of the St. Francis Basin was in flood from the 12th through the 26th. This flooding was due to rainfall on the 8-10th which averaged about 2 inches above Wappapello Dam. Most of the rain occurred on the 9th. Heavy runoff occurred as the ground was saturated from melting snow. The rainfall was heavier in the middle and lower portion. The loss in this flood was relatively small since the flood of early January had already inundated the newly-plowed and fall-seeded fields.

Rains in excess of 7 inches on the 9-10th caused flooding on the Cold Water, Yazoo, and Big Black Rivers in Mississippi. Most of the rain occurred during the 12-hour period ending at 6 a.m. on the 10th. A new 24-hour record of 8.62 inches occurred during February at Vicksburg, Miss. The flooding on the Cold Water River at Sarah, Miss., was of short duration. The river was back within its banks on the 11th. The lower Yazoo River continued in flood from the 13th to the 21st. The Big Black River went out of its banks at Bovina, Miss., on the 10th and was still in flood at the end of the month. The principal damages were to winter pastures, and farm- and timberlands.

WEST GULF OF MEXICO DRAINAGE

Minor flooding occurred on the Mermentau and Calcasieu Rivers in Louisiana and on the Sabine River in Texas between the 10th and 25th. This flooding was due to heavy rains on the 10-13th and 16th. Work on the Toledo Bend project and the salt water barrier project at Lake Charles, La., was halted until the waters subsided. Fish camps and some homes built in the lowlands were cut off and some were flooded.

Bankfull stage occurred on the Trinity River at Moss Bluff, Tex., on February 1 due to rains that occurred on January 29. Excessive rains on the 9th and 10th produced 2.5 to 3.0 feet of overflow at Liberty, Tex., and at Moss Bluff, Tex., between the 10th and 24th. Flooding occurred on Pine Island Bayou near Voth, Tex., from the 14th to the 17th. This overflow was due to upstream runoff.

PACIFIC SLOPE DRAINAGE

Sacramento Basin.--The overflow moving down the Sacramento River on the 4th and 5th brought overflow to the Colusa and Tisdale Weirs of the Sacramento River Flood Control System between the 5th and 9th.

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
ST. LAWRENCE DRAINAGE	Ft.			Ft.	
Lake Ontario					
Canaseraga Creek Groveland, N.Y.	11	13	13	12.5	13
Black Creek: Churchville, N. Y.	5	14	16	5.6	15
Genesee: Scio, N. Y.	8	13	14	8.45	13
ATLANTIC SLOPE DRAINAGE					
Passaic: Chatham, N. J.	6	15	15	6.0	15
Millstone: Blackwell Mills, N. J.	8	13	15	11.2	14
Raritan: Manville, N. J.	12	14	14	14.6	14
Bound Brook, N. J.	8	13	15	11.0	14
Assunpink Creek: Trenton, N. J.	5	13	14	8.7	13
Neshaminy Creek: Langhorne, Pa.	7	13	14	10.8	13
Brandywine Creek: Chadds Ford, Pa.	9	13	14	10.4	14
Monocacy: Frederick, Md.	15	14	14	15.6	14
Rapidan: Rapidan, Va.	14	13	14	14.0	13
Jackson: Covington, Va.	7	13	14	8.8	13
James: Bremo Bluff, Va.	19	15	15	19.5	15
Columbia, Va.	18	13	16	21.1	14
State Farm, Va.	12	13	16	E14.0	14
Richmond (Westham), Va.	12	14	16	13.7	15
Dan: Danville, Va.	11	14	14	11.0	14
Neuse: Neuse, N. C.	14	15	19	15.2	16
Smithfield, N. C.	13	(14 (25	21 28	17.3 16.3	18 26
Goldsboro, N. C.	14	18	28	#17.1	23
Kinston, N. C.	14	21	28	15.3	26
Cape Fear: William O. Huske, L & D, N. C.	42	14	20	(45.7 (47.7	15 18
Elizabethtown, N. C.	20	14	21	(24.0 (26.2	16 19
		25	28	23.8	27
Yadkin: Elkin, N. C.	18	13	13	18.6	13
Yadkin College, N. C.	18	14	15	23.2	15
Rocky: Norwood, N. C.	15	28	Mar. 1	20.7	Mar. 1
Lumber: Lumberton, N. C.	8	Jan. 27 22	Feb. 6 1/	#8.3	Jan.30-1
Pee Dee: Cheraw, S. C.	30	16	19	35.3	18
Peedee, S. C.	19	17	1/	22.3	23
Saluda: Pelzer, S. C.	9	14	15	10.0	14-15
Broad: Gaffney, S. C.	10	14	14	11.6	14
Blair, S. C.	14	14	19	21.3	15
Savannah: Milhaven, Ga.	15	27	28	15.7	28
Clyo, Ga.	11	20	28	13.5	28
Ogeechee: Dover, Ga.	7	22	28	9.0	25
Eden, Ga.	9	Jan. 28 24	3 28	9.5 10.8	1 28
Ocmulgee: Macon, Ga.	18	13	17	23.0	14
Hawkinsville, Ga.	25	18	21	26.7	19
Lumber City, Ga.	15	23	1/	17.2	25
Oconee: Milledgeville, Ga.	20	(14 (16	14 18	20.0 26.7	14 17
Dublin, Ga.	21	20	22	23.5	21
Mt. Vernon, Ga.	16	21	27	18.7	23
Altamaha: Charlotte, Ga.	15	Jan. 27 21	1 1/	16.3 21.2	Jan. 29 26
Satilla: Atkinson, Ga.	13	Jan. 25 24	12 1/	15.0 14.3	Jan. 31 28
EAST GULF OF MEXICO DRAINAGE					
Chattahoochee: Walter F. George L & D, Fort Gaines, Ga.	134	14	18	138.8	18
Flint: Montezuma, Ga.	20	16	19	21.55	17
Albany, Ga.	20	16	24	30.0	20
Newton, Ga.	24	20	24	28.65	22
EAST GULF OF MEXICO DRAINAGE	Ft.			Ft.	
Flint: Bainbridge, Ga.	25	19	25	27.3	22
Apalachicola: Jim Woodruff Dam, Chattahoochee, Fla.	66	15	21	69.5	19
Blountstown, Fla.	15	13	28	23.2	19
Choctawhatchee: Caryville, Fla.	12	15	23	13.1	18
Oostanaula: Resaca, Ga.	22	16	19	25.3	18
Etowah: Canton, Ga.	17	(13 (17	14 17	21.3 18.5	14 17
Coosa: Gadsden, Ala.	20	17	20	22.2	18
Cahaba: Centreville, Ala.	23	(13 (16	14 17	26.7 27.4	13 16
Marion Junction, Ala.	36	19	19	36.5	19
Alabama: Montgomery, Ala	35	16	21	40.8	18
Selma, Ala.	45	19	20	45.8	19
Millers Ferry, Ala.	40	16	26	49.8	21
Claiborne, Ala.	40	17	Mar. 2	45.6	23
Black Warrior: Oliver L & D, Tuscaloosa, Ala.	47	14	14	49.9	14
Warrior L & D, Ala.	30	14	20	36.8	18
Tombigbee: Tupelo, Miss.	21	11	13	24.5	12
Fulton, Miss.	16	12	16	17.5	12
Amory, Miss.	20	12	18	24.0	14
Aberdeen, Miss.	34	14	18	36.4	15
Tibbee, Miss.	23	12	18	26.7	14
Macon, Miss.	26	18	18	26.2	18
Gainesville, Ala.	36	17	23	39.8	18
Demopolis L & D, Ala.	48	14	24	59.0	18
Jackson, Lock U Dam, Ala.	43	14	1/	54.2	21,22
Chickasawhay: Enterprise, Miss.	20	13	19	25.5	17
Shubuta, Miss.	30	14	22	36.35	18
Waynesboro, Miss.	35	18	21	36.6	19
Leaf: Hattiesburg, Miss.	22	13	20	25.1	17
Beaumont, Miss.	20	13	23	27.6	18
Pascagoula: Merrill, Miss.	22	14	26	26.0	18
Bogue Chitto: Franklinton, La.	11	13	19	17.45	13
Pearl: Edinburg, Miss.	20	14	20	23.6	17
Jackson, Miss.	18	3 11	7 1/	19.5 31.0	5 18
Monticello, Miss.	19	11	1/	26.4	17
Columbia, Miss.	17	13	1/	22.85	18
Bogalusa, La.	15	Jan. 15	1/	20.5	18
Pearl River, La.	12	Jan. 28 13	5 1/	13.4 17.4	3 19
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Crow: Delano, Minn.	8	15	19	J 8.7	17
Cottonwood: New Ulm (nr), Minn.	11	9	12	J13.7	11
South Branch Zumbro: Rochester, Minn.	12	9	9	J13.9	9
Zumbro: Zumbro Falls, Minn.	18	9	10	J22.0	9
Theilman (nr), Minn.	38	9	10	J42.0	9
Whitewater: Beaver (nr), Minn.	7	9	10	J 9.8	9
Root: Houston, Minn.	15	9	10	J17.2	9
Hokah, Minn.	47	9	11	J51.2	9
Upper Iowa: Dorchester (nr), Iowa	14	8	10	J19.0	9
Kickapoo: La Farge, Wis.	12	8	9	13.7	9
Readstown, Wis.	10	9	10	40.3	9
Soldiers Grove, Wis.	723	8	12	727.4	9
Gays Mills, Wis.	698	8	12	702.0	9
Steuben, Wis.	8	8	14	12.8	10
Turkey: Garber, Iowa	17	8	10	24.8	9
Maquoketa: Maquoketa, Iowa	13	9	10	16.5	9

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	*Ft.*			*Ft.*	
Wapsipinicon: Dewitt, Iowa	10	17	22	11.8	18
East Branch Pecatonica: Blanchardville, Wis.	11	9	10	14.0	9
Pecatonica: Darlington, Wis.	11	9	10	15.7	9
Martintown, Wis.	11	9	15	17.5	12
Freeport, Ill.	13	12	16	14.2	14
Rock: Joslin, Ill.	10	10	Mar. 3	16.4	13
Moline, Ill.	13	12	12	13.6	12
Shell Rock: Marble Rock, Iowa	4	9	10	E 6.0	9
West Branch Cedar: Finch Ford, Iowa	12	11	11	12.2	11
Blackhawk Creek: Hudson, Iowa	12	9	10	14.8	9
Iowa:, Marshalltown, Iowa	13	9	9	13.75	9
Fox: Dayton, Ill.	12	10 23	11 24	14.0 20.0	10 23
Sangamon: Riverton, Ill.	13	11	14	15.0	11
Illinois: La Salle, Ill.	20	11	11	20.7	11
Havana, Ill.	14	13	18	14.5	14
Meredosia, Ill.	428	10	24	430.4	15
Bourbeuse: Union, Mo.	15	12	12	18.0	12
Meramec: Steelville, Mo.	12	10	11	20.8	10
Sullivan, Mo.	15	11	12	E25.8	11
Pacific, Mo.	11	10	14	22.0	13
Valley Park, Mo.	16	11	14	24.85	13
Kaskaskia: Vandalia, Ill.	18	12	12	18.0	12
Carlyle Dam, Ill.	423	13	18	425.6	15
Big Muddy: Murphysboro, Ill.	16	14	15	16.4	15
Mississippi: Davenport, Iowa	15	13	26	19.0	22
Keithsburg, Ill.	12	14	18	12.3	17
Burlington, Iowa	15	14	18	15.2	14-16
Missouri Basin					
Rock: Rock Rapids, Iowa	9	9	10	10.0	9
Rock Valley (nr), Iowa	11	9	11	14.9	10
Big Sioux: Hawarden, Iowa	15	10	13	19.0	11
Akron, Iowa	16	10	U	19.9	12
West Branch Floyd: Struble, Iowa	14	9	10	15.0	9
Floyd: Alton, Iowa	12	9	11	16.6	9
LeMars, Iowa	20	9	11	21.5	9
Merrill, Iowa	12	9	10	13.3	9
James, Iowa	16	9	12	20.2	10
North Branch Elkhorn: Hadar, Nebr.	12	9	11	15.5	10
Elkhorn: Norfolk, Nebr.	10	9	9	E14.1	9
Winslow, Nebr.	14	10	10	14.0	10
Little Sioux: Spencer, Iowa	10	9	11	12.9	9
Cherokee, Iowa	17	9	10	17.8	9
Lincoln Creek: Seward, Nebr.	15	9	9	15.2	9
Big Blue: Ulysees, Nebr.	15	9	10	19.1	9
Crete, Nebr.	16	10	13	19.6	11
Chariton: Chariton, Iowa	15	9	10	15.9	9
Gasconade: Hazlegreen, Mo.	21	11	11	24.0	11
Jerome, Mo.	15	11	12	20.7	11
Missouri: Waverly, Mo.	18	9	9	18.2	9
Ohio Basin					
Allegheny: Lock 9, Rimerton, Pa.	21	14	14	23.4	14
Lock 8, Mosgrove, Pa.	24	14	14	25.7	14
Lock 7, Kittanning, Pa.	23	14	14	24.0	14
Lock 5, Freeport, Pa.	21	14	14	24.0	14
Lock 4, Natrona, Pa.	20	14	14	21.4	14

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	*Ft*			*Ft*	
Allegheny: Lock 3, Acmetonia, Pa.	20	14	14	20.9	14
Monongahela: Lock 5, Brownsville, Pa.	23	13	14	21.9	14
Lock 4, Charleroi, Pa.	24	13	15	30.1	14
Lock 3, Elizabeth, Pa.	23	14	14	24.4	14
McKeesport, Pa.	12	13	15	15.6	14
Lock 2, Braddock, Pa.	26	13	15	28.9	14
Chartiers Creek: Carnegie, Pa.	10	13	14	13.9	13
Muskingum: McConnelsville, Ohio	11	13	13	11.2	13
Marietta, Ohio	35	14	16	39.3	15
Hocking: Athens, Ohio	17	13	15	19.6	14
Enterprise, Ohio	12	13	15	(12.5 (12.45	13 15
New: Radford, Va.	14	14	14	15.6	14
Paint Creek: Bourneville, Ohio	10	13	13	13.4	13
Scioto: La Rue, Ohio	11	11	12	12.3	11
Circleville, Ohio	14	13	15	15.55	14
Piketon, Ohio	16	12	17	23.3	14
Green: Lock 4, Woodbury, Ky.	33	15	15	33.2	15
Lock 2, Calhoun, Ky.	23	15	20	25.1	18
Saline: Harrisburg, Ill.	13	10	13	18.5	11
Muscatatuck: Austin, Ind.	16	10	15	20.6	12
White: Edwardsport, Ind.	15	13	13	15.3	15
Petersburg, Ind.	16	13	17	16.3	15-16
Skillet Fork. Wayne City, Ill.	15	11	13	16.6	11
Cumberland: Baxter, Ky.	16	13	13	18.2	13
Barbourville, Ky.	27	14	14	28.3	14
Cumberland, Ky.	7	13	13	7.75	13
Little Pigeon Creek: Sevierville, Tenn.	9	13	13	15.0	13
French Broad: Asheville, N. C.	8	13	15	(8.7 (9.1	13 14
Rosman, N. C.	8	13	13	12.5	13
Blantyre, N. C.	17	13	13	21.1	13
Marshall, N. C.	10	13	14	11.75	13
Hot Springs, N. C.	13	13	14	15.5	13
Tuckasegee: Bryson City, N. C.	11	13	13	12.2	13
Oconaluftee: Birdtown, N. C.	9	13	13	10.7	13
South Chickamauga Creek: Chickamauga, Tenn.	10	13 16	15 17	13.15 11.2	14 16
Tennessee. Whitesburg, Tenn.	560	13	19	563.6	17
Gilbertsville, Ky.	320	14	26	325.4	19
Ohio: Pittsburgh, Pa.	25	14	15	27.7	14
Dashields L & D, Pa.	26	14	15	28.3	14
Montgomery Is. L & D, Pa.	32	14	15	34.5	14
East Liverpool, Ohio	9	13	15	14.8	14
New Cumberland L & D, Pa.	36	14	15	38.6	15
Wellsburg, W. Va.	33	14	15	39.0	15
Dam 12, Wheeling, W. Va.	36	14	15	40.4	15
Dam 13, McMechen, W. Va.	37	14	16	42.9	15
Steubenville, Ohio	33	14	15	37.4	15
Portsmouth, Ohio	50	15	18	51.5	17
Maysville, Ky.	50	17	18	52.0	17
Anthony Meldahl L & D, Ohio	51	17	18	51.2	17
Cincinnati, Ohio	52	16	19	53.0	18
Louisville, Ky.	23	18	18	23.1	18
Dam 44, Leavenworth, Ind.	53	16	21	56.1	19
Dam 45, Addison, Ky.	47	16	22	49.3	19
Tell City, Ind.	38	15	23	42.[illegible]	20

FLOOD STAGE DATA

(All dates in February unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Ohio: Dam 46, Owensboro, Ky.	41	18	22	41.5	19
Dam 47, Newburgh, Ind.	48	14	25	43.9	21
Dam 48, Cypress, Ind.	38	16	25	43.2	21
Mt. Vernon, Ind.	35	16	26	40.1	22
Dam 49, Uniontown, Ky.	37	17	26	41.0	22
Shawneetown, Ill.	33	15	27	40.4	23
Dam 50, Fords Ferry, Ky.	34	15	27	43.0	22
Dam 52, Brookport, Ill.	37	18	25	38.5	19,23
Dam 53, Grand Chain, Ill.	42	17	25	43.5	19,20,21, 22,23
Cairo, Ill.	40	16	25	41.9	19
White Basin					
Buffalo: Gilbert, Ark.	30	9	10	39.3	9
Black: Black Rock, Ark.	14	10	25	22.3	10
Cache: Patterson, Ark.	7	Jan. 2	1/	(11.1 (9.1	Jan. 14 16-18
White: Calico Rock, Ark.	19	10	11	22.3	10
Batesville, Ark.	23	10	11	28.5	10
Georgetown, Ark.	21	19	26	21.5	23
Clarendon, Ark.	26	16	1/	27.2	24-Mar.1
St. Charles, Ark.	25	27	1/	25.4	27-Mar.4
Arkansas Basin					
Illinois: Tahlequah, Okla.	11	10	12	17.2	11
Poteau: Panama, Okla.	24	9	11	26.7	10
Red Basin					
Sulphur: Naples, Tex.	22	14	19	25.5	16
MISSISSIPPI SYSTEM	Ft.			Ft.	
Lower Mississippi Basin					
St. Francis: Fisk, Mo.	20	12	25	24.4	14
St. Francis, Ark.	18	16	26	20.4	18
Coldwater: Sarah, Miss.	18	10	11	21.0	11
Yazoo: Yazoo City, Miss.	29	13	21	29.8	16
Big Black: Pickens, Miss.	16	11	23	19.7	14
Bovina, Miss.	28	10	1/	38.5	17-19
WEST GULF OF MEXICO DRAINAGE					
Mermentau: Mermentau, La.	5	14	23	7.4	17
Calcasieu: Hineston, La.	12	Jan. 25 10	4 22	13.15 20.5	Jan. 30 11
Oakdale, La.	12	13	17	19.2	13
Kinder, La.	16	14	22	21.5	16
Old Town Bay, La.	4	16	22	7.5	17
Sabine: Milam, Tex.	35	12	16	36.9	13
Bon Wier, Tex.	17	11	21	22.8	13
Deweyville, Tex.	14	13	25	17.9	15
Pine Island Bayou: Voth (nr), Tex.	11	14	17	12.4	15
Trinity: Liberty, Tex.	24	11	18	26.6	12
Moss Bluff, Tex.	4	1 10	1 24	4.0 7.1	1 16-18
PACIFIC SLOPE DRAINAGE					
Sacramento Basin					
Sacramento: Colusa Weir, Calif.	62	5	7	63.3	5
Tisdale Weir, Calif.	45	5	9	47.9	5

* Provisional
# Highest stage observed
1/ Continued at end of month
E Estimated
J Ice action
U Unknown

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	86	- 7.7	79	300	3.3
1000	28	168			302	2.9
950	28	570	- 6.3	75	291	9.1
900	28	991	- 8.0	79	288	13.2
850	28	1,435	- 8.6	76	290	17.7
800	28	1,904	-10.1	72	292	18.1
750	28	2,400	-11.6	63	288	21.0
700	28	2,928	-13.5	64	282	27.4
650	28	3,486	-16.2	65	278	32.6
600	28	4,088	-19.3	63	275	37.5
550	28	4,725	-22.6	58	275	42.2
500	28	5,425	-26.9	51	273	46.6
450	28	6,171	-32.1	49	272	50.9
400	28	7,001	-37.5	49	273	45.8
350	28	7,911	-43.3	41	275	47.6
300	28	8,935	-49.0		282	49.3
250	28	10,119	-53.5		280	57.5
200	28	11,548	-54.8		277	64.3
175	28	12,401	-54.7		282	57.1
150	28	13,387	-54.8		278	55.6
125	26	14,551	-55.6		276	51.9
100	25	15,962	-57.0		275	50.5
80	25	17,370	-57.7		278	45.6
70	25	18,210	-58.0		274	43.1
60	25	19,181	-58.1		274	38.1
50	25	20,329	-58.2		272	37.7
40	25	21,735	-57.8		273	36.3
30	24	23,551	-56.7		273	36.1
25	22	24,696	-55.8		272	35.9
20	20	26,117	-54.9		268	38.9
15	18	27,947	-53.5		267	48.6
10	7	30,594	-45.4			
7						

ALBUQUERQUE, N. MEX.
837 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,619	- 3.7	65	11	2.5
1000	28	184				
950	28	595				
900	28	1,034				
850	28	1,491				
800	28	1,973	- 2.0	46	304	7.4
750	28	2,483	- 4.9	50	304	10.9
700	28	3,023	- 8.1	53	297	15.3
650	28	3,593	-10.9	50	292	17.5
600	28	4,206	-14.4	47	287	21.8
550	28	4,854	-18.4	46	285	25.4
500	28	5,566	-23.2	46	284	27.8
450	28	6,320	-28.5	43	283	32.4
400	28	7,163	-34.7	39	283	36.1
350	28	8,082	-41.5	38	280	35.7
300	28	9,112	-48.3		280	40.6
250	28	10,293	-55.2		277	42.5
200	28	11,709	-56.9		276	47.4
175	28	12,556	-55.6		272	48.0
150	28	13,539	-55.7		271	46.8
125	27	14,698	-57.7		272	46.6
100	27	16,098	-60.0		268	40.0
80	27	17,484	-61.6		272	36.5
70	27	18,311	-61.1		270	32.4
60	25	19,269	-60.7		268	25.3
50	24	20,405	-60.4		266	23.1
40	23	21,798	-59.1		262	22.5
30	23	23,605	-58.5		266	21.4
25	21	24,747	-58.0		263	22.3
20	17	26,159	-56.4		272	17.1
15	10	28,000	-55.4			
10	5	30,627	-50.4			
7						

AMARILLO, TEXAS
890 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,095	- 3.5	82	252	2.7
1000	28	168				
950	28	583				
900	28	1,015				
850	28	1,464	- .1	60	250	7.8
800	28	1,949	- .6	48	268	8.4
750	28	2,459	- 3.1	47	274	8.5
700	28	3,006	- 6.4	44	269	12.2
650	28	3,575	-10.4	45	266	15.3
600	28	4,194	-14.3	44	263	19.2
550	28	4,845	-18.6	42	263	24.9
500	28	5,552	-23.7	42	263	28.6
450	28	6,305	-29.1	42	263	33.0
400	28	7,145	-35.2	42	262	37.1
350	28	8,063	-41.6	47	263	42.9
300	28	9,093	-48.1		264	51.3
250	28	10,277	-54.3		265	54.8
200	28	11,696	-56.5		266	53.4
175	28	12,545	-55.6		260	55.8
150	28	13,526	-55.9		260	53.6
125	28	14,682	-57.5		263	49.5
100	28	16,082	-60.3		263	45.3
80	28	17,472	-60.7		265	36.3
70	27	18,299	-61.1		263	31.7
60	26	19,256	-60.9		265	27.0
50	26	20,391	-60.2		262	26.6
40	25	21,788	-59.0		264	25.8
30	25	23,596	-57.9		264	25.8
25	24	24,747	-57.1		268	28.0
20	21	26,158	-56.0		272	25.3
15	15	27,982	-54.3		261	33.8
10	7	30,631	-48.8			
7						

ANCHORAGE, ALASKA
1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	29	- 9.8	75	5	.8
1000	28	60			257	.8
950	28	460	- 6.8	67	356	3.1
900	28	882	- 7.5	66	137	2.9
850	28	1,326	- 9.1	65	135	2.7
800	28	1,793	-11.6	64	180	2.5
750	28	2,287	-13.9	61	202	4.3
700	28	2,807	-17.1	61	230	5.6
650	28	3,354	-20.6	59	254	9.3
600	28	3,947	-24.2	59	260	13.0
550	28	4,570	-28.2	55	270	14.6
500	28	5,253	-32.9	49	270	11.8
450	28	5,986	-37.9	44	269	11.1
400	28	6,790	-43.0	34	262	15.0
350	28	7,679	-48.1		256	16.3
300	28	8,685	-51.9		250	17.5
250	28	9,863	-52.7		255	18.5
200	28	11,311	-50.1		251	19.2
175	28	12,185	-49.2		251	18.6
150	28	13,197	-48.9		258	15.9
125	28	14,394	-48.8		258	15.7
100	27	15,858	-48.5		260	15.5
80	27	17,326	-48.5		283	13.2
70	27	18,203	-48.6		281	10.3
60	27	19,216	-49.0		291	11.7
50	27	20,413	-48.6		318	10.1
40	25	21,879	-48.1		345	7.6
30	24	23,778	-48.2		25	9.5
25	21	24,984	-48.1		27	12.2
20	18	26,455	-47.5		47	18.3
15	14	28,336	-46.7		53	18.1
10	[illegible]	31,077	-46.5			
7						

* ANNETTE, ALASKA
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	37	2.1	80	134	3.9
1000	28	97			146	4.1
950	28	508	- .4	86	172	8.5
900	28	940	- 2.9	89	193	11.5
850	28	1,391	- 5.5	90	204	12.8
800	28	1,865	- 8.2	83	219	13.0
750	28	2,365	-11.1	71	233	14.6
700	28	2,892	-13.5	68	244	15.7
650	28	3,451	-16.8	69	252	17.9
600	28	4,050	-20.6	68	256	18.5
550	28	4,685	-24.7	64	256	19.0
500	28	5,376	-29.5	60	260	21.8
450	28	6,115	-34.7	55	269	24.7
400	28	6,935	-40.5	51	270	27.2
350	28	7,833	-46.1		278	31.3
300	28	8,845	-52.2		278	32.6
250	28	10,011	-56.4		284	33.2
200	28	11,431	-54.5		288	29.5
175	28	12,288	-53.1		287	27.2
150	28	13,283	-52.3		291	24.9
125	28	14,461	-52.8		295	23.1
100	28	15,899	-53.2		301	22.9
80	27	17,339	-53.7		308	19.4
70	27	18,196	-53.4		312	17.5
60	27	19,191	-53.1		322	17.7
50	27	20,366	-53.1		341	16.9
40	27	21,805	-52.7		358	16.5
30	26	23,663	-52.2		14	19.0
25	23	24,843	-52.1		22	21.4
20	22	26,288	-52.1		26	26.8
15	20	28,149	-52.0		31	28.2
10	15	30,810	-50.9		39	37.3
7	8	33,151	-48.3			

ATHENS, GA.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	246	3.2	80	345	1.2
1000	28	179				
950	28	599	4.5	66	269	.6
900	28	1,037	3.9	62	233	6.6
850	28	1,501	2.6	59	255	11.3
800	28	1,990	.8	56	259	16.1
750	28	2,507	- 1.5	52	265	19.8
700	28	3,054	- 3.9	52	267	26.0
650	27	3,635	- 6.6	43	261	29.9
600	27	4,259	-10.0	41	257	38.5
550	27	4,923	-13.8	42	256	43.7
500	27	5,644	-18.2	43	254	49.3
450	27	6,418	-23.7	43	253	55.6
400	27	7,274	-29.9	48	254	61.6
350	27	[illegible],211	-36.7	49	255	70.1
300	27	9,262	-44.0	43	252	76.9
250	27	10,463	-52.2		256	92.5
200	27	11,885	-57.8		259	94.0
175	27	12,725	-58.4		259	97.9
150	26	13,691	-59.8		261	91.9
125	26	14,825	-61.8		261	77.9
100	26	16,197	-64.8		257	64.5
80	26	17,557	-64.7		262	50.1
70	26	18,373	-63.7		262	41.0
60	25	19,319	-61.9		268	34.0
50	25	20,449	-60.9		266	31.1
40	24	21,837	-59.3		265	29.3
30	22	23,651	-57.6		273	30.7
25	21	24,804	-55.3		272	32.4
20	19	26,232	-53.8		269	33.8
15	12	28,071	-51.7			
10						
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* BARROW, ALASKA
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	8	-30.4	75	89	3.7
1000	28	123			90	6.0
950	28	501	-23.6	81	78	6.8
900	28	891	-21.3	76	72	5.2
850	28	1,314	-20.5	70	40	2.9
800	28	1,762	-20.9	63	11	2.3
750	28	2,237	-22.2	63	3	2.3
700	28	2,743	-24.2	61	329	3.7
650	28	3,280	-26.9	60	314	4.5
600	28	3,854	-30.1	59	298	6.4
550	28	4,467	-33.9	59	284	7.4
500	28	5,132	-37.6	56	274	8.7
450	28	5,850	-41.9	61	279	9.7
400	28	6,643	-46.6		274	12.8
350	28	7,522	-50.2		265	12.0
300	28	[illegible],523	-52.5		264	14.0
250	28	9,702	-51.8		262	14.8
200	28	11,155	-49.5		265	14.8
175	28	12,031	-48.5		267	15.2
150	28	13,046	-48.3		271	16.3
125	28	14,248	-47.6		272	18.3
100	28	15,724	-47.0		276	17.9
80	28	17,200	-47.1		278	17.9
70	28	18,083	-46.9		284	19.8
60	28	19,104	-47.0		286	19.6
50	27	20,323	-47.0		287	20.8
40	27	21,802	-46.8		293	20.8
30	26	23,716	-46.9		299	23.3
25	25	24,914	-46.3		298	24.7
20	24	26,407	-45.7		308	24.7
15	24	28,326	-45.1		312	24.9
10	19	31,073	-45.2		332	22.1
7	12	33,450	-47.2			

BARTER IS., ALASKA
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	15	-30.1	77	245	5.1
1000	28	116			237	2.7
950	28	490	-21.8	77	235	1.6
900	28	885	-18.7	71	273	4.9
850	28	1,309	-18.7	67	272	7.8
800	28	1,759	-20.3	70	280	9.1
750	28	2,232	-21.9	69	278	8.5
700	28	2,741	-24.2	68	284	11.3
650	28	3,276	-26.5	62	285	13.4
600	28	3,854	-29.1	57	283	15.2
550	28	4,463	-32.9	55	283	16.3
500	28	5,136	-37.0	55	279	16.5
450	28	5,852	-41.4	53	281	18.8
400	28	6,650	-46.1		279	21.2
350	28	7,529	-50.3		282	23.3
300	28	8,528	-53.0		271	22.1
250	28	9,703	-52.6		276	19.4
200	28	11,155	-49.7		279	22.0
175	28	12,030	-49.0		283	21.4
150	28	13,043	-48.8		288	23.5
125	28	14,241	-48.6		289	21.2
100	28	15,710	-47.9		294	24.7
80	28	17,183	-47.3		299	23.5
70	28	18,065	-47.6		304	24.3
60	28	19,083	-47.5		306	26.4
50	28	20,287	-47.6		308	27.2
40	28	21,763	-47.3		308	30.3
30	28	23,665	-47.5		313	31.1
25	28	24,870	-47.5		319	34.6
20	25	26,357	-47.0		322	38.9
15	21	28,270	-46.7		332	42.0
10	11	31,003	-47.1			
7						

BETHEL, ALASKA
1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	39	-10.7	84	175	1.7
1000	28	54			208	2.7
950	28	455	- 7.2	77	211	4.5
900	28	874	- 8.2	74	227	5.6
850	28	1,317	- 9.8	67	239	6.4
800	28	1,783	-12.2	60	246	6.4
750	28	2,273	-14.4	58	248	7.0
700	28	2,795	-17.2	58	246	8.2
650	28	3,344	-20.6	63	243	8.2
600	28	3,934	-24.3	63	235	9.5
550	28	4,560	-28.4	64	238	9.1
500	28	5,240	-33.1	62	239	10.9
450	28	5,967	-38.2	66	249	12.8
400	28	6,774	-43.5	61	248	14.8
350	28	7,662	-48.6		250	15.0
300	28	8,666	-52.4		249	17.3
250	28	9,840	-53.8		244	17.9
200	28	11,281	-51.1		238	16.9
175	28	12,154	-49.4		235	18.5
150	28	13,167	-48.7		241	16.7
125	28	14,367	-48.3		231	14.4
100	28	15,837	-47.9		235	14.4
80	28	17,312	-47.3		237	11.8
70	28	18,194	-47.9		235	9.7
60	28	19,210	-48.0		231	9.1
50	28	20,414	-47.6		234	6.6
40	28	21,888	-47.5		248	4.7
30	27	23,792	-47.3		208	1.0
25	27	24,999	-46.6		43	2.5
20	26	26,487	-45.7		33	6.0
15	24	28,407	-44.9		38	12.4
10	14	31,157	-43.3		23	18.1
7						

BISMARCK, N. DAK.
958 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	505	-14.6	67	80	.6
1000	28	179				
950	28	569			149	2.1
900	28	984	-10.2	68	289	8.0
850	28	1,426	- 8.3	61	293	11.7
800	28	1,896	- 8.7	56	297	14.4
750	28	2,390	-10.9	53	301	18.1
700	28	2,923	-13.7	54	303	19.4
650	28	3,475	-16.7	52	298	22.0
600	28	4,080	-20.6	50	297	24.7
550	28	4,711	-24.9	47	297	26.4
500	28	5,405	-29.6	46	295	29.5
450	28	6,139	-34.9	45	293	28.9
400	28	6,963	-40.7	49	291	32.1
350	28	7,859	-47.0		290	33.8
300	28	8,865	-53.4		292	36.1
250	28	10,025	-57.8		292	34.8
200	28	11,433	-56.9		289	31.5
175	28	12,282	-55.5		288	32.4
150	28	13,266	-54.9		283	32.6
125	28	14,433	-54.5		290	30.7
100	28	15,859	-55.3		287	27.6
80	28	17,278	-56.3		290	27.4
70	28	18,125	-56.7		289	26.0
60	28	19,101	-57.3		292	23.3
50	28	20,252	-57.7		294	20.4
40	27	21,665	-57.4		293	19.0
30	26	23,482	-57.6		302	18.6
25	24	24,637	-56.8		308	17.3
20	22	26,057	-55.8		310	16.5
15	14	27,899	-54.6		309	16.3
10	10	30,495	-53.1			
7						

BOISE, IDAHO
918 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	868	- 1.9	82	147	3.3
1000	28	178				
950	28	585				
900	28	1,023	.8	65	140	1.9
850	28	1,481	- .9	60	269	1.4
800	28	1,963	- 4.1	63	279	5.6
750	28	2,467	- 7.4	65	289	8.9
700	28	3,003	-10.3	63	287	12.6
650	28	3,569	-13.6	56	287	15.0
600	28	4,175	-17.4	57	287	17.1
550	28	4,822	-21.6	54	294	20.6
500	28	5,517	-26.4	51	296	21.8
450	28	6,267	-31.7	52	297	26.2
400	28	7,095	-37.5	48	297	31.3
350	28	8,004	-44.0		296	35.5
300	28	9,023	-51.2		296	39.6
250	28	10,190	-57.4		296	43.9
200	28	11,593	-58.5		297	35.9
175	28	12,435	-56.9		295	32.4
150	28	13,416	-55.4		292	30.5
125	28	14,577	-56.1		295	29.7
100	28	15,992	-57.1		297	25.1
80	28	17,402	-57.8		302	21.6
70	28	18,242	-58.6		304	18.5
60	28	19,209	-58.6		308	17.7
50	28	20,353	-59.0		316	16.1
40	27	21,748	-58.9		317	13.8
30	27	23,556	-57.8		337	12.6
25	25	24,713	-57.3		346	12.8
20	22	26,144	-55.9		350	13.4
15	14	27,948	-54.5		358	9.7
10						
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* BOOTHVILLE, LA.
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1	11.1	90	40	4.5
1000	28	155	12.0	82	55	6.0
950	28	585	10.5	75	146	6.8
900	28	1,034	9.6	63	209	8.2
850	28	1,508	8.2	57	232	13.8
800	28	2,007	6.1	54	241	18.5
750	28	2,533	3.9	44	252	23.1
700	28	3,092	1.1	45	261	27.4
650	28	3,681	- 1.6	38	258	30.1
600	28	4,318	- 5.5	37	259	34.4
550	28	4,991	- 9.7	35	255	38.7
500	28	5,724	-14.5	32	251	42.3
450	28	6,509	-20.1	34	250	46.2
400	28	7,376	-26.2	36	253	51.1
350	28	8,330	-33.0	36	259	57.7
300	28	9,396	-40.8	41	258	63.7
250	28	10,613	-49.9		259	71.1
200	28	12,043	-57.6		259	87.0
175	28	12,882	-59.3		257	89.6
150	28	13,843	-61.2		250	80.8
125	27	14,966	-64.9			
100	27	16,313	-68.5			
80	27	17,649	-67.8			
70	27	18,454	-66.1			
60	26	19,392	-64.3			
50	25	20,511	-61.5			
40	25	21,897	-60.6		251	20.6
30	24	23,704	-57.6		293	15.0
25	23	24,861	-56.1		268	9.3
20	21	26,286	-53.9		235	3.5
15	21	28,146	-50.3		262	4.5
10	18	30,835	-44.2		232	11.1
7	12	33,281	-38.8			

* BROWNSVILLE, TEXAS
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	7	11.2	93	349	3.7
1000	28	143	12.5	85	13	4.5
950	28	574	11.2	84	105	5.1
900	28	1,026	10.2	74	171	6.2
850	28	1,502	10.1	62	205	12.0
800	28	2,005	8.3	62	217	16.9
750	28	2,535	6.4	48	225	17.7
700	28	3,100	3.5	40	241	19.0
650	28	3,694	- .7	38	248	22.3
600	28	4,332	- 5.1	39	249	27.0
550	28	5,006	- 9.7	34	251	30.9
500	28	5,740	-14.5	33	249	37.9
450	28	6,525	-19.9	35	246	48.0
400	28	7,394	-26.0	41	244	55.8
350	28	8,347	-32.9	44	244	66.0
300	28	9,414	-40.3	42	244	82.4
250	28	10,634	-48.9		245	92.7
200	28	12,070	-56.7		249	104.1
175	28	12,911	-59.3		251	101.6
150	28	13,869	-62.7		249	94.2
125	28	14,982	-66.2		252	82.6
100	27	16,323	-70.5		251	61.6
80	27	17,641	-71.0		249	42.7
70	27	18,435	-68.5		253	32.2
60	27	19,367	-65.2		253	21.0
50	26	20,482	-63.4		245	15.7
40	26	21,860	-61.2		246	8.0
30	26	23,651	-59.4		259	4.5
25	25	24,795	-58.0		315	2.1
20	24	26,207	-55.6		41	3.9
15	22	28,060	-52.1		18	1.7
10	17	30,726	-46.1		245	5.8
7						

BUFFALO, N. Y.
994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	218	- 5.4	87	250	4.9
1000	28	172				
950	28	573	- 5.3	79	253	10.3
900	28	999	- 6.7	80	272	12.8
850	28	1,444	- 8.5	82	281	14.8
800	28	1,913	- 9.9	81	285	18.8
750	28	2,411	-11.8	75	281	22.0
700	28	2,936	-14.1	69	276	25.6
650	28	3,494	-16.8	67	275	28.0
600	28	4,093	-20.0	62	273	32.1
550	28	4,731	-23.7	58	268	38.3
500	28	5,424	-27.9	54	267	41.6
450	28	6,170	-32.6	49	268	46.0
400	27	6,989	-38.4	44	272	49.7
350	27	7,895	-44.1	47	275	46.4
300	27	8,916	-49.8		276	50.7
250	27	10,097	-53.4		278	49.1
200	27	11,528	-54.9		280	52.8
175	27	12,381	-55.0		279	54.2
150	27	13,366	-54.8		276	52.4
125	25	14,516	-55.5		275	49.3
100	25	15,931	-57.0		273	46.2
80	23	17,327	-57.9		272	46.2
70	22	18,168	-58.3		273	43.7
60	22	19,137	-58.0		271	38.9
50	22	20,287	-57.7		269	37.3
40	22	21,696	-57.2		265	34.0
30	21	23,519	-56.6		270	36.7
25	21	24,677	-56.0		270	37.9
20	19	26,086	-55.3		269	40.8
15	19	27,926	-54.0		265	47.0
10	12	30,596	-49.4			
7	5	32,994	-44.0			

*CANTON IS., PACIFIC AREA
+ 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	4	30.4	70	67	8.9
1000	28	70	28.8	67	68	10.1
950	28	515	23.2	68	67	11.8
900	28	993	20.4	64	78	11.3
850	28	1,485	18.1	55	86	11.5
800	28	2,003	15.9	47	89	9.7
750	28	2,544	13.6	42	90	8.7
700	28	3,128	10.5	39	91	8.0
650	28	3,737	7.3	36	94	9.1
600	28	4,396	3.6	34	93	7.8
550	28	5,094	- .3	32	102	5.8
500	28	5,854	- 4.2	27	94	2.9
450	28	6,674	- 9.0	26	59	1.7
400	28	7,580	-14.9	25	179	1.9
350	28	8,576	-21.7	25	184	4.7
300	28	9,693	-29.9	24	189	7.4
250	28	10,965	-40.1	22	211	11.3
200	27	12,449	-52.6		225	14.6
175	27	13,297	-59.8		229	13.8
150	27	14,243	-67.3		232	12.6
125	27	15,320	-75.2		231	6.8
100	27	16,590	-82.1		187	3.5
80	27	17,830	-82.5		93	8.7
70	27	18,584	-77.7		89	17.3
60	27	19,473	-74.0		92	27.8
50	27	20,548	-69.9		89	44.1
40	25	21,894	-63.6		89	57.3
30	24	23,698	-55.2		88	42.3
25	24	24,870	-52.1		71	8.2
20	24	26,322	-49.7		274	11.3
15	21	28,205	-47.9		273	15.5
10	18	30,896	-44.4		288	3.1
7	6	33,267	-42.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBRUARY 1966

*** CAPE HATTERAS, N. C.**
1021 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	27	4	5.9	81	340	3.3
1000	27	175	6.4	72	336	3.3
950	27	593	4.4	64	291	6.0
900	27	1,034	3.0	61	277	10.3
850	27	1,497	1.4	59	269	14.0
800	27	1,984	.0	58	270	20.6
750	27	2,499	- 1.7	52	266	26.0
700	27	3,047	- 4.1	52	264	31.5
650	26	3,628	- 7.0	48	266	39.6
600	26	4,252	-10.4	46	264	45.8
550	26	4,908	-14.5	46	263	49.7
500	26	5,634	-18.8	42	265	56.3
450	26	6,405	-24.0	43	264	65.5
400	26	7,262	-29.6	44	265	74.4
350	26	8,202	-36.0	48	264	81.6
300	26	9,257	-43.5		265	82.4
250	26	10,461	-51.7		266	90.5
200	25	11,891	-57.9		270	100.6
175	24	12,738	-58.5		272	100.8
150	23	13,714	-59.2		270	89.7
125	21	14,853	-62.4		266	80.2
100	21	16,227	-63.6		267	64.1
80	21	17,595	-63.6		266	54.8
70	21	18,416	-62.3		266	44.1
60	21	19,371	-61.0		272	37.9
50	19	20,511	-60.4		281	22.5
40	19	21,907	-58.6		280	16.9
30	17	23,728	-55.9			
25	16	24,892	-53.9			
20	15	26,326	-51.6		257	21.2
15	14	28,195	-49.2			
10	11	30,902	-43.0			
7						

*** CARIBOU, ME.**
993 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	191	-12.6	81	297	3.9
1000	28	132				
950	28	529	- 9.3	77	315	9.1
900	28	944	-10.4	74	319	12.0
850	28	1,384	-11.6	69	311	14.4
800	28	1,847	-13.4	67	312	16.3
750	28	2,338	-15.2	65	303	17.5
700	28	2,857	-17.3	63	295	19.6
650	28	3,406	-20.1	60	290	22.5
600	28	3,999	-23.3	54	288	24.9
550	28	4,628	-27.0	53	287	28.0
500	28	5,314	-30.6	50	285	32.1
450	28	6,054	-35.0	47	286	35.4
400	28	6,870	-39.9	44	280	40.2
350	28	7,772	-45.2		280	40.8
300	28	8,789	-50.2		279	43.1
250	28	9,968	-54.0		281	46.4
200	28	11,396	-54.3		278	49.7
175	28	12,253	-53.5		278	47.0
150	28	13,244	-53.8		276	47.0
125	28	14,413	-54.5		274	47.4
100	28	15,841	-54.7		271	43.3
80	28	17,264	-55.9		270	40.8
70	28	18,113	-55.9		271	37.9
60	27	19,083	-56.7		274	34.2
50	27	20,235	-57.6		273	33.8
40	27	21,643	-57.4		274	31.7
30	27	23,459	-57.2		274	33.4
25	27	24,613	-56.6		273	32.4
20	26	26,019	-56.6		266	37.3
15	23	27,837	-54.5		267	44.9
10	10	30,517	-48.4			
7						

CHARLESTON, S. C.
1020 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	13	5.8	82	333	.6
1000	28	174	7.9	72	54	.8
950	28	596	7.6	66	211	2.9
900	28	1,043	6.2	64	233	8.5
850	28	1,510	4.5	57	250	13.0
800	28	2,003	3.1	45	258	17.5
750	28	2,524	.9	39	257	22.1
700	28	3,077	- 1.9	46	262	27.0
650	28	3,664	- 4.3	44	261	34.8
600	28	4,292	- 7.8	45	257	41.2
550	28	4,958	-11.8	41	256	45.6
500	28	5,689	-16.3	39	258	50.7
450	28	6,470	-21.9	41	256	55.4
400	28	7,332	-28.0	42	256	61.2
350	28	8,278	-34.6	47	255	72.3
300	28	9,337	-42.4	43	258	81.4
250	28	10,547	-51.1		258	93.4
200	28	11,973	-58.4		260	103.0
175	28	12,810	-59.6		262	107.0
150	28	13,773	-60.6		264	100.0
125	28	14,900	-63.8		264	82.4
100	28	16,262	-66.0		262	66.4
80	27	17,612	-65.9		261	48.4
70	27	18,423	-64.8		263	41.2
60	27	19,368	-62.6		264	31.7
50	27	20,493	-61.7		267	27.4
40	27	21,883	-59.2		276	23.9
30	26	23,692	-57.1		281	22.7
25	26	24,851	-55.1		273	19.8
20	25	26,281	-53.0		267	16.5
15	23	28,142	-50.3		272	12.8
10	10	30,792	-46.5			
7						

CHIHUAHUA, MEXICO
856 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,428	2.6	52	228	1.9
1000	28	144				
950	28	563				
900	28	1,011				
850	28	1,481	2.8	52	247	1.6
800	28	1,974	4.5	46	242	6.8
750	28	2,495	2.3	46	244	10.5
700	28	3,053	- .1	40	252	17.9
650	28	3,638	- 3.7	35	258	22.1
600	28	4,270	- 7.6	32	262	25.6
550	28	4,937	-12.1	31	264	27.2
500	28	5,662	-17.4	33	266	27.8
450	28	6,438	-23.5	38	264	32.4
400	28	7,293	-29.7	37	262	36.9
350	28	8,230	-36.9	39	267	38.7
300	28	9,278	-44.8		270	42.0
250	28	10,476	-51.9		278	47.8
200	27	11,904	-56.0		269	60.4
175	27	12,753	-55.9		270	69.0
150	27	13,729	-58.0		274	65.7
125	25	14,868	-61.0		265	54.2
100	24	16,247	-64.1		267	42.9
80	23	17,612	-65.0		270	38.9
70	23	18,426	-64.7		271	35.7
60	22	19,373	-62.9		273	27.2
50	22	20,501	-61.0		272	23.5
40	21	21,892	-59.3		267	19.6
30	17	23,698	-58.6		267	20.0
25	16	24,850	-57.6		269	21.8
20	13	26,272	-55.2			
15	8	28,100	-52.4			
10						
7						

*** COLD BAY, ALASKA**
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	30	- .6	81	214	5.4
1000	28	73			173	3.5
950	28	480	- 2.1	75	237	7.6
900	28	910	- 4.8	76	248	10.1
850	28	1,358	- 6.8	65	244	15.0
800	28	1,829	- 9.3	60	255	17.9
750	28	2,324	-12.1	53	257	19.8
700	28	2,851	-15.2	54	256	21.2
650	28	3,403	-18.8	53	254	22.3
600	28	3,998	-23.1	52	252	25.6
550	28	4,628	-27.2	47	254	27.6
500	28	5,311	-31.5	47	257	31.9
450	28	6,050	-35.5	48	262	34.8
400	28	6,863	-40.6	48	269	38.1
350	28	7,762	-45.8		267	39.6
300	28	8,777	-50.9		262	39.4
250	28	9,955	-54.0		261	33.0
200	28	11,390	-51.9		245	27.8
175	28	12,258	-50.5		236	26.6
150	28	13,266	-49.3		230	24.9
125	28	14,462	-49.4		231	19.0
100	28	15,925	-49.0		237	15.9
80	28	17,391	-48.9		228	13.8
70	28	18,267	-48.8		223	11.8
60	28	19,278	-49.0		209	8.0
50	28	20,475	-49.1		200	6.0
40	28	21,938	-49.3		140	3.7
30	27	23,824	-48.6		84	9.7
25	27	25,025	-47.8		80	13.0
20	26	26,497	-47.6		77	18.5
15	24	28,413	-46.4		76	26.0
10	21	31,112	-46.0		72	36.3
7	12	33,508	-45.5		72	41.8

COLUMBIA, MO.
991 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	238	- 3.3	79	109	1.6
1000	28	166				
950	28	573	- 2.0	69	208	1.6
900	28	1,003	- 2.6	64	272	6.2
850	28	1,455	- 3.9	60	282	10.1
800	28	1,933	- 5.1	54	281	12.2
750	28	2,434	- 6.7	48	276	14.6
700	28	2,976	- 9.0	45	273	17.1
650	28	3,540	-12.2	48	271	20.4
600	28	4,155	-16.0	48	266	25.4
550	28	4,798	-20.4	50	265	28.4
500	28	5,504	-25.0	49	261	33.2
450	28	6,253	-30.3	49	254	36.7
400	28	7,090	-36.4	44	250	41.2
350	28	8,003	-43.1	42	251	45.3
300	28	9,025	-50.5		249	46.2
250	28	10,198	-56.0		253	52.4
200	28	11,611	-57.4		259	53.8
175	28	12,459	-55.6		261	53.6
150	28	13,441	-56.1		263	53.6
125	28	14,596	-57.5		264	50.5
100	28	16,000	-59.2		263	45.1
80	28	17,396	-60.2		267	40.2
70	28	18,227	-60.5		267	37.1
60	28	19,187	-60.3		267	36.1
50	27	20,320	-59.7		269	32.1
40	25	21,719	-59.4		269	28.4
30	20	23,527	-58.4		270	28.4
25	16	24,691	-58.2		268	24.3
20	8	26,148	-57.9			
15						
10						
7						

CORPUS CHRISTI, TEXAS
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	6	11.3	82	9	4.9
1000	26	146	10.9	84	359	7.2
950	26	570	9.8	83	2	6.0
900	26	1,022	8.7	77	293	4.1
850	26	1,494	7.3	72	241	5.4
800	26	1,993	5.8	68	238	12.0
750	26	2,520	4.4	63	241	16.3
700	26	3,080	1.7	62	247	18.8
650	26	3,669	- 2.3	59	244	21.2
600	26	4,305	- 6.7	56	247	24.7
550	26	4,975	-11.3	59	247	28.9
500	26	5,703	-16.0	57	249	34.2
450	26	6,480	-21.2	54	245	38.7
400	26	7,349	-27.6	57	247	45.6
350	26	8,295	-34.7	57	246	53.6
300	26	9,353	-42.7	65	245	65.3
250	26	10,562	-50.9		243	78.9
200	25	11,988	-57.6		245	81.8
175	22	12,829	-59.3		248	80.2
150	20	13,786	-61.0		249	74.0
125	19	14,917	-64.2		253	68.6
100	18	16,267	-67.6		251	52.4
80	18	17,606	-68.0		249	46.8
70	17	18,410	-66.2		247	38.3
60	17	19,351	-64.0		253	25.3
50	16	20,479	-62.1		254	20.0
40	14	21,862	-60.2		250	21.2
30	11	23,666	-58.7			
25	11	24,814	-57.1			
20	9	26,231	-55.3			
15	8	28,079	-51.7			
10						
7						

DAYTON, OHIO
986 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	27	297	- 3.4	81	258	.8
1000	27	185				
950	27	593	- 3.1	71	237	4.5
900	27	1,019	- 4.2	67	258	9.9
850	27	1,469	- 5.4	62	262	14.0
800	27	1,943	- 7.2	57	268	16.5
750	27	2,446	- 8.3	51	267	21.2
700	27	2,979	-10.4	46	264	25.6
650	27	3,546	-13.3	44	268	30.3
600	27	4,153	-16.6	46	268	33.6
550	27	4,798	-20.7	44	271	40.4
500	27	5,501	-25.1	41	270	48.2
450	27	6,253	-30.0	38	268	54.2
400	27	7,088	-36.0	37	266	62.7
350	27	8,003	-42.7	35	264	70.7
300	27	9,028	-49.1		261	84.1
250	27	10,207	-55.2		258	91.7
200	27	11,621	-57.1		258	84.1
175	27	12,468	-56.2		257	83.1
150	27	13,449	-55.9		259	71.9
125	27	14,605	-57.5		259	64.9
100	27	16,006	-60.0		260	56.9
80	27	17,397	-60.4		261	46.0
70	27	18,228	-60.3		261	44.9
60	27	19,189	-59.9		263	41.2
50	27	20,329	-59.2		266	38.7
40	27	21,729	-58.5		268	34.2
30	26	23,541	-57.5		270	35.0
25	24	24,701	-56.0		268	32.1
20	24	26,123	-55.1		269	32.8
15	22	27,970	-53.6		266	41.8
10	17	30,620	-48.6		265	48.4
7	8	32,949	-46.2			

DEL RIO, TEXAS
982 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	314	6.3	81	68	2.5
1000	28	159				
950	28	580	7.2	71	137	3.7
900	28	1,026	6.5	67	186	6.2
850	28	1,495	6.2	52	213	8.0
800	28	1,990	4.6	47	245	9.7
750	28	2,511	2.1	48	260	13.6
700	28	3,069	- .5	42	260	19.2
650	28	3,649	- 4.0	41	259	23.1
600	28	4,285	- 7.7	39	256	29.1
550	28	4,949	-12.5	35	254	32.8
500	28	5,677	-17.8	36	255	37.7
450	28	6,449	-23.3	35	253	40.4
400	28	7,309	-29.8	36	252	43.5
350	28	8,248	-36.5	37	253	52.3
300	28	9,299	-43.9		250	57.3
250	28	10,501	-51.8		250	64.7
200	28	11,928	-56.5		252	72.1
175	28	12,774	-56.7		253	71.1
150	28	13,749	-58.3		253	69.3
125	27	14,890	-61.2		254	62.5
100	27	16,263	-64.5		258	49.5
80	25	17,618	-65.6		258	43.3
70	23	18,435	-64.4		259	33.4
60	21	19,377	-62.9		258	26.6
50	20	20,505	-61.0		253	23.3
40	18	21,894	-59.0		253	18.1
30	16	23,707	-57.9		257	20.0
25	15	24,857	-57.0		261	19.0
20	13	26,270	-55.1		261	18.8
15	10	28,122	-52.8			
10	6	30,792	-48.3			
7						

DENVER, COLO.
834 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,611	- 6.8	69	228	3.9
1000	28	172				
950	28	580				
900	28	1,012				
850	28	1,464				
800	28	1,942	- 2.5	51	279	6.6
750	28	2,450	- 4.9	47	299	9.9
700	28	2,991	- 8.6	48	307	9.7
650	28	3,556	-12.9	53	305	13.2
600	28	4,167	-17.1	52	307	16.5
550	28	4,814	-21.4	51	304	18.6
500	28	5,511	-26.1	48	299	18.8
450	28	6,257	-31.7	47	295	19.2
400	28	7,088	-37.8	46	294	22.0
350	28	7,995	-44.5	42	290	26.2
300	28	9,011	-51.1		288	28.0
250	28	10,183	-55.9		287	35.7
200	28	11,593	-57.4		281	39.2
175	28	12,442	-54.9		276	36.1
150	28	13,427	-55.1		278	36.9
125	27	14,590	-55.5		275	35.0
100	27	16,005	-57.3		271	31.7
80	27	17,411	-58.7		271	28.9
70	27	18,249	-58.7		274	24.9
60	27	19,218	-58.9		272	23.3
50	27	20,363	-59.0		276	22.9
40	26	21,759	-59.8		275	20.8
30	26	23,564	-58.4		276	22.9
25	23	24,714	-56.9		281	23.5
20	21	26,123	-56.4		279	21.8
15	13	27,960	-54.4			
10						
7						

DODGE CITY, KANS.
925 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	792	- 4.5	85	257	1.7
1000	28	173				
950	28	581				
900	28	1,008	- 2.3	62	254	4.5
850	28	1,463	- 1.5	56	272	7.8
800	28	1,945	- 2.9	52	274	10.5
750	28	2,456	- 5.6	51	276	13.0
700	28	2,992	- 8.5	50	277	15.0
650	28	3,560	-12.2	49	272	16.1
600	28	4,171	-16.1	47	271	19.0
550	28	4,817	-20.7	44	269	21.2
500	28	5,518	-25.7	41	269	23.9
450	28	6,267	-31.4	39	263	27.2
400	28	7,097	-37.6	38	260	30.5
350	28	8,005	-44.3		259	35.5
300	28	9,023	-50.5		263	41.2
250	28	10,197	-55.8		266	50.1
200	28	11,611	-56.4		265	54.4
175	28	12,460	-55.6		264	51.9
150	28	13,442	-55.7		262	44.9
125	28	14,599	-57.2		264	47.2
100	28	16,005	-58.8		266	43.1
80	28	17,399	-60.3		266	35.0
70	28	18,231	-60.5		268	32.4
60	28	19,191	-60.2		265	26.8
50	28	20,326	-60.2		266	26.0
40	27	21,721	-59.5		268	26.0
30	26	23,526	-58.5		262	26.4
25	26	24,674	-57.7		267	27.2
20	24	26,085	-56.6		270	26.8
15	15	27,920	-54.9		266	25.8
10						
7						
5						

EL PASO, TEXAS
883 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,193	1.1	49	317	2.9
1000	28	172				
950	28	593				
900	28	1,037				
850	28	1,497	3.7	42	313	5.6
800	28	1,987	1.1	46	292	8.4
750	28	2,502	- 1.6	45	271	15.3
700	28	3,050	- 4.5	39	268	20.0
650	28	3,627	- 7.4	36	269	23.9
600	28	4,251	-10.8	35	270	27.8
550	28	4,909	-15.1	33	272	30.7
500	28	5,629	-20.3	36	273	34.4
450	28	6,395	-25.9	39	271	38.1
400	28	7,246	-32.1	36	267	42.0
350	28	8,175	-39.1	36	267	46.4
300	28	9,215	-46.5		269	50.1
250	28	10,404	-54.4		268	53.4
200	28	11,821	-56.9		268	61.2
175	28	12,669	-55.9		268	59.4
150	28	13,649	-56.6		265	58.1
125	28	14,801	-58.5		265	55.8
100	28	16,192	-62.1		265	45.6
80	28	17,563	-63.5		265	36.7
70	28	18,384	-62.5		264	33.4
60	28	19,337	-61.5		261	24.5
50	27	20,469	-60.7		260	23.7
40	26	21,861	-58.9		259	23.1
30	23	23,663	-57.7		256	22.5
25	19	24,819	-57.6		264	22.9
20	16	26,231	-55.3		261	24.5
15	10	28,071	-53.7			
10	7	30,695	-50.4			
7						
5						

ELY, NEV.
807 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,908	- 9.9	62	197	6.8
1000	28	221				
950	28	631				
900	28	1,060				
850	28	1,506				
800	28	1,977			203	7.8
750	28	2,485	- 6.7	59	256	2.1
700	28	3,020	- 9.0	50	303	8.9
650	28	3,588	-11.9	48	301	12.8
600	28	4,200	-15.5	46	301	15.0
550	28	4,850	-19.3	41	306	21.0
500	28	5,554	-23.8	R37	306	23.7
450	27	6,313	-29.3	R37	302	26.4
400	27	7,149	-35.7	R30	303	27.4
350	27	8,064	-42.7	39	301	30.7
300	27	9,086	-50.6		299	33.6
250	27	10,255	-57.6		300	42.2
200	27	11,652	-59.6		294	41.2
175	27	12,492	-57.1		292	38.1
150	27	13,470	-56.5		290	37.5
125	27	14,625	-57.4		291	34.4
100	26	16,027	-58.8		291	28.2
80	26	17,422	-60.1		288	25.4
70	26	18,254	-60.2		293	21.8
60	26	19,213	-60.4		295	18.6
50	25	20,346	-60.4		286	16.1
40	22	21,738	-60.0		292	14.8
30	22	23,539	-58.4		285	12.4
25	19	24,686	-56.9		283	15.0
20	17	26,110	-56.0		287	14.6
15	14	27,958	-54.4		277	13.0
10	8	30,612	-50.2			
7						
5						

EMPALME, MEXICO
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	27	12	10.5	73	337	5.8
1000	27	131	13.8	51	344	5.8
950	27	562	14.4	38	341	8.4
900	27	1,019	11.7	34	327	5.4
850	27	1,494	8.9	31	250	3.9
800	27	1,993	6.3	30	240	7.2
750	27	2,519	3.9	22	255	10.1
700	27	3,077	.9	23	271	11.8
650	27	3,661	- 3.0	24	270	15.5
600	27	4,297	- 7.3	24	269	20.4
550	27	4,965	-12.2	26	271	23.5
500	27	5,691	-17.4	27	270	27.4
450	27	6,465	-23.5	30	271	33.4
400	27	7,322	-29.8	29	269	38.9
350	27	8,260	-36.9	33	272	45.3
300	27	9,310	-44.7		272	52.1
250	27	10,508	-52.2		273	63.5
200	27	11,937	-55.6		271	74.8
175	27	12,786	-56.5		270	77.7
150	27	13,760	-58.8		273	71.3
125	27	14,894	-62.4		269	63.1
100	27	16,259	-65.7		268	51.9
80	26	17,614	-66.9		268	33.4
70	25	18,423	-66.3		269	30.3
60	25	19,364	-63.7		267	25.3
50	25	20,487	-61.7		266	18.3
40	24	21,881	-59.6		256	15.0
30	21	23,684	-58.1		258	14.2
25	19	24,839	-57.2		246	14.6
20	14	26,255	-55.3		274	13.0
15						
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5						

*** FAIRBANKS, ALASKA**
994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	135	-22.8	86	3	1.6
1000	28	92			298	1.0
950	28	480	-14.3	84	122	2.5
900	28	886	-13.2	75	203	3.1
850	28	1,322	-12.9	70	234	6.2
800	28	1,783	-14.6	70	247	9.5
750	28	2,269	-16.9	65	251	11.5
700	28	2,784	-19.6	59	251	13.6
650	28	3,331	-22.6	57	256	13.6
600	28	3,915	-26.3	55	249	15.9
550	28	4,531	-30.1	53	245	18.3
500	28	5,211	-34.6	54	243	19.2
450	28	5,936	-39.3	51	253	21.2
400	28	6,738	-44.5		261	23.9
350	28	7,622	-49.4		266	25.3
300	28	8,623	-53.2		268	26.6
250	28	9,795	-52.9		262	24.3
200	28	11,246	-49.6		265	21.8
175	28	12,122	-48.6		266	23.3
150	27	13,137	-48.7		270	22.9
125	27	14,337	-48.7		274	21.6
100	26	15,809	-48.7		279	21.2
80	26	17,278	-47.8		288	20.0
70	26	18,158	-47.8		293	20.2
60	26	19,175	-47.5		296	18.5
50	26	20,378	-47.4		303	16.5
40	26	21,852	-47.5		317	15.5
30	26	23,751	-47.3		328	16.7
25	26	24,957	-46.8		338	17.1
20	21	26,397	-47.2		347	18.1
15	18	28,314	-45.9		344	29.3
10	13	31,011	-44.7		353	46.2
7	6	33,339	-44.3			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBRUARY 1966

FLINT, MICH.
993 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	234	- 5.3	74	230	2.5
1000	28	175				
950	28	575	- 5.9	71	257	5.6
900	28	999	- 7.8	70	260	8.0
850	28	1,443	- 8.8	63	269	10.5
800	28	1,912	-10.1	55	271	13.8
750	28	2,405	-11.8	48	270	15.9
700	28	2,935	-14.1	45	271	19.6
650	28	3,493	-16.9	46	271	25.4
600	28	4,093	-20.1	45	267	29.7
550	28	4,728	-24.2	43	266	32.1
500	28	5,422	-28.3	39	267	37.1
450	28	6,166	-32.9	R35	267	45.5
400	28	6,992	-38.2	R34	268	54.2
350	28	7,899	-44.3		266	61.2
300	28	8,917	-50.6		264	66.2
250	28	10,092	-54.5		263	70.5
200	28	11,516	-55.3		262	68.2
175	28	12,367	-55.4		262	62.9
150	28	13,352	-54.5		263	60.4
125	28	14,516	-55.4		264	55.6
100	28	15,934	-56.7		264	51.3
80	28	17,346	-57.4		266	43.5
70	28	18,188	-57.5		265	40.4
60	28	19,162	-57.8		266	36.9
50	27	20,312	-57.5		266	34.4
40	25	21,721	-57.0		266	33.2
30	24	23,546	-55.7		272	30.7
25	23	24,708	-55.8		273	28.6
20	22	26,130	-55.4		273	29.3
15	20	27,981	-53.7		271	29.5
10	12	30,584	-49.5			
7	6	32,955	-44.0			

FORT WORTH, TEXAS
999 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	180	3.7	77	309	2.3
1000	28	166			340	3.1
950	28	588	4.4	66	247	5.6
900	28	1,024	3.4	64	250	8.7
850	28	1,488	3.0	53	259	11.3
800	28	1,977	.5	53	263	13.2
750	28	2,495	- 1.8	47	263	17.1
700	28	3,039	- 4.5	44	263	20.8
650	28	3,619	- 7.8	44	261	26.0
600	28	4,238	-11.7	46	258	31.9
550	28	4,896	-16.2	45	253	35.9
500	28	5,610	-21.1	43	252	41.8
450	28	6,376	-26.0	40	254	49.1
400	28	7,224	-31.8	39	255	56.5
350	28	8,155	-38.7	38	253	62.9
300	28	9,197	-46.1		251	69.7
250	28	10,389	-53.8		251	77.5
200	28	11,806	-57.5		254	77.1
175	28	12,650	-57.3		254	73.4
150	28	13,624	-57.8		256	68.6
125	28	14,770	-59.9		257	60.0
100	27	16,154	-62.5		257	52.8
80	26	17,525	-63.6		260	42.2
70	26	18,344	-63.1		257	36.3
60	25	19,291	-62.3		256	31.7
50	24	20,423	-60.5		255	28.2
40	24	21,817	-59.1		259	24.9
30	23	23,625	-58.8		261	28.2
25	21	24,766	-57.5		263	26.4
20	20	26,176	-55.7		261	23.3
15	15	28,014	-52.8		257	28.2
10						
7						

GLASGOW, MONT.
934 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	696	-15.5	74	95	3.9
1000	28	172				
950	28	563				
900	28	977	- 8.4	77	267	.8
850	28	1,423	- 5.8	66	288	10.9
800	28	1,897	- 7.1	61	292	15.7
750	28	2,396	- 9.7	59	294	19.6
700	28	2,928	-12.8	59	296	22.0
650	28	3,483	-16.8	60	297	23.5
600	28	4,087	-20.7	58	297	26.0
550	28	4,718	-24.9	57	296	26.6
500	28	5,411	-29.6	54	297	27.2
450	28	6,148	-34.8	50	300	29.3
400	28	6,967	-40.7	53	299	30.5
350	28	7,863	-47.3		298	33.4
300	28	8,868	-53.6		295	33.4
250	28	10,026	-58.4		296	34.4
200	27	11,438	-57.0		293	30.5
175	26	12,286	-55.7		301	29.9
150	26	13,271	-54.5		300	30.3
125	26	14,438	-55.0		298	29.1
100	26	15,862	-55.5		302	26.6
80	25	17,279	-56.4		302	25.3
70	25	18,124	-56.9		303	22.7
60	25	19,099	-57.3		308	20.0
50	24	20,246	-57.4		317	16.9
40	24	21,654	-57.8		325	15.5
30	22	23,477	-56.4		355	11.8
25	21	24,636	-55.5		21	12.6
20	19	26,082	-53.5		41	12.2
15	16	27,959	-51.7		49	12.0
10	5	30,632	-49.1			
7						

• GRAND JUNCTION, COLO.
852 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,474	- 3.5	76	103	2.5
1000	28	191				
950	28	600				
900	28	1,038				
850	28	1,492			111	3.7
800	28	1,972	- 4.2	61	146	3.7
750	28	2,477	- 7.0	62	216	2.7
700	28	3,013	-10.3	66	267	6.6
650	28	3,578	-13.7	64	280	9.1
600	28	4,185	-17.2	56	291	12.4
550	28	4,829	-21.0	53	301	15.2
500	28	5,530	-25.7	51	297	19.0
450	28	6,281	-31.1	46	302	21.2
400	28	7,111	-37.1	43	301	25.4
350	28	8,021	-43.7	51	301	31.1
300	28	9,041	-50.6		301	35.2
250	28	10,210	-56.8		296	35.4
200	27	11,623	-58.1		290	38.5
175	27	12,468	-56.6		285	36.5
150	27	13,447	-55.9		283	36.3
125	26	14,609	-57.3		279	36.9
100	26	16,013	-59.1		278	33.4
80	24	17,413	-59.8		280	27.4
70	24	18,245	-60.2		279	23.9
60	24	19,207	-60.5		279	23.7
50	23	20,340	-60.4		282	21.6
40	22	21,729	-60.1		282	20.0
30	22	23,528	-59.0		271	21.2
25	21	24,673	-57.6		271	22.3
20	19	26,079	-55.7		270	20.0
15	16	27,907	-54.3		270	20.8
10	8	30,504	-50.1			
7						

• GREAT FALLS, MONT.
884 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,123	- 4.9	77	229	7.8
1000	28	144				
950	28	554				
900	28	985				
850	28	1,435	- 3.0	53	253	13.6
800	28	1,913	- 4.8	57	278	15.2
750	28	2,416	- 8.2	62	285	16.1
700	28	2,950	-11.6	65	292	18.1
650	28	3,513	-15.4	66	293	19.6
600	28	4,114	-19.5	61	289	20.4
550	28	4,750	-24.0	54	286	20.4
500	28	5,444	-28.8	49	289	24.3
450	28	6,185	-34.1	49	292	26.2
400	28	7,005	-39.9	48	297	28.4
350	28	7,905	-46.4		295	30.1
300	28	8,914	-52.9		298	35.4
250	28	10,075	-58.0		299	37.5
200	27	11,475	-57.3		296	31.5
175	27	12,323	-55.5		297	29.1
150	26	13,301	-54.9		298	29.7
125	26	14,466	-54.8		298	27.2
100	23	15,886	-55.1		298	24.7
80	22	17,303	-56.3		299	23.5
70	22	18,149	-56.6		302	19.8
60	21	19,128	-56.9		305	19.6
50	21	20,283	-57.1		315	16.3
40	20	21,697	-57.2		320	18.5
30	16	23,532	-56.6		339	15.0
25	16	24,689	-56.1		349	17.5
20	13	26,104	-55.8		[illegible]	14.0
15	11	27,917	-56.1		9	21.0
10	7	30,520	-52.8			
7						

GREEN BAY, WIS.
995 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	210	- 8.0	79	286	2.3
1000	28	170				
950	28	568	- 8.5	80	283	5.6
900	28	987	- 8.8	74	278	9.1
850	28	1,430	- 9.2	64	274	12.2
800	28	1,897	-10.8	62	272	13.2
750	28	2,389	-12.6	58	272	15.5
700	28	2,916	-15.2	58	278	17.3
650	28	3,468	-18.0	53	276	20.2
600	28	4,067	-21.6	53	279	23.3
550	28	4,698	-25.7	50	278	26.6
500	28	5,388	-29.9	46	278	34.6
450	28	6,125	-34.6	44	278	41.0
400	28	6,944	-40.0	46	274	46.2
350	28	7,845	-46.0		273	50.7
300	28	8,857	-51.9		269	57.1
250	28	10,027	-55.4		270	53.4
200	28	11,449	-55.2		274	48.8
175	28	12,301	-55.2		272	47.2
150	28	13,285	-54.9		273	44.7
125	28	14,450	-55.5		271	46.2
100	27	15,873	-56.2		273	44.1
80	26	17,286	-57.4		272	39.8
70	26	18,128	-58.0		271	35.2
60	25	19,102	-59.1		273	32.4
50	25	20,245	-59.1		270	31.1
40	24	21,644	-58.3		273	26.4
30	22	23,450	-57.3		272	28.2
25	20	24,599	-56.2		274	27.6
20	17	26,019	-55.6		269	23.7
15	12	27,893	-52.3			
10						
7						

GREENSBORO, N. C.
989 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	273	.9	84	44	1.2
1000	28	180				
950	28	595	2.6	64	338	3.3
900	28	1,031	1.6	65	274	6.8
850	28	1,491	.2	64	262	12.8
800	28	1,976	- 1.5	62	256	18.5
750	28	2,490	- 3.8	58	262	24.5
700	28	3,033	- 5.3	47	265	29.3
650	28	3,611	- 7.8	41	268	34.4
600	28	4,232	-11.3	39	270	39.4
550	28	4,890	-15.3	40	266	45.5
500	28	5,610	-19.7	39	265	50.1
450	28	6,380	-24.9	45	266	55.9
400	28	7,233	-31.0	48	263	63.7
350	28	8,168	-37.4	53	262	73.8
300	28	9,216	-44.7		262	79.3
250	28	10,415	-52.7		258	84.9
200	28	11,834	-57.8		258	91.3
175	28	12,674	-58.9		263	91.3
150	28	13,642	-58.9		264	80.8
125	28	14,782	-60.7		265	69.7
100	27	16,158	-62.9		263	62.4
80	27	17,529	-63.2		269	45.3
70	27	18,351	-61.9		270	42.7
60	27	19,307	-61.0		270	36.3
50	27	20,440	-60.6		271	32.8
40	27	21,832	-59.4		270	31.5
30	27	23,641	-57.6		275	32.4
25	27	24,795	-56.1		276	32.8
20	27	26,220	-54.1		268	32.1
15	24	28,069	-51.8		272	31.7
10	15	30,702	-48.5			
7	5	33,001	-44.5			

GUAM, MARIANA IS.
1001 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	111	24.0	84	76	8.4
1000	28	115			77	8.5
950	28	563	21.1	86	74	20.8
900	28	1,030	18.0	82	80	21.4
850	28	1,519	16.0	69	83	18.8
800	28	2,033	15.2	45	84	16.7
750	28	2,576	13.5	36	81	15.9
700	28	3,156	10.5	29	78	17.1
650	28	3,765	7.3	26	79	14.2
600	28	4,424	4.3	19	83	11.7
550	28	5,123	.3	21	93	9.5
500	28	5,884	- 4.3	20	101	6.8
450	28	6,700	- 9.5	19	96	9.5
400	28	7,607	-15.1	18	94	7.8
350	28	8,602	-22.3	20	80	5.6
300	28	9,716	-30.6	21	37	3.9
250	28	10,984	-40.7	27	180	.4
200	28	12,463	-52.6		218	4.1
175	28	13,312	-59.6		193	7.4
150	28	14,259	-67.2		184	8.5
125	28	15,336	-75.6		146	8.5
100	28	16,602	-82.5		106	13.0
80	23	17,846	-82.7		104	15.7
70	22	18,594	-79.0		97	16.7
60	22	19,485	-73.9		98	15.0
50	22	20,563	-68.3		97	18.5
40	21	21,917	-64.1		97	26.6
30	21	23,698	-59.2		89	25.8
25	21	24,850	-55.6		86	21.4
20	20	26,289	-51.6		78	8.4
15	18	28,172	-47.5		310	5.2
10	5	30,865	-46.9			
7						

HILO, HAWAII
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	11	19.6	87	254	3.3
1000	28	127	20.0	82	261	3.1
950	28	569	17.2	84	131	1.4
900	28	1,030	14.2	87	129	2.3
850	28	1,511	11.6	86	157	3.7
800	28	2,018	9.4	74	179	5.4
750	28	2,554	8.2	51	229	8.7
700	28	3,120	5.7	44	234	13.4
650	28	3,723	2.7	44	243	17.9
600	28	4,368	- .8	41	253	23.3
550	28	5,052	- 5.1	35	256	29.7
500	28	5,801	- 9.8	37	255	37.7
450	28	6,604	-15.0	43	255	45.5
400	28	7,490	-21.0	46	257	47.6
350	28	8,463	-27.3	41	258	58.7
300	28	9,557	-34.7	35	258	70.7
250	28	10,808	-43.2		255	83.5
200	28	12,276	-53.7		257	93.2
175	28	13,124	-59.2		259	88.6
150	28	14,076	-65.1		262	78.1
125	27	15,174	-70.8		264	63.1
100	27	16,477	-76.3		267	45.8
80	24	17,761	-75.9		271	25.4
70	22	18,537	-72.9		263	9.9
60	22	19,450	-68.9		299	.6
50	22	20,551	-64.9		45	2.7
40	21	21,924	-61.6		77	4.3
30	20	23,721	-59.2		91	11.3
25	19	24,863	-57.9		90	12.8
20	16	26,284	-55.1		83	9.5
15	13	28,134	-52.1		77	3.9
10	5	30,754	-52.1			
7						

HUNTINGTON, W. VA.
992 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	246	- 1.7	84	234	1.0
1000	28	179				
950	28	588	- .8	70	245	5.2
900	28	1,020	- 2.2	73	256	8.7
850	28	1,473	- 3.6	73	266	12.6
800	28	1,951	- 4.7	64	266	17.9
750	28	2,458	- 6.8	61	267	21.2
700	28	2,995	- 8.4	54	270	24.7
650	28	3,567	-11.0	54	268	29.5
600	28	4,179	-14.5	52	266	34.6
550	28	4,830	-18.2	51	267	40.6
500	28	5,539	-22.5	51	265	46.4
450	28	6,301	-27.7	52	267	55.9
400	28	7,142	-33.3	48	266	65.3
350	28	8,067	-39.9	51	266	69.9
300	27	9,100	-47.2		264	75.8
250	26	10,288	-54.1		260	84.5
200	26	11,705	-57.9		256	86.6
175	24	12,559	-57.2		260	82.4
150	24	13,534	-56.8		262	74.8
125	24	14,686	-58.2		262	66.2
100	24	16,081	-60.6		263	53.0
80	24	17,468	-60.9		264	46.6
70	24	18,299	-60.2		266	42.9
60	23	19,264	-59.8		268	35.9
50	23	20,406	-58.6		269	31.5
40	23	21,807	-58.8		269	30.1
30	23	23,621	-57.3		273	31.3
25	23	24,775	-56.4		269	31.7
20	23	26,196	-54.9		267	37.3
15	19	28,043	-52.3		264	46.4
10	8	30,724	-46.9			
7						

• INTERNAT. FALLS, MINN.
977 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	360	-19.7	69	204	1.7
1000	28	180				
950	28	564	-15.4	73	226	1.7
900	28	973	-14.2	71	266	6.4
850	28	1,408	-12.7	61	280	10.9
800	28	1,870	-13.6	56	280	13.0
750	28	2,355	-15.2	54	280	14.8
700	28	2,878	-17.6	53	284	17.5
650	28	3,426	-20.1	52	284	20.0
600	28	4,020	-23.3	49	285	23.3
550	28	4,648	-27.1	49	285	26.0
500	28	5,333	-31.7	49	285	28.2
450	28	6,064	-37.0	50	286	30.9
400	28	6,876	-42.8	58	282	35.0
350	28	7,766	-48.4		283	35.5
300	28	8,768	-53.7		284	36.5
250	28	9,929	-57.1		283	37.9
200	28	11,341	-56.5		278	35.9
175	28	12,191	-55.1		277	35.5
150	28	13,177	-54.5		278	35.2
125	27	14,337	-54.7		281	35.4
100	27	15,761	-55.5		280	31.3
80	25	17,177	-56.0		281	31.9
70	24	18,025	-56.5		278	27.6
60	24	19,002	-57.1		284	25.4
50	21	20,161	-57.6		280	23.3
40	21	21,569	-57.7		289	21.2
30	17	23,378	-58.0		288	19.0
25	15	24,532	-58.4		301	20.8
20	13	25,945	-57.9		299	12.8
15	6	27,893	-52.3			
10						

JACKSON, MISS.
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	94	5.3	87	79	1.6
1000	28	160			66	2.9
950	28	582	6.4	70	170	5.2
900	28	1,024	5.5	63	216	7.6
850	28	1,491	4.0	63	240	10.1
800	28	1,982	1.8	60	245	14.8
750	28	2,498	- .3	50	252	19.2
700	28	3,050	- 3.0	45	256	24.7
650	27	3,630	- 5.2	45	255	33.2
600	27	4,260	- 9.2	44	258	38.7
550	27	4,920	-13.4	40	257	43.1
500	27	5,646	-18.2	40	257	48.6
450	27	6,416	-23.4	41	256	56.5
400	27	7,277	-29.3	40	255	64.1
350	27	8,218	-36.0	39	254	72.5
300	27	9,270	-43.8	47	256	80.8
250	27	10,471	-52.3		254	93.2
200	27	11,891	-58.5		253	98.3
175	27	12,729	-58.8		256	95.6
150	26	13,697	-59.9		255	91.7
125	26	14,829	-62.0		256	76.5
100	26	16,201	-64.6		254	59.4
80	26	17,558	-65.7		259	47.8
70	25	18,370	-63.9		258	39.4
60	25	19,317	-62.6		258	33.6
50	25	20,445	-60.7		261	27.8
40	25	21,836	-59.5		260	28.0
30	25	23,639	-58.2		274	26.0
25	24	24,792	-56.4		274	22.9
20	22	26,221	-54.5		258	19.8
15	19	28,065	-52.3		255	25.3
10	12	30,728	-46.6			

• JACKSONVILLE, FLA.
1021 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	5	9.2	89	308	2.5
1000	28	178	10.6	74	223	2.5
950	28	608	9.7	70	203	6.2
900	28	1,054	8.6	59	217	9.1
850	28	1,525	6.9	60	229	12.8
800	28	2,022	5.2	50	243	15.7
750	28	2,547	3.5	38	250	21.4
700	28	3,105	1.0	40	250	24.9
650	28	3,697	- 2.0	39	251	29.7
600	28	4,329	- 5.9	38	250	35.0
550	28	5,001	-10.2	35	251	39.2
500	28	5,733	-14.8	34	252	46.8
450	28	6,515	-20.5	37	251	54.4
400	28	7,384	-26.3	43	252	61.8
350	28	8,335	-33.2	43	255	69.2
300	28	9,402	-40.6	36	256	77.3
250	28	10,620	-49.6		256	88.4
200	27	12,055	-57.3		257	94.0
175	27	12,894	-59.9		258	102.0
150	27	13,851	-62.2		261	96.3
125	26	14,973	-65.8		263	76.5
100	25	16,320	-68.8		262	62.9
80	25	17,650	-69.0		261	48.8
70	24	18,451	-66.8		262	39.2
60	24	19,388	-64.3		261	30.3
50	24	20,510	-61.6		265	25.1
40	23	21,899	-59.7		277	20.8
30	23	23,708	-57.2		287	18.1
25	22	24,866	-55.4		285	10.9
20	20	26,293	-53.5		273	7.8
15	18	28,161	-49.8		277	8.4
10	12	30,835	-45.3			

JOHN F. KENNEDY INT. ARPT.NY
1021 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	5	- 1.4	61	333	6.2
1000	28	171	- 1.6	61	325	7.0
950	28	581	- 3.6	65	315	9.1
900	28	1,004	- 4.9	69	293	12.6
850	28	1,453	- 5.7	66	289	17.5
800	28	1,928	- 6.8	61	282	21.0
750	28	2,435	- 8.5	60	277	24.9
700	28	2,964	-10.8	55	274	28.6
650	28	3,530	-13.9	54	269	32.6
600	28	4,135	-17.0	50	271	37.7
550	28	4,784	-21.0	47	272	41.8
500	28	5,481	-25.1	46	272	49.3
450	28	6,241	-29.5	43	269	57.9
400	28	7,072	-35.2	45	268	62.9
350	28	7,990	-41.5	54	270	68.6
300	28	9,024	-47.2		270	84.3
250	28	10,212	-53.7		272	85.1
200	28	11,637	-55.8		270	83.1
175	28	12,486	-55.8		272	78.7
150	27	13,469	-56.5		270	63.3
125	26	14,627	-57.7		270	60.4
100	26	16,030	-58.8		270	54.0
80	26	17,428	-59.4		273	46.8
70	26	18,262	-59.3		273	42.5
60	25	19,225	-59.6		273	39.8
50	25	20,367	-59.0		271	35.7
40	25	21,769	-58.6		271	33.8
30	25	23,584	-56.7		273	34.0
25	24	24,740	-55.9		273	32.4
20	23	26,163	-54.4		271	37.9
15	15	28,030	-52.7			
10						

JOHNSTON IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	3	23.3	75	75	11.3
1000	28	119	22.3	76	70	12.6
950	28	569	18.4	82	65	14.4
900	28	1,026	15.1	83	67	12.6
850	28	1,510	12.6	71	70	10.7
800	28	2,018	11.2	57	60	7.0
750	28	2,560	9.9	47	342	3.1
700	28	3,128	7.4	44	284	6.2
650	28	3,734	3.8	43	262	9.7
600	28	4,381	.2	41	261	15.3
550	28	5,066	- 4.0	34	264	19.2
500	28	5,820	- 8.7	29	266	25.3
450	28	6,625	-13.9	26	268	31.7
400	28	7,515	-19.[illegible]	27	269	37.7
350	28	8,495	-25.[illegible]	27	270	45.3
300	28	9,594	-33.3	24	269	52.3
250	28	10,852	-41.9		265	55.8
200	28	12,328	-52.[illegible]		263	61.4
175	28	13,178	-59.2		265	62.5
150	28	14,128	-65.9		267	59.6
125	28	15,217	-72.3		269	45.1
100	28	16,509	-78.5		268	30.5
80	24	17,776	-79.0		264	16.3
70	22	18,542	-74.9		258	9.3
60	21	19,447	-70.6		239	2.7
50	21	20,543	-65.9		116	3.7
40	21	21,908	-62.5		88	14.2
30	20	23,703	-58.6		84	15.7
25	20	24,854	-56.5		84	17.3
20	19	26,286	-53.4		79	12.0
15	16	28,145	-51.[illegible]		280	6.4
10	8	30,823	-46.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KEY WEST, FLORIDA 1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	3	19.4	85	85	6.0
1000	28	156	18.1	86	95	8.5
950	28	596	15.1	81	115	9.5
900	28	1,052	13.2	70	152	5.4
850	28	1,532	11.2	60	182	6.6
800	28	2,038	9.8	43	213	7.6
750	28	2,570	8.3	37	227	12.0
700	28	3,140	5.9	30	233	13.4
650	28	3,737	2.6	29	237	17.1
600	28	4,388	- .7	24	242	22.0
550	28	5,068	- 4.8	21	248	26.4
500	28	5,822	-10.1	22	248	29.1
450	28	6,617	-16.0	25	249	34.2
400	28	7,505	-22.0	28	251	42.3
350	28	8,473	-28.7	31	255	48.4
300	28	9,558	-37.0	29	255	61.6
250	28	10,794	-46.7		254	70.3
200	27	12,239	-56.5		254	75.8
175	27	13,077	-61.6		254	78.7
150	27	14,022	-66.3		257	70.9
125	26	15,118	-70.7		260	62.4
100	25	16,430	-74.6		258	48.6
80	25	17,724	-75.1		253	34.2
70	25	18,502	-72.3		255	23.3
60	25	19,419	-67.2		259	11.1
50	25	20,526	-64.5		274	5.2
40	25	21,900	-61.6		317	4.9
30	24	23,691	-58.6		61	9.5
25	23	24,840	-56.7		55	13.2
20	23	26,263	-53.9		83	13.4
15	22	28,124	-50.0		83	9.3
10	18	30,803	-44.4		109	8.9
7	9	33,271	-38.9			
5						

KING SALMON, ALASKA 1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	15	- 8.1	82	219	1.0
1000	28	54			8	2.5
950	28	455	- 6.0	72	268	5.4
900	28	878	- 7.1	67	272	8.0
850	28	1,322	- 8.8	68	277	9.1
800	28	1,790	-11.0	64	271	9.7
750	28	2,282	-13.6	60	267	12.2
700	28	2,805	-16.3	54	267	14.8
650	28	3,358	-19.6	51	268	15.5
600	28	3,949	-23.7	52	264	16.1
550	28	4,579	-28.0	52	264	17.3
500	28	5,257	-32.4	47	262	18.5
450	28	5,991	-37.1	46	266	20.0
400	28	6,799	-42.4	48	264	22.0
350	28	7,691	-47.5		268	23.7
300	28	8,700	-51.3		269	25.3
250	28	9,878	-53.1		263	25.6
200	28	11,324	-50.6		256	23.1
175	28	12,196	-49.2		255	24.9
150	28	13,208	-48.9		249	21.2
125	28	14,407	-48.4		246	19.4
100	28	15,872	-48.7		249	16.7
80	28	17,340	-48.1		256	12.2
70	28	18,218	-48.6		250	10.3
60	28	19,231	-48.8		251	8.2
50	28	20,429	-48.6		264	4.9
40	28	21,895	-48.5		18	2.5
30	28	23,788	-47.9		39	6.6
25	28	24,991	-47.4		50	8.7
20	25	26,466	-46.7		73	12.2
15	20	28,387	-46.3		51	17.5
10	11	31,053	-45.7			
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+ KOROR, CAROLINE IS. 1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	30	26.5	80	70	8.7
1000	28	102	25.7	79	70	10.9
950	28	549	21.9	80	71	18.5
900	28	1,021	18.9	75	75	20.6
850	28	1,512	16.8	65	79	18.3
800	28	2,028	15.3	47	81	15.2
750	28	2,569	12.7	43	81	15.9
700	28	3,150	10.0	34	76	15.5
650	28	3,761	7.0	33	82	16.7
600	28	4,416	3.2	28	90	17.3
550	28	5,116	- .6	25	94	19.0
500	28	5,873	- 4.6	24	93	19.2
450	28	6,695	- 9.5	25	97	19.0
400	28	7,598	-14.8	21	91	19.0
350	28	8,596	-21.8	19	84	17.9
300	28	9,712	-30.6	21	95	18.3
250	28	10,979	-41.1	18	110	19.4
200	28	12,456	-53.3		120	23.3
175	27	13,302	-60.2		120	23.9
150	27	14,248	-67.4		115	23.7
125	27	15,324	-75.5		102	25.3
100	26	16,594	-81.8		93	25.8
80	26	17,838	-81.8		89	23.1
70	26	18,596	-76.9		86	17.5
60	26	19,491	-72.6		87	20.2
50	26	20,574	-68.3		93	35.2
40	25	21,927	-63.1		92	49.9
30	24	23,724	-56.5		91	43.7
25	23	24,884	-53.5		93	24.1
20	21	26,330	-49.5		71	4.5
15	14	28,224	-46.8		301	8.4
10	5	30,934	-46.5			
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KOTZEBUE, ALASKA 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	5	-19.8	74	92	4.5
1000	28	79			107	5.8
950	28	467	-15.0	75	103	7.4
900	28	874	-14.4	71	106	5.2
850	28	1,307	-14.6	69	141	2.7
800	28	1,765	-16.2	68	228	2.7
750	28	2,248	-18.4	64	241	6.4
700	28	2,761	-21.3	63	243	9.5
650	28	3,306	-24.5	60	254	10.1
600	28	3,884	-28.0	57	252	11.3
550	28	4,503	-31.3	56	250	13.0
500	28	5,174	-35.3	54	250	14.8
450	28	5,898	-40.2	57	256	20.2
400	28	6,696	-46.0	52	254	21.0
350	28	7,574	-50.9		252	22.9
300	28	8,570	-53.9		248	25.4
250	28	9,739	-53.7		245	24.5
200	28	11,184	-50.1		240	20.8
175	28	12,058	-49.0		235	21.2
150	28	13,071	-48.3		238	20.0
125	28	14,273	-47.7		238	20.2
100	28	15,747	-47.3		246	17.5
80	28	17,225	-46.5		250	18.3
70	28	18,111	-46.3		258	16.5
60	28	19,136	-46.2		258	16.3
50	28	20,348	-46.4		263	14.8
40	28	21,828	-46.6		271	12.6
30	28	23,740	-46.1		278	12.0
25	27	24,956	-45.4		294	12.6
20	25	26,436	-44.7		300	13.2
15	20	28,374	-42.9		313	20.2
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KWAJALEIN, MARSHALL IS. 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	4	26.1	77	59	15.9
1000	28	97	25.3	77	61	17.1
950	28	546	21.8	85	65	20.0
900	28	1,013	18.3	86	74	18.6
850	28	1,503	16.2	70	78	15.5
800	28	2,017	15.2	45	80	10.9
750	28	2,562	14.0	29	85	6.2
700	28	3,143	11.2	21	86	5.2
650	28	3,754	7.6	23	89	6.0
600	28	4,408	3.8	21	79	8.4
550	28	5,108	- .3	21	82	10.3
500	28	5,868	- 4.7	22	69	13.8
450	28	6,684	- 9.5	18	64	13.6
400	28	7,590	-15.1	16	54	11.3
350	28	8,581	-21.9	17	33	7.0
300	28	9,703	-30.3	19	345	2.7
250	28	10,973	-40.6	23	236	4.5
200	28	12,451	-53.0		224	6.8
175	28	13,292	-59.9		225	6.8
150	28	14,244	-67.8		242	5.1
125	28	15,312	-75.6		17	2.1
100	26	16,582	-83.4		60	11.5
80	22	17,811	-82.9		79	13.8
70	22	18,564	-78.1		76	12.0
60	22	19,454	-73.1		85	18.5
50	19	20,541	-68.7		92	29.1
40	19	21,885	-63.6		89	43.5
30	19	23,683	-57.7		90	36.5
25	19	24,840	-53.5		97	16.5
20	19	26,282	-50.1		285	1.6
15	17	28,169	-47.7		267	7.2
10	16	30,860	-44.9		274	10.5
7	10	33,251	-41.7			
5	6	35,507	-39.5			

LAKE CHARLES, LA. 1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	5	7.9	87	42	4.1
1000	28	158	9.3	73	58	5.2
950	28	585	8.7	67	83	2.3
900	28	1,030	8.0	55	228	4.7
850	28	1,501	6.9	53	243	9.7
800	28	1,998	4.8	53	258	16.7
750	28	2,522	2.3	46	254	21.8
700	28	3,078	.6	44	251	26.4
650	28	3,667	- 3.1	44	250	29.9
600	28	4,299	- 7.1	40	252	35.5
550	28	4,969	-11.7	37	252	41.2
500	28	5,697	-16.6	40	249	47.8
450	28	6,477	-21.8	42	249	54.8
400	28	7,339	-28.2	45	246	58.9
350	28	8,285	-34.6	39	246	68.2
300	28	9,345	-42.4	44	245	75.8
250	28	10,553	-51.1		247	89.0
200	28	11,980	-57.9		249	91.9
175	28	12,820	-58.3		250	88.0
150	28	13,786	-60.3		250	88.6
125	27	14,913	-63.0		256	70.9
100	27	16,277	-65.6		256	58.9
80	25	17,628	-66.0		260	42.2
70	24	18,441	-64.6		260	37.9
60	23	19,387	-62.5		258	30.7
50	23	20,516	-60.9		260	24.7
40	23	21,906	-59.7		261	21.0
30	23	23,712	-58.1		265	19.0
25	23	24,863	-56.5		269	17.7
20	23	26,285	-54.9		259	16.7
15	22	28,137	-51.6		255	23.7
10	11	30,800	-45.1			
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LANDER, WYO. 826 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	1,696	- 8.3	60	202	1.2
1000	28	180				
950	28	586				
900	28	1,014				
850	28	1,466				
800	28	1,941	- 4.5	44	219	1.0
750	28	2,445	- 6.5	43	296	3.1
700	28	2,985	- 9.7	44	288	8.5
650	28	3,547	-13.6	47	292	13.2
600	28	4,158	-17.5	43	296	18.1
550	28	4,798	-22.1	43	295	18.8
500	28	5,499	-26.8	41	296	20.0
450	28	6,244	-32.4	42	296	22.0
400	28	7,072	-38.9	43	298	23.1
350	28	7,976	-45.3		297	25.4
300	28	8,990	-51.9		298	29.5
250	28	10,157	-57.2		300	33.6
200	28	11,561	-58.3		298	31.9
175	28	12,406	-56.3		294	30.9
150	28	13,388	-55.1		291	31.3
125	28	14,553	-55.0		289	29.9
100	28	15,972	-57.0		287	26.2
80	28	17,382	-57.3		288	24.3
70	28	18,223	-58.2		289	22.3
60	28	19,194	-58.8		291	20.2
50	28	20,338	-58.9		290	18.6
40	26	21,746	-58.7		296	16.9
30	25	23,558	-58.0		300	13.4
25	22	24,715	-58.0		303	14.4
20	17	26,140	-56.7		307	12.8
15	6	27,957	-55.4			
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LAS VEGAS, NEV. 941 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	660	3.8	48	272	4.9
1000	28	158				
950	28	576				
900	28	1,021	5.7	34	351	4.1
850	28	1,486	2.8	37	338	5.2
800	28	1,974	- .4	40	337	5.1
750	28	2,482	- 3.4	41	324	6.2
700	28	3,030	- 6.2	40	308	8.2
650	28	3,599	- 9.3	42	305	12.6
600	28	4,221	-13.2	37	304	16.7
550	28	4,869	-17.5	37	305	19.8
500	28	5,586	-22.2	38	304	21.8
450	28	6,343	-27.8	39	304	24.9
400	28	7,187	-34.6	37	302	27.6
350	28	8,106	-41.6	41	300	29.7
300	28	9,134	-49.2		297	36.1
250	28	10,309	-56.2		295	42.7
200	26	11,711	-59.9		288	47.6
175	26	12,549	-58.2		284	47.2
150	26	13,522	-57.4		286	45.8
125	25	14,669	-58.3		284	41.6
100	25	16,064	-61.1		283	36.5
80	24	17,446	-62.1		282	28.4
70	24	18,270	-62.2		282	24.7
60	24	19,221	-62.2		285	19.8
50	24	20,349	-61.7		286	15.9
40	24	21,732	-60.8		281	13.8
30	21	23,526	-59.5		279	14.6
25	21	24,669	-58.6		275	14.4
20	19	26,084	-56.8		284	15.2
15	14	27,902	-55.9			
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* LIHUE, HAWAII 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	36	18.3	86	329	2.5
1000	28	133	19.4	76	2	4.9
950	28	573	16.4	79	44	7.2
900	28	1,032	13.0	83	53	5.4
850	28	1,511	10.6	77	25	1.9
800	28	2,014	8.1	64	273	3.7
750	28	2,543	7.3	42	244	8.0
700	28	3,112	4.9	37	247	11.5
650	28	3,705	1.3	33	256	16.1
600	28	4,352	- 2.8	30	263	20.0
550	28	5,030	- 7.0	36	267	22.7
500	28	5,774	-11.7	35	258	30.3
450	28	6,562	-17.2	40	256	38.3
400	28	7,446	-23.4	39	256	47.2
350	28	8,409	-29.8	40	255	58.7
300	28	9,492	-36.6	33	253	70.1
250	28	10,735	-44.0		252	82.4
200	28	12,203	-53.0		253	92.1
175	28	13,053	-58.2		258	87.4
150	28	14,011	-63.3		261	74.6
125	27	15,119	-68.7		261	69.5
100	27	16,438	-73.1		265	57.1
80	27	17,738	-74.2		263	38.3
70	27	18,519	-71.8		260	23.9
60	26	19,437	-67.8		258	13.6
50	25	20,542	-65.1		263	6.2
40	23	21,909	-62.0		264	3.3
30	22	23,702	-58.8		241	1.4
25	21	24,853	-57.4		86	1.9
20	19	26,280	-55.0		37	.8
15	16	28,144	-52.3		321	4.5
10	14	30,778	-47.0		244	15.7
7	10	33,154	-40.0			

LITTLE ROCK, ARK. 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	79	3.1	83	308	.8
1000	28	166	3.2	69	353	.8
950	28	583	3.2	69	270	3.3
900	28	1,021	2.7	66	260	8.0
850	28	1,482	1.2	61	262	11.5
800	28	1,969	- .8	55	257	15.0
750	28	2,481	- 2.9	50	255	18.8
700	28	3,027	- 5.6	49	255	24.9
650	28	3,600	- 8.7	51	257	27.0
600	28	4,222	-12.2	51	254	29.5
550	28	4,874	-16.2	47	255	35.5
500	28	5,594	-20.8	44	253	41.2
450	28	6,356	-26.3	44	252	48.4
400	28	7,206	-32.1	41	253	54.0
350	28	8,137	-38.3	44	250	65.7
300	28	9,180	-45.7		250	72.1
250	28	10,375	-52.9		254	76.5
200	28	11,795	-57.6		253	82.4
175	28	12,641	-56.4		251	78.9
150	28	13,617	-57.5		254	74.6
125	28	14,764	-59.2		254	61.0
100	28	16,157	-60.9		257	50.1
80	26	17,543	-62.3		256	40.4
70	26	18,368	-61.8		261	39.4
60	26	19,323	-61.4		259	32.4
50	25	20,454	-59.7		263	30.1
40	23	21,842	-58.7		267	31.9
30	22	23,650	-57.7		261	31.9
25	21	24,799	-56.8		267	34.0
20	19	26,224	-55.0		264	38.5
15	10	28,078	-52.4			
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MCGRATH, ALASKA 997 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	103	-17.6	73	227	1.0
1000	28	77			213	2.1
950	28	465	-13.6	89	104	2.5
900	28	878	-11.1	89	163	3.3
850	28	1,317	-11.3	83	221	4.5
800	28	1,781	-12.8	80	244	5.6
750	28	2,266	-15.2	79	251	6.2
700	28	2,790	-17.7	75	262	7.6
650	28	3,337	-20.3	70	266	10.3
600	28	3,931	-24.1	67	263	11.7
550	28	4,553	-28.1	61	264	13.6
500	28	5,239	-32.8	61	247	15.5
450	28	5,966	-38.1	56	246	17.1
400	28	6,775	-43.8	63	250	19.8
350	28	7,662	-49.0		251	22.1
300	28	8,665	-52.6		255	25.3
250	28	9,841	-52.7		255	24.5
200	28	11,292	-49.9		248	21.4
175	28	12,168	-48.2		248	21.6
150	28	13,185	-47.9		247	21.8
125	28	14,389	-47.5		248	19.6
100	28	15,864	-47.4		252	19.0
80	28	17,339	-47.2		258	16.3
70	28	18,222	-46.9		264	14.4
60	28	19,243	-46.8		267	11.7
50	28	20,450	-47.0		276	9.3
40	28	21,927	-46.6		286	7.8
30	27	23,830	-46.7		300	7.2
25	26	25,043	-46.1		323	8.9
20	26	26,528	-45.5		353	11.5
15	24	28,441	-44.5		6	14.0
10	18	31,127	-44.9		19	24.3

+ MAJURO, MARSHALL IS. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	3	28.1	73	58	10.3
1000	28	93	26.8	69	58	13.0
950	28	539	22.4	70	58	21.0
900	28	1,014	19.5	64	66	18.5
850	28	1,504	17.2	58	74	13.2
800	28	2,021	16.1	42	84	7.8
750	28	2,568	14.4	32	89	5.1
700	28	3,148	11.4	29	87	7.0
650	28	3,760	8.2	26	89	8.5
600	28	4,420	4.4	26	85	10.5
550	28	5,116	.2	26	86	9.9
500	28	5,881	- 4.0	24	78	12.6
450	28	6,701	- 8.8	20	75	14.6
400	28	7,611	-14.0	18	65	12.4
350	28	8,613	-20.3	19	39	7.4
300	28	9,736	-29.0	21	31	2.1
250	28	11,013	-39.4	20	184	7.0
200	28	12,501	-51.8		198	8.2
175	28	13,353	-58.9		230	6.6
150	26	14,303	-66.8		269	3.7
125	26	15,382	-74.9		19	5.2
100	26	16,654	-81.9		56	13.2
80	25	17,902	-81.0		78	15.9
70	24	18,660	-76.2		88	15.7
60	24	19,556	-72.3		89	20.4
50	21	20,642	-68.2		90	35.9
40	20	22,004	-62.0		91	50.3
30	17	23,817	-54.5		94	35.4
25	16	24,992	-51.8		85	21.0
20	9	26,437	-50.2			
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+ MARCUS IS., N. PACIFIC 1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	9	23.0	71	91	5.4
1000	28	155	21.2	69	94	7.2
950	28	593	16.9	68	101	6.4
900	28	1,056	13.9	63	128	4.3
850	28	1,536	11.6	58	197	3.1
800	28	2,042	10.0	44	241	6.6
750	28	2,578	8.4	38	253	8.2
700	28	3,144	5.8	33	262	14.0
650	28	3,746	2.7	29	260	17.7
600	28	4,391	- .8	29	264	23.1
550	28	5,076	- 4.8	27	268	28.7
500	28	5,824	- 9.4	25	268	35.4
450	28	6,626	-14.4	25	271	42.3
400	28	7,516	-19.5	24	272	52.6
350	28	8,496	-25.3	24	274	61.4
300	28	9,599	-32.7	24	274	70.9
250	28	10,860	-41.5	23	279	73.2
200	28	12,338	-52.5		279	74.8
175	28	13,188	-58.7		280	67.6
150	28	14,141	-65.3		275	64.9
125	28	15,235	-71.1		275	60.2
100	28	16,537	-76.5		274	45.3
80	28	17,819	-76.3		275	26.6
70	28	18,594	-73.3		272	19.4
60	28	19,504	-68.9		288	8.0
50	26	20,609	-63.7		342	3.5
40	26	21,991	-60.5		50	3.7
30	25	23,797	-57.0		79	5.4
25	22	24,954	-55.3		118	2.7
20	22	26,386	-53.0		238	5.2
15	11	28,230	-50.1			
10						

* MEDFORD, OREG. 972 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	401	1.2	81	138	1.9
1000	28	171				
950	28	585	2.8	75	131	2.3
900	28	1,023	1.8	67	157	6.0
850	28	1,483	- .3	64	198	6.6
800	28	1,966	- 2.7	61	219	6.4
750	28	2,474	- 5.5	56	243	9.3
700	28	3,014	- 8.5	49	251	12.6
650	28	3,583	-11.7	46	260	14.8
600	28	4,195	-15.4	48	279	19.0
550	28	4,842	-19.4	51	282	22.1
500	28	5,549	-24.2	53	283	24.9
450	28	6,301	-29.7	56	279	26.4
400	28	7,140	-35.6	48	280	29.1
350	28	8,056	-42.5	45	282	31.3
300	28	9,081	-50.1		285	33.6
250	28	10,253	-57.0		287	37.7
200	28	11,652	-59.9		291	37.9
175	28	12,490	-58.0		288	35.7
150	28	13,467	-56.2		286	31.3
125	27	14,622	-56.7		289	29.1
100	27	16,032	-57.9		293	26.8
80	27	17,435	-58.9		295	21.2
70	27	18,272	-58.8		299	20.2
60	26	19,240	-59.2		306	16.7
50	25	20,381	-59.2		319	13.8
40	24	21,788	-58.6		335	12.8
30	23	23,609	-57.3		358	11.7
25	22	24,769	-56.6		9	10.9
20	19	26,183	-55.9		25	12.6
15	14	28,018	-54.5		33	17.9
10	5	30,598	-48.2			

MERIDA, MEXICO 1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	11	18.6	93	84	5.2
1000	28	150	20.2	86	89	9.1
950	28	589	18.3	81	115	13.0
900	28	1,056	16.3	74	132	12.8
850	28	1,541	14.2	67	152	7.2
800	28	2,051	12.3	55	189	6.6
750	28	2,586	9.5	51	215	7.2
700	28	3,161	6.9	42	227	8.9
650	28	3,759	3.8	38	232	11.5
600	28	4,412	.4	32	240	15.2
550	28	5,096	- 4.0	27	235	20.0
500	28	5,850	- 8.3	23	241	24.5
450	28	6,650	-13.9	28	243	30.9
400	28	7,545	-20.5	29	248	39.2
350	28	8,520	-27.0	28	251	47.8
300	28	9,612	-35.3	32	248	54.0
250	28	10,856	-44.6		257	54.4
200	28	12,314	-54.9		264	52.8
175	28	13,155	-60.1		260	58.1
150	28	14,105	-65.4			
125	27	15,196	-70.9			
100	23	16,499	-75.5			
80	21	17,792	-76.4			
70	19	18,567	-72.6			
60	18	19,484	-67.1			
50	18	20,593	-64.2			
40	18	21,967	-61.3			
30	16	23,767	-58.0			
25	15	24,922	-55.6			
20	14	26,350	-52.7			
15	10	28,225	-49.8			
10	7	30,918	-44.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FEBURARY 1966

Standard pressure surface (mb.)	* MIAMI, FLA. 1019 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	4	17.5	84	97	2.9
1000	28	162	17.5	78	99	5.1
950	28	601	15.2	76	130	7.4
900	28	1,058	13.0	69	156	5.1
850	28	1,537	11.2	58	214	5.8
800	28	2,042	9.9	45	233	10.7
750	28	2,576	7.8	41	234	15.3
700	28	3,144	5.3	32	234	18.8
650	28	3,742	2.1	33	242	20.6
600	28	4,388	- 1.4	31	247	24.5
550	28	5,069	- 5.6	29	251	30.5
500	28	5,818	-10.5	27	255	33.0
450	28	6,611	-16.2	29	254	39.2
400	28	7,497	-22.7	33	255	46.0
350	28	8,463	-29.7	35	260	56.3
300	28	9,547	-37.1	35	260	67.6
250	28	10,783	-46.6		262	73.4
200	28	12,231	-56.2		262	82.9
175	28	13,069	-61.5		260	80.2
150	27	14,014	-65.4		264	77.1
125	26	15,113	-69.6		265	67.6
100	26	16,427	-74.2		263	52.6
80	26	17,724	-74.2		261	34.0
70	26	18,505	-71.6		260	23.3
60	26	19,423	-67.4		264	15.2
50	26	20,528	-64.8		272	11.1
40	25	21,902	-61.4		309	5.4
30	25	23,699	-58.3		16	7.4
25	24	24,847	-56.7		46	10.5
20	24	26,269	-54.1		74	10.9
15	23	28,133	-49.8		106	8.9
10	13	30,832	-44.0		187	8.0
7	7	33,250	-39.9			
5	5	35,579	-35.3			

Standard pressure surface (mb.)	* MIDLAND, TEXAS 916 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	874	.4	77	225	1.4
1000	28	162				
950	28	579				
900	28	1,016	2.7	59	206	2.1
850	28	1,480	4.0	46	256	9.3
800	28	1,972	2.3	41	270	13.4
750	28	2,488	- .7	38	270	15.3
700	28	3,039	- 4.0	38	266	20.0
650	28	3,614	- 7.4	39	262	24.7
600	28	4,239	-11.3	34	260	29.5
550	28	4,895	-15.4	31	258	36.1
500	28	5,615	-20.3	32	256	40.8
450	28	6,380	-25.8	32	257	46.0
400	28	7,230	-32.1	33	257	49.1
350	28	8,160	-38.8	37	257	51.5
300	28	9,201	-46.5		257	55.9
250	28	10,390	-53.9		256	66.0
200	28	11,808	-56.8		256	69.7
175	28	12,656	-56.2		257	61.8
150	28	13,634	-56.7		262	63.9
125	28	14,785	-59.2		260	56.9
100	28	16,172	-62.7		261	50.9
80	28	17,542	-63.6		257	41.2
70	28	18,362	-63.2		259	34.8
60	28	19,313	-62.2		257	28.4
50	28	20,444	-60.7		256	27.4
40	28	21,837	-59.2		260	26.0
30	28	23,644	-58.7		259	25.6
25	28	24,791	-57.7		265	24.7
20	25	26,208	-55.6		267	18.5
15	19	28,040	-53.6		253	19.2
10	17	30,677	-49.0		256	28.2
7	13	33,036	-43.3			

Standard pressure surface (mb.)	MONTERREY, MEXICO 967 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	423	8.4	87	333	3.9
1000	28	139				
950	28	561	9.0	80	331	3.9
900	28	1,013	8.5	75	330	1.2
850	28	1,486	8.7	56	186	4.5
800	28	1,987	8.0	48	225	9.5
750	28	2,511	6.1	42	238	15.2
700	28	3,081	2.8	36	247	20.2
650	28	3,669	- 1.2	37	243	23.3
600	28	4,309	- 5.8	38	247	26.4
550	28	4,980	-10.5	35	246	31.9
500	28	5,713	-15.1	35	243	39.4
450	28	6,495	-20.5	34	241	45.5
400	28	7,364	-26.6	35	242	52.3
350	28	8,314	-33.7	37	244	59.8
300	28	9,378	-41.3	44	246	69.7
250	28	10,594	-49.5		246	84.1
200	28	12,030	-56.2		252	89.0
175	28	12,873	-58.7		258	87.0
150	28	13,833	-62.5		258	76.1
125	28	14,946	-66.8		255	68.4
100	28	16,282	-69.9		257	54.4
80	28	17,608	-69.6		255	39.2
70	27	18,407	-68.1		255	34.8
60	25	19,343	-65.4		257	26.0
50	25	20,458	-63.1		253	17.3
40	23	21,843	-61.0		247	12.6
30	20	23,642	-59.1		256	6.4
25	17	24,783	-58.1		322	2.9
20	14	26,185	-55.9		356	3.7
15	6	28,025	-53.4			

Standard pressure surface (mb.)	MONTGOMERY, ALA. 1014 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	61	5.2	82	91	1.7
1000	28	171	6.8	71	94	3.1
950	28	595	6.7	68	148	4.9
900	28	1,036	5.2	65	206	5.1
850	28	1,503	4.3	56	250	9.3
800	28	1,996	2.9	50	252	15.2
750	28	2,517	.5	46	256	19.4
700	28	3,068	- 1.8	45	258	24.1
650	28	3,654	- 4.8	39	256	31.1
600	28	4,281	- 8.3	35	252	37.7
550	28	4,945	-12.6	34	254	44.3
500	28	5,672	-17.3	41	254	48.2
450	28	6,448	-22.6	41	252	52.6
400	28	7,310	-28.4	37	253	58.7
350	28	8,254	-35.3	38	252	68.0
300	28	9,311	-43.0	39	252	74.8
250	28	10,518	-51.2		252	90.5
200	28	11,943	-58.1		253	96.9
175	28	12,783	-59.1		253	99.1
150	28	13,746	-60.4		256	94.0
125	28	14,875	-63.1		257	77.1
100	28	16,241	-65.1		254	65.3
80	28	17,598	-65.5		255	45.3
70	28	18,411	-64.1		256	37.7
60	28	19,359	-62.3		258	31.9
50	28	20,489	-61.2		262	28.2
40	26	21,874	-59.2		265	26.2
30	26	23,686	-57.1		268	23.1
25	26	24,844	-55.6		268	22.7
20	25	26,267	-53.5		263	23.5
15	22	28,145	-50.4		260	22.1
10	19	30,813	-45.9		251	25.3
7	18	33,213	-41.2		254	37.5
5	16	35,526	-36.4			

Standard pressure surface (mb.)	* NANTUCKET, MASS. 1017 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	14	- 2.4	86	296	5.1
1000	28	149	- 1.8	69	282	5.1
950	28	553	- 3.4	71	287	9.9
900	28	983	- 4.7	67	287	13.2
850	28	1,432	- 5.9	59	281	16.3
800	28	1,906	- 7.5	56	280	19.8
750	28	2,406	- 9.1	55	280	23.5
700	28	2,939	-11.6	56	276	28.7
650	28	3,498	-14.9	58	275	33.0
600	28	4,105	-18.1	53	274	38.5
550	28	4,749	-21.3	49	273	43.9
500	28	5,448	-25.5	49	270	48.8
450	28	6,200	-30.4	46	269	55.6
400	28	7,033	-35.9	45	268	62.5
350	28	7,949	-42.0	46	267	70.3
300	28	8,979	-47.5		268	80.0
250	28	10,170	-52.5		270	83.5
200	28	11,598	-55.6		273	82.4
175	27	12,457	-55.7		272	76.0
150	27	13,438	-55.6		269	65.3
125	27	14,596	-57.1		270	62.7
100	26	16,007	-58.0		270	56.9
80	26	17,411	-58.5		269	50.7
70	26	18,249	-58.5		270	45.1
60	26	19,218	-58.9		270	38.3
50	26	20,363	-58.5		266	32.8
40	25	21,775	-57.8		264	34.0
30	25	23,593	-56.9		268	32.6
25	25	24,750	-55.9		265	31.5
20	23	26,170	-54.3		262	33.6
15	20	28,015	-51.5		262	38.3
10	14	30,669	-47.1			

Standard pressure surface (mb.)	* NASHVILLE, TENN. 999 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	177	1.7	77	26	.8
1000	28	173			4	.8
950	28	585	1.5	70	199	4.5
900	28	1,022	.5	66	229	9.5
850	28	1,480	- .4	67	253	13.4
800	28	1,964	- 1.8	65	264	17.7
750	28	2,476	- 3.9	64	265	22.3
700	28	3,019	- 6.4	62	268	25.8
650	28	3,593	- 9.2	58	267	28.2
600	28	4,211	-12.7	55	264	32.1
550	28	4,864	-16.8	57	262	38.3
500	28	5,579	-21.3	54	261	45.3
450	28	6,344	-26.6	51	256	52.4
400	28	7,190	-32.2	50	257	61.2
350	28	8,119	-39.0	52	255	66.2
300	27	9,157	-46.7		253	74.2
250	27	10,345	-54.3		252	87.0
200	27	11,757	-58.1		255	90.7
175	27	12,600	-57.0		256	86.4
150	26	13,569	-57.7		261	79.8
125	24	14,723	-59.3		261	65.1
100	24	16,115	-61.4		260	56.5
80	24	17,496	-61.8		263	42.9
70	24	18,321	-61.9		261	38.9
60	24	19,275	-61.2		259	35.4
50	23	20,409	-60.1		266	31.9
40	23	21,805	-58.6		263	29.1
30	23	23,617	-57.2		263	26.8
25	23	24,772	-56.2		266	28.7
20	21	26,193	-54.3		263	31.3
15	19	28,048	-52.1		257	35.7
10	17	30,700	-47.8		252	46.8
7	9	33,062	-41.2			

Standard pressure surface (mb.)	NOME, ALASKA 1007 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	26	7	-12.7	82	74	8.7
1000	26	61			90	9.1
950	26	457	-11.1	85	115	9.1
900	26	870	-11.3	78	147	6.4
850	26	1,308	-12.4	72	167	5.2
800	26	1,770	-14.0	70	178	5.2
750	26	2,255	-16.5	62	193	5.1
700	26	2,774	-19.4	62	209	4.5
650	26	3,319	-22.9	59	240	7.2
600	26	3,904	-26.3	57	239	8.4
550	26	4,525	-30.2	60	239	10.1
500	26	5,202	-34.3	61	253	13.8
450	26	5,925	-39.8	59	247	15.2
400	26	6,730	-44.9	59	256	19.0
350	26	7,614	-49.9		251	18.8
300	26	8,613	-53.5		240	21.6
250	26	9,782	-53.9		238	25.6
200	26	11,223	-50.8		224	22.1
175	26	12,098	-48.6		222	23.3
150	26	13,113	-48.0		225	19.2
125	26	14,317	-47.5		225	22.0
100	26	15,794	-46.9		230	16.9
80	26	17,273	-46.7		229	16.1
70	26	18,158	-46.8		231	14.4
60	26	19,181	-46.9		240	11.1
50	26	20,389	-46.9		241	10.5
40	25	21,876	-46.3		249	7.0
30	25	23,787	-46.4		240	4.1
25	22	25,007	-45.5		259	2.9
20	22	26,498	-44.7		2	1.9
15	16	28,414	-43.8		57	2.3
10	[illegible]	31,166	-42.0			

Standard pressure surface (mb.)	* NORTH PLATTE, NEBR. 917 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	848	- 9.4	85	331	1.6
1000	28	175				
950	28	578				
900	28	996	- 7.3	80	306	4.3
850	28	1,446	- 4.0	66	291	9.3
800	28	1,923	- 5.1	61	290	11.5
750	28	2,429	- 7.5	59	293	11.7
700	28	2,964	-10.1	56	298	13.6
650	28	3,530	-13.7	54	289	14.8
600	28	4,135	-17.9	58	286	15.9
550	28	4,778	-22.2	56	282	18.3
500	28	5,474	-27.0	50	273	19.2
450	28	6,223	-32.3	45	276	20.6
400	28	7,047	-38.5	49	273	20.8
350	28	7,951	-45.1		271	23.9
300	28	8,964	-51.9		274	27.8
250	28	10,130	-56.9		272	29.5
200	28	11,538	-57.0		270	35.9
175	28	12,387	-55.4		270	37.3
150	28	13,372	-54.5		268	37.7
125	28	14,536	-55.8		270	37.9
100	28	15,954	-56.9		273	33.2
80	28	17,361	-58.4		276	29.1
70	27	18,203	-58.9		278	26.8
60	27	19,170	-59.0		276	26.0
50	27	20,313	-59.2		273	25.6
40	27	21,712	-58.8		275	23.1
30	24	23,532	-57.8		276	22.3
25	21	24,684	-57.0		269	23.7
20	16	26,085	-55.6		268	23.9
15	14	27,929	-54.0		265	22.0
10	8	30,544	-50.8			

Standard pressure surface (mb.)	* OAKLAND, CALIF. 1019 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	6	8.9	77	83	1.2
1000	28	159	8.2	73	44	1.0
950	28	580	6.5	66	324	2.3
900	28	1,024	4.7	55	274	2.3
850	28	1,489	3.0	48	256	4.9
800	28	1,978	1.1	41	269	7.0
750	28	2,490	- 1.5	38	289	8.4
700	28	3,042	- 4.6	37	288	10.7
650	28	3,616	- 8.4	37	286	14.2
600	28	4,239	-12.2	36	287	17.3
550	28	4,894	-16.7	36	291	20.4
500	28	5,610	-21.3	38	288	25.3
450	28	6,377	-27.1	40	290	27.6
400	28	7,218	-33.5	42	293	31.5
350	28	8,141	-40.7	40	292	36.5
300	28	9,173	-48.8		292	38.9
250	28	10,349	-56.9		283	42.2
200	28	11,745	-60.5		285	46.6
175	28	12,581	-58.4		288	46.0
150	28	13,554	-57.1		286	42.5
125	28	14,705	-58.4		286	41.0
100	28	16,103	-60.5		291	32.1
80	28	17,488	-61.0		288	25.4
70	28	18,317	-61.2		293	21.6
60	28	19,272	-61.2		296	19.2
50	26	20,406	-60.8		306	15.5
40	24	21,802	-59.9		310	12.6
30	23	23,599	-58.8		316	10.9
25	21	24,747	-57.5		316	9.1
20	21	26,159	-56.0		321	6.0
15	19	27,987	-54.7		306	7.4
10	10	30,641	-51.1			

Standard pressure surface (mb.)	OKLAHOMA CITY, OKLA. 972 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	392	- .6	87	1	1.7
1000	28	160				
950	28	573	.9	71	328	2.1
900	28	1,007	1.2	64	256	5.6
850	28	1,467	.2	59	267	8.2
800	28	1,951	- 1.7	57	269	9.7
750	28	2,462	- 4.0	54	278	11.1
700	28	3,004	- 6.8	51	275	15.5
650	28	3,576	-10.0	48	267	20.0
600	28	4,192	-14.1	47	260	25.1
550	28	4,843	-18.6	46	256	28.4
500	28	5,551	-23.6	45	255	35.0
450	28	6,305	-29.0	45	251	41.6
400	28	7,144	-35.1	47	248	46.8
350	26	8,078	-41.4	47	249	51.1
300	26	9,108	-48.5		252	58.7
250	26	10,290	-54.9		253	65.9
200	26	11,704	-57.5		254	67.8
175	26	12,548	-57.2		252	66.4
150	26	13,524	-57.0		256	61.4
125	26	14,674	-58.4		256	58.7
100	25	16,070	-60.6		263	45.5
80	25	17,452	-62.0		260	38.5
70	25	18,278	-61.8		260	34.2
60	25	19,232	-61.6		259	31.9
50	22	20,363	-60.5		262	30.9
40	21	21,751	-59.6		264	29.7
30	20	23,556	-58.7		260	31.5
25	18	24,709	-58.1		264	30.9
20	16	26,120	-56.4		263	24.9
15	8	27,937	-53.4			

Standard pressure surface (mb.)	OMAHA, NEBR. 971 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	403	- 7.2	81	57	1.6
1000	28	173				
950	28	571	- 6.1	74	164	.4
900	28	999	- 4.6	67	271	6.4
850	28	1,449	- 4.6	59	273	9.1
800	28	1,925	- 5.7	52	280	11.1
750	28	2,427	- 7.9	49	283	13.0
700	28	2,964	-10.6	51	287	15.2
650	28	3,525	-13.7	51	287	17.7
600	28	4,135	-17.6	57	281	21.2
550	28	4,775	-21.8	52	277	25.1
500	28	5,476	-26.5	48	274	27.0
450	28	6,220	-31.9	43	268	28.6
400	28	7,052	-38.0	39	265	31.3
350	28	7,959	-44.6		261	31.3
300	28	8,975	-51.7		262	34.6
250	28	10,142	-56.9		264	40.6
200	28	11,554	-56.4		262	44.3
175	28	12,405	-55.0		262	46.0
150	28	13,391	-54.9		264	47.8
125	28	14,554	-55.6		265	42.7
100	28	15,972	-56.9		268	39.0
80	28	17,382	-58.2		268	35.0
70	28	18,221	-58.8		265	32.8
60	28	19,187	-58.7		268	30.3
50	28	20,332	-58.7		273	28.4
40	27	21,736	-58.4		272	26.4
30	23	23,544	-57.4		267	29.1
25	20	24,709	-56.3		265	28.7
20	15	26,116	-54.4		259	34.2
15	10	27,954	-52.1		257	38.1
10	6	30,600	-47.9			
7						

Standard pressure surface (mb.)	* PEORIA, ILL. 997 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	200	- 5.3	80	130	1.2
1000	28	174				
950	28	577	- 4.0	68	262	4.1
900	28	1,004	- 4.5	60	273	7.4
850	28	1,453	- 5.7	56	279	11.1
800	28	1,928	- 6.6	52	278	14.6
750	28	2,432	- 8.4	50	279	18.6
700	28	2,964	-10.6	47	276	23.3
650	28	3,530	-13.5	49	271	27.4
600	28	4,135	-17.4	49	269	31.3
550	28	4,775	-21.3	55	270	35.2
500	28	5,479	-25.8	52	270	39.2
450	28	6,229	-31.0	50	263	43.1
400	28	7,059	-37.0	45	262	46.4
350	28	7,969	-43.7		261	51.5
300	28	8,989	-50.9		257	57.3
250	28	10,159	-56.3		256	60.4
200	28	11,571	-57.1		259	63.3
175	28	12,419	-55.4		260	61.0
150	28	13,403	-55.3		260	57.7
125	28	14,563	-56.6		262	53.0
100	28	15,973	-58.1		262	47.8
80	28	17,375	-59.2		262	41.6
70	28	18,211	-59.2		265	39.6
60	28	19,177	-59.3		268	34.8
50	28	20,322	-58.5		266	32.1
40	28	21,726	-58.2		265	30.7
30	28	23,540	-57.4		271	31.3
25	27	24,691	-56.4		268	29.7
20	27	26,111	-55.4		271	28.2
15	27	27,950	-54.1		267	32.1
10	25	30,584	-49.1		264	37.7
7	11	32,906	-44.3			

Standard pressure surface (mb.)	* PITTSBURGH, PA. 978 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	353	- 3.7	82	234	1.9
1000	28	181				
950	28	585	- 3.7	82	250	5.2
900	28	1,013	- 5.1	79	265	10.9
850	28	1,461	- 6.0	75	271	15.7
800	28	1,935	- 7.7	69	276	18.8
750	28	2,435	- 9.8	64	274	23.5
700	28	2,966	-11.8	55	272	27.4
650	28	3,530	-14.4	50	272	31.9
600	28	4,134	-17.6	47	270	36.7
550	28	4,780	-21.2	44	270	42.2
500	28	5,479	-25.6	41	271	46.8
450	28	6,231	-30.2	40	271	53.6
400	28	7,064	-35.9	41	270	61.2
350	28	7,980	-41.9	48	268	68.6
300	28	9,011	-48.0		266	82.9
250	28	10,199	-53.7		263	89.6
200	28	11,622	-56.8		262	84.5
175	28	12,467	-57.1		265	78.3
150	28	13,444	-56.4		265	73.2
125	28	14,598	-57.7		265	64.7
100	28	16,000	-59.3		266	60.4
80	28	17,396	-59.8		266	51.7
70	28	18,230	-59.6		267	47.6
60	27	19,189	-59.1		268	41.4
50	27	20,333	-58.9		267	38.5
40	27	21,736	-57.9		268	34.2
30	26	23,558	-57.0		274	32.4
25	26	24,715	-56.0		271	31.3
20	26	26,137	-54.8		271	33.2
15	26	27,983	-53.2		267	35.2
10	25	30,622	-47.1		259	51.1
7	14	32,973	-42.3		253	65.7

Standard pressure surface (mb.)	PONAPE, CAROLINE IS. + 1005 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	39	28.2	73	55	10.1
1000	28	85	27.6	72	58	11.8
950	28	528	22.9	74	66	19.4
900	28	1,007	19.4	71	70	22.3
850	28	1,497	16.6	66	75	20.0
800	28	2,014	16.5	41	82	12.8
750	28	2,556	14.7	30	90	7.8
700	28	3,142	11.6	27	93	8.4
650	28	3,750	8.0	26	94	10.5
600	28	4,413	4.2	28	96	12.4
550	28	5,108	.4	25	93	16.1
500	28	5,874	- 3.7	22	91	21.6
450	28	6,695	- 8.3	20	87	20.6
400	28	7,605	-14.0	17	89	17.9
350	28	8,606	-20.4	17	88	14.6
300	28	9,728	-28.9	18	95	8.7
250	28	11,004	-39.4	19	123	8.0
200	28	12,492	-51.6		137	11.8
175	28	13,344	-58.8		137	12.0
150	28	14,293	-66.7		124	11.8
125	28	15,372	-75.2		88	14.8
100	28	16,641	-82.5		75	22.0
80	28	17,881	-82.1		89	20.8
70	28	18,638	-76.6		91	18.6
60	27	19,537	-71.5		93	21.0
50	27	20,619	-68.7		92	35.0
40	27	21,973	-62.7		91	50.3
30	25	23,775	-54.6		90	36.3
25	22	24,948	-51.7		87	18.1
20	21	26,397	-50.0		125	2.9
15	10	28,280	-48.1			

Standard pressure surface (mb.)	PORTLAND, ME. 1017 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	20	- 8.5	77	301	2.9
1000	28	149			305	3.1
950	28	549	- 5.9	64	303	8.0
900	28	975	- 7.3	68	298	10.3
850	28	1,419	- 8.8	66	297	13.8
800	28	1,888	-10.1	62	296	17.1
750	28	2,383	-11.9	56	290	20.4
700	28	2,910	-14.3	52	284	23.9
650	28	3,465	-17.0	55	279	27.8
600	28	4,067	-20.2	51	276	31.3
550	28	4,700	-24.1	53	273	36.9
500	28	5,397	-28.1	52	272	42.5
450	28	6,139	-32.8	51	273	51.7
400	[illegible]	6,968	-38.2	51	272	53.2
350	28	7,876	-43.8	44	271	56.7
300	28	8,898	-49.3		270	63.9
250	28	10,082	-53.2		275	60.0
200	26	11,517	-54.4		274	59.6
175	26	12,372	-54.6		275	57.1
150	26	13,358	-54.7		273	56.7
125	26	14,523	-55.5		273	53.2
100	26	15,943	-56.2		272	49.7
80	25	17,365	-56.7		272	43.7
70	25	18,209	-57.6		273	39.0
60	25	19,181	-57.8		274	35.0
50	25	20,330	-57.9		273	35.0
40	25	21,738	-57.4		270	32.4
30	25	23,556	-57.2		270	34.4
25	24	24,711	-56.4		267	34.2
20	22	26,129	-55.6		267	39.4
15	17	27,949	-53.5		270	40.4

See reference note at end of table

RAWINSONDE DATA

Average monthly values

RAPID CITY, S. DAK.
903 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	966	-8.9	70	322	2.5
1000	28	169				
950	28	569				
900	28	990			23	1.6
850	28	1,440	-4.3	66	297	5.8
800	28	1,917	-5.2	63	306	11.3
750	28	2,417	-8.1	62	310	13.6
700	28	2,954	-11.7	67	303	14.6
650	28	3,513	-15.0	62	295	15.2
600	28	4,119	-19.2	63	296	17.7
550	28	4,759	-23.5	60	294	19.2
500	28	5,451	-28.4	59	292	21.6
450	28	6,191	-33.4	54	292	24.9
400	28	7,015	-39.3	52	294	24.7
350	28	7,915	-46.3		294	28.6
300	28	8,924	-52.9		296	30.7
250	28	10,084	-58.0		295	33.2
200	28	11,487	-57.6		282	31.9
175	28	12,333	-55.8		282	31.1
150	28	13,316	-54.6		281	30.7
125	28	14,480	-55.3		283	30.5
100	28	15,898	-56.1		282	29.5
80	28	17,312	-57.5		283	28.6
70	28	18,153	-58.1		282	26.6
60	28	19,124	-58.7		285	23.3
50	28	20,268	-58.8		288	22.1
40	27	21,668	-58.6		283	19.8
30	27	23,476	-58.1		289	17.7
25	26	24,625	-57.7		295	17.1
20	22	26,049	-56.6		290	15.2
15	11	27,866	-55.4			
10						

ST. CLOUD, MINN.
982 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	316	-13.8	72	349	.4
1000	28	178				
950	28	572	-11.8	72	271	2.1
900	28	985	-10.1	64	268	7.4
850	28	1,426	-10.0	55	276	10.9
800	28	1,893	-10.8	49	280	13.4
750	28	2,386	-12.3	46	281	15.2
700	28	2,913	-14.5	49	286	17.9
650	28	3,471	-17.0	51	290	21.6
600	28	4,070	-20.5	52	289	25.1
550	28	4,706	-24.7	48	289	26.4
500	28	5,397	-29.4	46	288	28.2
450	28	6,136	-34.7	42	285	32.4
400	28	6,954	-40.5	38	285	36.3
350	28	7,852	-46.8		284	39.2
300	28	8,860	-52.7		283	39.6
250	28	10,025	-56.9		282	40.2
200	28	11,439	-56.5		274	39.0
175	28	12,289	-54.9		275	41.0
150	28	13,276	-54.4		274	38.7
125	28	14,443	-54.8		274	38.3
100	28	15,868	-55.5		278	35.7
80	28	17,287	-56.7		276	32.1
70	28	18,132	-57.2		276	30.1
60	28	19,107	-57.4		281	27.2
50	28	20,257	-57.7		279	25.8
40	28	21,666	-57.8		281	23.5
30	21	23,478	-57.1		283	21.2
25	20	24,642	-56.7		284	20.0
20	16	26,081	-54.6		275	16.1
15	11	27,930	-52.8		286	17.3
10						

ST. PAUL IS., ALASKA
1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	10	-.3	87	203	9.3
1000	28	33			198	10.9
950	28	440	-3.0	81	203	13.4
900	28	867	-6.0	82	213	15.0
850	28	1,312	-8.8	75	219	16.5
800	28	1,780	-11.6	69	218	16.5
750	28	2,270	-14.3	64	224	17.1
700	28	2,792	-17.2	58	225	19.6
650	28	3,339	-20.5	54	228	21.0
600	28	3,932	-24.0	54	230	24.5
550	28	4,557	-28.1	53	229	26.6
500	28	5,240	-32.5	53	235	29.3
450	28	5,968	-37.3	53	238	29.5
400	28	6,780	-42.2	50	233	34.2
350	28	7,672	-47.6		235	36.9
300	28	8,678	-52.3		241	42.9
250	28	9,850	-54.3		246	37.7
200	28	11,285	-52.3		238	27.8
175	28	12,154	-50.0		232	27.8
150	28	13,164	-49.1		229	28.2
125	28	14,361	-48.5		234	22.3
100	28	15,830	-47.9		224	20.0
80	28	17,302	-47.7		222	18.3
70	28	18,182	-47.8		218	15.7
60	27	19,200	-47.9		217	15.3
50	27	20,403	-47.9		199	10.9
40	27	21,875	-47.8		176	8.5
30	25	23,767	-47.2		136	7.6
25	25	24,975	-46.6		120	10.1
20	25	26,458	-45.8		100	12.8
15	23	28,386	-45.0		84	20.6
10	12	31,134	-44.6			

SALEM, OREG.
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	61	2.2	90	178	4.1
1000	28	154	3.5	82	189	4.1
950	28	566	3.7	68	217	5.2
900	28	1,009	1.5	63	237	8.0
850	28	1,468	-1.2	61	240	10.7
800	28	1,949	-3.7	56	250	12.4
750	28	2,452	-6.5	49	256	13.4
700	28	2,993	-9.7	48	260	14.0
650	28	3,556	-13.4	45	264	16.1
600	28	4,167	-16.9	47	272	17.3
550	28	4,809	-20.7	52	282	21.0
500	28	5,514	-25.6	52	283	22.7
450	28	6,263	-30.9	50	289	27.2
400	28	7,096	-36.8	46	292	29.1
350	28	8,007	-43.4	43	294	32.4
300	28	9,029	-50.4		288	33.6
250	28	10,198	-57.0		286	39.6
200	28	11,600	-59.0		287	38.1
175	28	12,442	-56.5		286	33.8
150	28	13,422	-55.8		286	32.2
125	28	14,582	-56.0		290	28.2
100	28	15,998	-56.9		293	25.3
80	28	17,411	-57.3		302	19.2
70	28	18,252	-58.4		304	16.3
60	28	19,221	-58.2		313	15.5
50	28	20,369	-58.0		333	14.2
40	28	21,775	-57.7		351	13.4
30	28	23,592	-57.0		14	14.4
25	27	24,746	-56.6		27	17.5
20	25	26,160	-55.6		36	20.6
15	19	27,994	-54.9		37	22.5
10	5	30,663	-56.0			

SALT LAKE CITY, UTAH
872 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,288	-3.5	77	148	4.3
1000	28	196				
950	28	605				
900	28	1,041				
850	28	1,494	-1.8	64	171	6.2
800	28	1,975	-4.0	64	200	7.2
750	28	2,480	-7.5	69	249	7.0
700	28	3,015	-11.0	65	279	9.3
650	28	3,581	-14.0	60	289	11.5
600	28	4,186	-17.2	56	294	13.8
550	28	4,828	-21.1	52	295	17.7
500	28	5,530	-25.7	48	294	20.4
450	28	6,278	-30.9	49	297	23.7
400	28	7,111	-37.0	45	301	31.1
350	28	8,022	-43.7	46	306	35.9
300	28	9,041	-50.8		303	38.7
250	28	10,209	-57.4		298	40.0
200	28	11,610	-58.6		298	42.5
175	28	12,452	-56.6		292	39.4
150	28	13,432	-55.8		293	36.5
125	28	14,591	-56.6		290	33.4
100	28	16,002	-57.8		287	29.5
80	28	17,406	-58.4		288	26.6
70	28	18,244	-59.1		287	22.7
60	28	19,209	-59.3		290	18.6
50	28	20,350	-59.3		288	16.7
40	26	21,748	-59.3		294	14.6
30	22	23,554	-58.0		291	13.8
25	21	24,700	-57.4		291	13.0
20	19	26,107	-56.6		295	12.6
15	13	27,929	-52.9		268	10.1
10	5	30,589	-50.6			

SAN ANTONIO, TEXAS
990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	243	4.9	85	360	4.7
1000	28	160				
950	28	582	7.0	73	74	1.0
900	28	1,027	7.3	63	205	2.3
850	28	1,497	5.9	55	244	7.0
800	28	1,992	4.2	53	252	11.3
750	28	2,515	2.2	50	249	17.7
700	28	3,071	-.4	43	248	23.3
650	28	3,654	-3.9	38	251	28.9
600	28	4,288	-7.9	39	250	34.0
550	28	4,950	-12.6	39	253	38.5
500	28	5,680	-17.7	34	252	44.7
450	28	6,453	-23.1	39	249	50.7
400	28	7,314	-29.2	38	248	55.9
350	28	[illegible],255	-36.1	34	247	62.7
300	28	9,308	-44.0		249	69.7
250	28	10,510	-52.0		250	81.0
200	28	11,934	-57.1		249	83.3
175	28	12,777	-57.8		251	80.8
150	28	13,746	-59.5		252	78.9
125	28	14,879	-62.3		255	73.4
100	28	16,247	-65.2		257	52.1
80	27	17,600	-66.1		260	39.0
70	25	18,408	-64.7		260	34.8
60	25	19,351	-63.7		259	28.6
50	23	20,476	-61.3		257	24.9
40	22	21,865	-59.9		259	17.9
30	20	23,664	-59.0		263	20.2
25	19	24,812	-57.6		271	17.7
20	18	26,222	-56.4		261	16.1
15	10	28,069	-53.8			
10						
7						
5						

SAN DIEGO, CALIF.
1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	124	7.3	84	69	2.7
1000	28	145	8.7	78	66	3.1
950	28	571	10.0	50	349	1.6
900	28	1,020	8.0	45	318	2.5
850	28	1,489	5.5	39	318	4.3
800	28	1,982	2.8	35	303	6.8
750	28	2,500	.7	30	299	11.3
700	28	3,054	-2.1	26	301	14.4
650	28	3,635	-5.5	29	299	18.3
600	28	4,263	-9.6	29	299	21.4
550	28	4,922	-13.9	29	304	24.5
500	28	5,647	-19.0	30	307	28.7
450	28	6,416	-24.8	33	304	30.5
400	28	7,270	-31.2	34	302	38.7
350	28	8,203	-38.4	35	301	42.2
300	28	9,245	-46.3		295	47.2
250	28	10,434	-54.5		291	53.6
200	28	11,843	-59.3		288	58.5
175	28	12,681	-57.6		285	57.1
150	28	13,655	-57.5		287	59.6
125	28	14,802	-59.2		283	50.7
100	28	16,191	-61.6		280	41.2
80	27	17,564	-62.8		277	30.1
70	27	18,385	-62.9		275	27.0
60	27	19,335	-62.0		278	22.0
50	27	20,464	-61.0		280	17.9
40	27	21,855	-59.4		272	16.1
30	27	23,661	-58.0		265	17.3
25	26	24,815	-56.9		268	16.9
20	24	26,230	-55.7		266	16.9
15	24	28,072	-53.3		269	22.0
10	21	30,698	-50.6		263	22.9
7	14	33,029	-45.7		264	32.4
5	10	35,335	-38.5			

* SAN JUAN, P. R.
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	6	22.4	80	94	5.2
1000	28	155	22.5	75	89	11.8
950	28	594	19.2	77	83	16.3
900	28	1,064	16.1	75	85	17.1
850	28	1,548	13.1	76	84	15.2
800	28	2,056	10.9	67	91	11.8
750	28	2,590	10.3	35	88	9.9
700	28	3,166	8.4	24	94	7.6
650	28	3,769	5.0	23	96	5.8
600	28	4,424	1.7	22	97	3.7
550	28	5,111	-2.4	21	133	2.5
500	28	5,871	-6.7	20	170	2.5
450	28	6,679	-11.8	21	240	2.1
400	28	7,577	-18.6	22	264	7.2
350	28	8,558	-26.0	23	277	9.5
300	28	9,655	-34.2	24	297	15.3
250	28	10,906	-43.5		304	24.1
200	28	12,372	-54.0		297	32.1
175	28	13,219	-59.1		291	34.0
150	28	14,172	-65.2		289	28.2
125	28	15,264	-71.9		285	24.7
100	28	16,561	-77.2		284	18.6
80	28	17,832	-79.0		296	6.6
70	28	18,595	-76.6		352	3.3
60	28	19,493	-70.6		58	5.4
50	28	20,588	-66.2		77	8.5
40	27	21,959	-60.6		75	13.6
30	27	23,766	-57.7		72	18.1
25	27	24,920	-55.7		77	20.2
20	25	26,349	-52.7		86	18.5
15	23	28,228	-47.6		93	12.2
10	15	30,917	-44.1		130	1.2
7	7	33,311	-39.7			
5						

SAN NICOLAS, CALIF.
997 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	174	9.3	77	318	8.4
1000	28	148				
950	28	575	10.4	48	324	9.9
900	28	1,024	8.3	37	323	7.4
850	28	1,494	5.9	30	328	7.6
800	28	1,988	4.0	28	316	9.9
750	28	2,508	1.2	30	311	12.4
700	28	3,062	-1.8	26	308	14.2
650	28	3,646	-5.2	28	300	16.7
600	28	4,272	-9.3	22	300	18.6
550	28	4,935	-14.0	27	295	21.2
500	28	5,655	-19.0	28	294	25.3
450	28	6,427	-24.7	30	295	29.5
400	28	7,277	-31.3	31	294	35.2
350	28	8,208	-38.7	33	296	41.2
300	28	9,248	-46.8	38	294	42.9
250	28	10,433	-55.3	33	287	48.8
200	27	11,841	-60.2	31	286	55.0
175	27	12,679	-57.8	28	286	55.2
150	25	13,651	-58.0	24	282	54.4
125	25	14,795	-60.0		279	48.0
100	24	16,183	-63.1		283	41.0
80	24	17,551	-64.2		282	28.9
70	24	18,370	-63.9		283	22.9
60	24	19,318	-62.6		282	17.7
50	24	20,444	-61.5		292	14.4
40	22	21,831	-59.7		276	13.6
30	22	23,637	-58.0		275	9.7
25	21	24,795	-56.8		271	9.9
20	21	26,212	-55.3		270	9.9
15	18	28,066	-53.0		269	13.4
10	18	30,708	-47.6		254	19.0
7	16	33,073	-39.8		253	40.4
5						

* SAULT STE. MARIE, MICH.
993 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	221	-9.0	84	60	1.7
1000	28	163				
950	28	559	-9.8	84	269	4.3
900	28	977	-10.5	86	265	11.5
850	28	1,416	-11.5	74	271	13.4
800	28	1,880	-12.6	68	273	14.8
750	28	2,370	-14.6	66	272	17.1
700	28	2,892	-17.0	64	274	18.1
650	28	3,444	-19.9	61	278	18.8
600	28	4,035	-22.9	53	274	21.8
550	28	4,666	-26.7	57	273	23.9
500	28	5,349	-31.1	50	270	25.4
450	28	6,085	-36.1	46	269	26.6
400	28	6,896	-41.7	46	267	28.4
350	28	7,789	-47.3		266	31.1
300	28	[illegible],796	-52.5		270	37.7
250	28	9,964	-55.6		268	42.2
200	28	11,384	-55.6		267	45.8
175	28	12,235	-54.9		273	46.0
150	28	13,222	-54.3		270	44.3
125	28	14,388	-54.8		268	43.5
100	27	15,804	-55.3		271	39.8
80	27	17,224	-56.3		270	36.3
70	26	18,064	-57.0		270	33.6
60	26	19,040	-56.9		270	31.9
50	26	20,194	-57.1		275	30.9
40	26	21,606	-57.1		272	26.8
30	26	23,426	-56.7		270	25.3
25	25	24,584	-56.0		273	27.2
20	24	26,007	-55.7		277	25.1
15	23	27,840	-54.1		274	27.0
10	20	30,446	-51.2		269	33.8
7	[illegible]	32,783	-46.9			
5						

SHEMYA, ALASKA
993 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	38	-1.3	83	238	14.8
1000	26	-20				
950	26	388	-4.5	77	256	19.4
900	26	810	-7.9	86	261	22.3
850	26	1,252	-11.2	84	258	22.1
800	26	1,714	-14.1	79	256	22.9
750	26	2,201	-17.0	72	251	25.8
700	26	2,716	-19.9	66	245	26.4
650	26	3,260	-23.5	60	254	26.4
600	26	3,843	-27.3	60	251	28.9
550	26	4,460	-31.5	57	250	32.4
500	26	5,133	-35.6	53	247	34.2
450	26	5,857	-39.8	49	258	37.7
400	26	6,658	-44.2	48	253	38.9
350	26	7,546	-48.2		250	42.2
300	25	8,559	-51.0		252	45.8
250	25	9,742	-51.8		246	39.8
200	25	11,194	-50.5		241	35.0
175	25	12,066	-49.5		232	36.5
150	24	13,095	-48.4		238	35.4
125	24	14,296	-48.5		231	29.9
100	23	15,770	-48.4		229	28.6
80	23	17,237	-48.8		219	22.0
70	23	18,114	-48.5		215	19.8
60	23	19,129	-48.7		221	15.2
50	23	20,326	-48.7		178	13.4
40	23	21,794	-48.6		155	9.9
30	22	23,687	-49.3		132	13.2
25	21	24,886	-48.7		124	15.2
20	20	26,354	-48.1		122	15.9
15	18	28,266	-47.2			
10	11	30,970	-46.0			
7						

* SHREVEPORT, LA.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	79	5.0	82	31	2.3
1000	28	160	5.4	78	58	2.7
950	28	587	5.3	73	190	3.3
900	28	1,023	4.4	70	232	5.8
850	28	1,487	2.8	61	252	9.3
800	28	1,977	.6	61	258	14.8
750	28	2,494	-1.2	56	259	19.0
700	28	3,042	-3.5	51	256	25.3
650	28	3,624	-6.3	47	250	29.9
600	28	4,247	-10.1	47	253	36.3
550	28	4,910	-14.6	50	252	41.6
500	28	5,628	-19.5	46	252	48.2
450	28	6,403	-24.9	45	251	56.9
400	28	7,251	-30.6	44	251	64.9
350	28	8,186	-37.1	41	250	74.8
300	28	9,234	-44.8		250	82.8
250	28	10,431	-52.7		250	86.8
200	27	11,845	-58.2		253	84.9
175	27	12,685	-58.0		255	84.3
150	27	13,655	-58.9		258	74.0
125	27	14,790	-61.4		258	64.3
100	27	16,165	-63.6		256	56.5
80	27	17,528	-65.0		259	45.1
70	27	18,343	-63.8		258	37.3
60	26	19,290	-62.5		257	32.4
50	26	20,417	-61.4		259	32.1
40	22	21,807	-59.5		259	34.2
30	22	23,611	-58.6		263	30.7
25	20	24,754	-57.1		266	23.7
20	18	26,171	-55.7		261	26.0
15	14	28,015	-52.3		250	26.8
10	10	30,671	-47.4			
7						

SPOKANE, WASH.
932 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	717	-1.3	84	198	2.7
1000	28	153				
950	28	561				
900	28	998	-.4	76	225	6.6
850	28	1,454	-2.2	68	246	10.3
800	28	1,933	-5.2	68	260	11.7
750	28	2,432	-8.1	67	268	12.2
700	28	2,972	-11.2	65	272	14.4
650	28	3,530	-14.6	60	276	16.9
600	28	4,139	-18.6	57	284	18.1
550	28	4,776	-23.0	54	282	20.4
500	28	5,474	-28.0	55	284	23.7
450	28	6,217	-33.3	53	282	26.2
400	28	7,041	-39.3	48	283	29.1
350	28	7,944	-45.3		286	31.7
300	28	8,958	-51.8		291	36.5
250	28	10,124	-57.4		294	41.2
200	28	11,531	-57.3		299	36.5
175	28	12,380	-54.9		294	33.6
150	28	13,367	-54.3		296	28.7
125	28	14,535	-54.7		297	27.2
100	28	15,959	-55.7		301	24.5
80	28	17,377	-56.3		307	22.3
70	28	18,224	-56.6		310	20.4
60	28	19,200	-56.8		317	17.1
50	28	20,353	-57.0		332	16.5
40	28	21,765	-56.7		343	14.4
30	27	23,597	-55.8		19	17.1
25	25	24,762	-54.9		19	17.5
20	22	26,185	-54.8		23	20.6
15	17	28,005	-52.8		29	24.1
10	6	30,672	-52.4			
7						

SWAN ISLAND, W. I.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	10	24.5	84	91	8.5
1000	28	128	23.6	84	90	11.1
950	28	579	20.1	87	100	14.6
900	28	1,040	17.2	79	107	14.8
850	28	1,527	14.2	79	110	13.0
800	28	2,038	12.3	59	114	10.3
750	28	2,585	10.8	48	115	8.4
700	28	3,151	7.7	39	115	7.0
650	28	3,761	5.2	40	150	3.7
600	28	4,409	1.8	39	177	4.7
550	28	5,103	-2.2	35	212	4.7
500	28	5,858	-6.7	29	219	7.0
450	28	6,675	-11.8	26	225	9.7
400	28	7,565	-18.1	32	255	15.0
350	28	[illegible],550	-25.1	29	250	22.9
300	28	9,652	-33.8	29	250	26.6
250	28	10,903	-43.8		249	31.9
200	28	12,365	-55.1		255	38.5
175	27	13,207	-60.9		257	41.0
150	26	14,153	-66.7		255	37.1
125	25	15,240	-72.2		258	31.9
100	24	16,538	-77.4		253	22.1
80	22	17,809	-80.1		233	6.6
70	22	18,569	-76.8		173	2.3
60	22	19,467	-71.8		110	7.2
50	22	20,556	-66.6		89	11.8
40	22	21,922	-61.7		87	15.2
30	19	23,713	-58.5		82	21.8
25	17	24,859	-56.1		83	22.0
20	15	26,284	-52.8		87	19.8
15	10	28,139	-49.9			
10						
7						

TAMPA, FLA.
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	8	12.2	90	59	3.9
1000	28	166	13.3	85	78	4.9
950	28	598	12.3	79	162	5.4
900	28	1,051	11.1	69	213	6.8
850	28	1,527	9.2	64	229	8.4
800	28	2,029	7.9	50	235	11.3
750	28	2,562	6.1	43	242	15.5
700	28	3,123	3.4	38	246	20.4
650	28	3,724	.4	35	245	26.0
600	28	4,359	-3.2	33	247	31.9
550	28	5,040	-7.6	34	248	36.5
500	28	5,778	-12.3	30	250	42.3
450	28	6,574	-17.8	32	249	47.6
400	28	7,448	-24.1	34	251	54.8
350	28	[illegible],407	-31.1	38	254	62.5
300	28	9,484	-38.7	41	255	69.7
250	28	10,713	-47.2		256	84.7
200	28	12,158	-56.0		255	99.1
175	28	12,999	-60.1		256	96.2
150	28	13,953	-63.8		256	88.2
125	28	15,063	-66.8		258	76.1
100	28	16,398	-70.6		256	62.4
80	28	17,718	-71.1		256	41.8
70	27	18,511	-68.7		254	32.6
60	26	19,444	-65.2		256	23.9
50	26	20,561	-62.4		265	17.7
40	26	21,947	-60.0		285	10.7
30	25	23,758	-57.3		309	8.2
25	25	24,914	-55.9		332	5.8
20	23	26,345	-53.0		337	2.7
15	20	28,220	-49.3		251	4.7
10	11	30,919	-45.0			
7	8	33,345	-39.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

*** TATOOSH IS., WASH — 1012 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	31	6.8	80	137	3.7
1000	28	132	6.0	75	133	2.7
950	28	548	3.2	72	198	7.6
900	28	986	.1	75	215	9.9
850	28	1,441	- 2.9	74	231	11.8
800	28	1,920	- 5.4	61	240	13.0
750	28	2,422	- 8.0	54	239	13.8
700	28	2,957	-11.0	53	251	14.8
650	28	3,521	-14.2	48	264	16.1
600	28	4,126	-18.1	48	276	16.9
550	28	4,767	-22.4	55	278	17.7
500	28	5,464	-26.9	52	264	19.4
450	28	6,208	-32.2	46	279	22.9
400	28	7,037	-38.3	46	270	27.6
350	28	7,941	-45.2		280	28.2
300	28	8,954	-52.2		270	33.2
250	28	10,117	-57.6		269	38.1
200	28	11,518	-58.2		266	30.3
175	27	12,358	-55.3		272	27.4
150	27	13,344	-54.5		270	22.9
125	27	14,508	-55.8		277	19.6
100	27	15,926	-56.3		287	19.4
80	27	17,344	-56.6		297	17.3
70	27	18,189	-56.7		303	15.5
60	27	19,167	-57.2		323	15.3
50	27	20,320	-57.2		334	16.1
40	26	21,735	-56.5		357	16.1
30	25	23,571	-55.6		23	19.4
25	24	24,730	-55.3		25	23.1
20	23	26,155	-55.2		30	26.8
15	17	27,999	-54.6		36	29.9
10	9	30,603	-53.0			
7						

TOPEKA, KANS. — 988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	269	- 4.7	75	44	1.7
1000	28	173				
950	28	579	- 2.3	70	244	1.9
900	28	1,008	- 2.2	59	276	5.8
850	28	1,462	- 2.9	56	277	8.9
800	28	1,942	- 4.0	51	278	11.1
750	28	2,446	- 6.6	50	277	12.6
700	28	2,985	- 9.4	48	275	15.5
650	28	3,550	-12.4	48	276	18.6
600	28	4,162	-16.3	47	273	21.2
550	28	4,806	-20.6	46	267	23.7
500	28	5,510	-25.4	46	262	25.3
450	28	6,260	-30.8	42	262	28.4
400	28	7,093	-37.0	39	256	31.1
350	28	8,003	-43.8		252	35.5
300	28	9,023	-50.6		253	36.1
250	28	10,196	-56.1		255	42.3
200	28	11,609	-56.8		256	49.9
175	28	12,457	-55.4		260	51.5
150	28	13,440	-55.6		264	50.5
125	28	14,599	-56.7		265	45.8
100	28	16,008	-58.4		266	41.4
80	28	17,407	-59.6		265	35.0
70	27	18,240	-59.7		266	32.1
60	26	19,209	-60.0		267	30.1
50	25	20,349	-59.5		269	28.2
40	22	21,753	-58.9		271	23.3
30	21	23,563	-58.4		272	24.1
25	18	24,708	-57.6		272	27.0
20	13	26,107	-56.3		273	26.0
15	11	27,961	-53.9			
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+ TRUK, CAROLINE IS. — 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	2	27.8	72	61	11.7
1000	28	95	26.8	71	64	14.2
950	28	541	22.7	72	72	20.0
900	28	1,016	19.5	66	79	21.6
850	28	1,507	17.2	54	81	19.2
800	28	2,023	15.8	37	81	15.2
750	28	2,570	14.3	28	83	12.0
700	28	3,150	11.6	25	97	10.1
650	28	3,765	8.3	21	97	12.2
600	28	4,422	4.4	20	95	15.5
550	28	5,118	.3	20	96	17.1
500	28	5,885	- 3.7	19	97	21.0
450	28	6,706	- 8.7	17	96	20.8
400	28	7,614	-14.6	15	96	19.6
350	28	8,614	-20.8	13	92	16.7
300	28	9,736	-29.2	15	96	13.4
250	28	11,011	-39.6	17	116	11.8
200	27	12,499	-51.8		128	15.7
175	27	13,350	-58.9		127	19.2
150	27	14,300	-66.7		121	17.5
125	27	15,379	-75.1		101	17.9
100	27	16,649	-82.2		88	23.1
80	27	17,894	-81.6		97	22.3
70	27	18,653	-75.4		95	21.0
60	27	19,557	-71.4		94	21.0
50	27	20,643	-67.7		95	34.0
40	27	22,007	-61.6		93	47.8
30	25	23,822	-54.4		96	35.7
25	22	25,004	-51.5		102	13.4
20	17	26,462	-49.7		108	2.3
15	9	28,355	-47.9			
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*** TUCSON, ARIZ. — 925 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	789	3.6	72	128	5.8
1000	28	151				
950	28	570				
900	28	1,014	7.2	48	135	6.4
850	28	1,483	5.2	44	151	2.7
800	28	1,975	2.2	43	244	4.1
750	28	2,492	- .5	38	264	7.8
700	28	3,043	- 3.5	34	269	12.8
650	28	3,619	- 6.8	37	274	16.9
600	28	4,246	-10.2	32	275	22.3
550	28	4,905	-14.8	32	280	25.4
500	28	5,624	-20.1	36	279	29.1
450	28	6,386	-26.0	40	279	33.8
400	28	7,238	-32.5	34	282	36.9
350	28	8,164	-40.1	30	282	40.4
300	28	9,199	-47.2		282	44.9
250	28	10,384	-54.8		282	52.1
200	28	11,795	-57.6		277	58.1
175	28	12,640	-56.3		279	57.5
150	28	13,617	-57.1		276	53.4
125	28	14,766	-59.1		273	49.7
100	28	16,154	-62.2		273	43.5
80	27	17,530	-63.7		272	36.5
70	27	18,348	-63.7		273	30.1
60	27	19,295	-62.5		272	25.4
50	27	20,422	-61.4		267	20.0
40	27	21,811	-59.5		265	22.7
30	27	23,616	-58.3		260	22.1
25	27	24,766	-56.9		266	20.4
20	23	26,181	-56.5		263	21.2
15	21	28,018	-53.2		263	20.4
10	17	30,646	-48.4		256	28.0
7	9	33,019	-42.9			

*** VANDENBERG AFB, CALIF. — 1007 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	100	6.7	79	57	2.1
1000	28	154	8.4	74	41	3.1
950	28	581	9.0	61	4	6.2
900	28	1,026	7.2	49	10	5.6
850	28	1,494	4.7	39	345	4.7
800	28	1,987	2.9	33	318	8.9
750	28	2,505	.4	37	306	11.7
700	28	3,058	- 2.4	36	299	14.6
650	28	3,640	- 5.5	29	298	17.1
600	28	4,267	- 9.4	31	302	22.9
550	28	4,929	-14.0	31	293	23.1
500	28	5,650	-19.3	34	292	24.7
450	28	6,417	-25.3	36	293	27.8
400	28	7,268	-32.1	41	293	32.4
350	28	8,197	-39.2	35	292	38.7
300	28	9,235	-47.4		290	42.9
250	28	10,418	-55.6		288	47.8
200	28	11,820	-60.1		283	52.4
175	28	12,656	-58.2		286	55.0
150	28	13,629	-57.7		285	49.9
125	28	14,776	-58.9		284	46.2
100	28	16,169	-61.1		284	37.1
80	28	17,547	-62.6		282	31.1
70	27	18,371	-62.7		286	25.3
60	27	19,320	-62.1		288	20.2
50	27	20,448	-61.3		281	11.8
40	27	21,838	-59.8		287	8.7
30	24	23,642	-58.0		278	9.1
25	23	24,792	-57.0		270	11.3
20	23	26,208	-55.5		266	9.7
15	18	28,041	-53.2		267	14.6
10	14	30,683	-47.0		261	21.2
7	8	33,097	-40.5			

*** WAKE IS., PACIFIC AREA — 1016 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	5	24.1	76	59	12.8
1000	28	147	22.7	74	67	15.9
950	28	589	18.5	78	75	17.9
900	28	1,054	15.0	78	75	16.7
850	28	1,537	12.7	70	74	14.6
800	28	2,045	11.8	45	75	11.8
750	28	2,581	11.0	21	74	9.5
700	28	3,158	8.3	20	58	6.8
650	28	3,759	5.4	19	8	4.1
600	28	4,416	1.7	19	336	5.2
550	28	5,106	- 2.6	20	307	8.9
500	28	5,862	- 7.4	20	305	15.5
450	28	6,670	-12.3	18	304	21.8
400	28	7,569	-17.7	18	299	29.7
350	28	8,557	-23.6	18	297	36.1
300	28	9,667	-31.5	18	295	41.4
250	28	10,932	-41.1	17	291	41.6
200	28	12,410	-53.0		291	42.3
175	28	13,258	-59.5		291	42.3
150	28	14,208	-66.1		288	39.6
125	27	15,295	-73.3		288	36.1
100	26	16,578	-80.2		293	27.0
80	23	17,827	-81.3		300	14.0
70	20	18,586	-77.8		329	5.4
60	18	19,477	-71.9		21	2.9
50	18	20,566	-66.7		89	5.4
40	18	21,927	-62.5		126	4.7
30	17	23,713	-58.9		70	6.4
25	16	24,861	-57.1		66	7.2
20	13	26,282	-54.5		109	5.1
15	12	28,148	-50.0		325	3.1
10	10	30,821	-44.8			
7	9	33,225	-40.3			

*** WALLOPS IS. VA. NASA — 1022 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	3	- .3	83	320	3.7
1000	28	180	1.6	69	305	4.9
950	28	596	.7	68	294	10.9
900	28	1,027	- .7	71	281	14.4
850	28	1,482	- 2.2	71	277	17.5
800	28	1,963	- 3.7	67	270	21.0
750	28	2,473	- 5.5	64	268	26.2
700	28	3,011	- 8.0	56	266	30.9
650	28	3,582	-10.7	49	269	35.9
600	28	4,196	-14.0	48	268	43.3
550	28	4,847	-17.9	46	264	49.7
500	28	5,561	-21.6	46	265	56.3
450	28	6,323	-26.8	47	266	66.0
400	28	7,170	-32.5	45	263	71.5
350	28	8,099	-38.7	51	264	81.8
300	28	9,143	-45.5		262	91.5
250	28	10,338	-53.0		264	93.8
200	28	11,760	-57.3		269	89.4
175	28	12,603	-57.6		271	86.2
150	28	13,577	-57.6		268	74.8
125	28	14,723	-59.5		266	63.1
100	28	16,112	-61.5		266	59.6
80	27	17,486	-62.0		270	46.0
70	26	18,312	-60.2		272	41.2
60	26	19,273	-60.0		270	40.2
50	25	20,410	-59.6		269	41.2
40	24	21,807	-58.5		268	36.1
30	24	23,622	-56.8		270	34.8
25	24	24,780	-55.3		269	32.6
20	22	26,208	-53.3		268	35.2
15	19	28,066	-52.0		269	43.9
10	9	30,731	-47.0			
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WASHINGTON, D. C. — 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	84	- 2.9	73	323	3.3
1000	28	183	- 1.6	68	313	5.4
950	28	594	- 2.3	70	299	12.0
900	28	1,020	- 3.3	69	295	14.8
850	28	1,471	- 4.3	69	293	19.2
800	28	1,948	- 5.4	61	285	20.8
750	28	2,450	- 7.0	56	276	24.3
700	28	2,990	- 9.2	49	274	27.8
650	28	3,554	-12.0	47	276	32.8
600	28	4,169	-15.3	45	273	37.5
550	28	4,817	-19.3	41	273	42.3
500	28	5,525	-23.8	42	272	50.5
450	28	6,281	-28.4	41	269	57.9
400	28	7,123	-33.8	44	267	66.2
350	28	8,048	-39.8	49	265	73.6
300	28	9,085	-46.6		264	79.4
250	28	10,277	-53.1		265	91.9
200	27	11,703	-57.7		266	88.6
175	27	12,545	-57.9		267	83.9
150	26	13,513	-57.2		269	75.2
125	25	14,667	-58.5		267	65.1
100	25	16,063	-60.4		267	59.4
80	25	17,451	-60.8		265	49.1
70	25	18,281	-60.3		267	45.6
60	25	19,243	-59.7		268	38.7
50	25	20,382	-59.6		267	34.2
40	24	21,779	-59.0		266	31.3
30	24	23,591	-57.0		267	33.4
25	24	24,748	-55.7		268	34.2
20	22	26,168	-54.9		268	38.3
15	15	28,004	-52.9		260	41.6
10	7	30,680	-46.3			
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WINNEMUCCA, NEV. — 869 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,310	- 3.6	76	105	2.5
1000	28	188				
950	28	604				
900	28	1,039				
850	28	1,489	- .7	62	170	2.7
800	28	1,972	- 2.6	57	236	5.6
750	28	2,478	- 5.5	55	269	7.2
700	28	3,020	- 8.5	55	283	8.7
650	28	3,588	-11.7	52	292	12.8
600	28	4,201	-15.2	49	301	15.9
550	28	4,851	-19.5	47	299	18.5
500	28	5,556	-24.1	43	297	21.0
450	28	6,310	-29.5	40	295	23.1
400	28	7,147	-35.7	41	298	27.4
350	28	8,062	-42.6	42	297	30.3
300	28	9,086	-50.0		303	35.0
250	28	10,257	-57.1		301	38.9
200	28	11,657	-58.9		296	36.5
175	28	12,499	-56.9		293	35.2
150	28	13,477	-55.9		294	32.2
125	28	14,637	-56.3		293	29.7
100	28	16,048	-58.2		293	24.3
80	28	17,451	-59.0		297	22.1
70	28	18,287	-59.2		297	18.8
60	27	19,255	-59.3		301	17.1
50	26	20,403	-58.6		308	12.8
40	26	21,806	-58.4		316	11.7
30	26	23,620	-57.2		323	10.1
25	20	24,792	-56.4		331	8.2
20	19	26,212	-55.3		339	5.6
15	7	28,084	-55.2			
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WINSLOW, ARIZ. — 850 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,492	- 3.8	74	242	1.7
1000	28	192				
950	28	604				
900	28	1,040				
850	28	1,496			138	.6
800	28	1,978	- 1.8	54	281	2.7
750	28	2,490	- 4.2	53	289	5.8
700	28	3,031	- 7.1	53	291	8.4
650	28	3,602	-10.1	46	291	11.7
600	28	4,219	-13.5	48	286	17.1
550	28	4,871	-17.3	45	289	21.0
500	28	5,585	-22.1	41	291	24.1
450	28	6,348	-27.8	41	289	27.8
400	28	7,188	-34.2	48	292	30.3
350	28	8,108	-41.4	41	292	36.1
300	28	9,137	-48.7		287	39.2
250	28	10,317	-55.2		287	44.1
200	28	11,728	-57.5		283	46.8
175	28	12,573	-56.5		281	48.0
150	28	13,552	-56.2		279	45.5
125	28	14,707	-57.7		277	42.0
100	28	16,107	-60.3		275	35.2
80	28	17,491	-61.6		274	31.1
70	28	18,317	-61.7		274	27.6
60	28	19,272	-61.1		275	22.9
50	28	20,404	-61.0		271	[illegible]
40	27	21,791	-59.8		267	19.2
30	26	23,596	-58.0		265	17.7
25	24	24,747	-57.3		271	17.3
20	22	26,170	-56.5		265	13.8
15	16	27,992	-53.8		261	18.1
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YAKUTAT, ALASKA — 1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	12	- 4.2	93	111	4.1
1000	28	53			120	4.1
950	28	460	- 2.0	84	137	8.2
900	28	890	- 4.4	86	159	9.1
850	28	1,339	- 7.0	86	174	9.7
800	28	1,810	- 9.7	84	192	10.7
750	28	2,306	-12.6	80	210	12.2
700	28	2,829	-15.8	72	225	13.0
650	28	3,381	-19.4	68	234	14.4
600	28	3,975	-23.2	66	243	15.5
550	28	4,602	-27.5	64	247	17.5
500	28	5,286	-31.8	59	248	21.6
450	28	6,021	-36.9	61	246	24.7
400	28	6,829	-42.4	67	252	27.8
350	28	7,721	-48.0		258	31.5
300	28	8,726	-52.6		259	29.1
250	28	9,898	-54.1		266	27.4
200	28	11,338	-51.3		272	28.0
175	28	12,206	-50.8		274	25.6
150	28	13,210	-50.4		276	25.8
125	28	14,398	-51.0		283	23.5
100	28	15,851	-50.5		286	22.1
80	28	17,304	-51.1		301	20.0
70	28	18,171	-51.0		302	16.5
60	28	19,175	-50.6		311	15.2
50	28	20,365	-50.1		330	15.5
40	28	21,823	-49.9		349	14.2
30	28	23,704	-50.0		4	17.1
25	28	24,896	-49.8		10	18.5
20	26	26,366	-49.6		18	22.1
15	23	28,262	-49.2		29	26.2
10	13	30,956	-48.5			

+ YAP, CAROLINE IS. — 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	17	27.3	77	49	10.5
1000	28	102	25.9	71	55	14.0
950	28	548	21.7	75	66	21.6
900	28	1,020	18.7	69	74	21.8
850	28	1,509	16.4	60	78	20.0
800	28	2,025	15.1	43	82	19.0
750	28	2,571	13.3	31	84	17.7
700	28	3,148	10.4	27	83	19.4
650	28	3,763	7.3	26	85	17.9
600	28	4,417	3.9	21	91	20.0
550	28	5,113	.1	17	90	19.0
500	28	5,877	- 4.4	19	101	18.5
450	28	6,694	- 9.5	18	98	20.0
400	28	7,601	-15.1	16	94	19.0
350	28	8,597	-21.7	16	89	17.7
300	28	9,714	-30.1	16	80	13.6
250	28	10,984	-40.5	16	107	12.8
200	28	12,465	-52.6		124	17.9
175	28	13,314	-59.7		122	18.3
150	28	14,261	-67.3		118	17.3
125	27	15,337	-75.6		104	19.8
100	27	16,605	-82.0		96	22.9
80	27	17,848	-82.4		89	19.4
70	27	18,601	-78.2		84	18.1
60	27	19,493	-72.2		82	19.0
50	27	20,580	-67.5		86	28.2
40	24	21,941	-62.1		89	38.5
30	23	23,742	-56.4		89	38.9
25	22	24,906	-53.8		94	27.6
20	18	26,348	-51.0		94	16.7
15	11	28,239	-48.2			
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YUCCA FLAT, NEV. — 882 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,196	- 2.2	72	311	2.7
1000	28	183				
950	28	593				
900	28	1,034				
850	28	1,492	1.8	42	350	4.3
800	28	1,978	- .7	41	335	3.7
750	28	2,487	- 3.8	42	339	4.9
700	28	3,034	- 6.0	R36	318	7.6
650	28	3,606	- 9.2	37	309	11.5
600	28	4,225	-13.2	37	301	16.5
550	28	4,878	-17.5	34	301	18.6
500	28	5,590	-22.0	R34	307	24.3
450	28	6,349	-27.8	R34	308	27.4
400	28	7,191	-34.4	R29	308	29.9
350	28	8,111	-41.4	R31	311	35.0
300	28	9,140	-49.2		305	41.0
250	28	10,314	-56.5		303	48.2
200	27	11,723	-59.2		292	50.3
175	27	12,563	-57.3		292	48.6
150	27	13,539	-56.5		288	46.2
125	27	14,695	-57.3		289	44.7
100	27	16,096	-60.1		286	32.4
80	27	17,486	-61.0		285	28.0
70	27	18,314	-61.1		285	23.5
60	27	19,274	-60.6		290	19.2
50	25	20,417	-60.4		296	14.0
40	24	21,811	-59.3		292	13.4
30	21	23,620	-57.9		279	10.5
25	18	24,781	-56.9		281	11.3
20	16	26,185	-56.7		276	10.9
15	10	28,004	-55.9			
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YUMA, ARIZ. — 1001 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	19	131	7.2	58	30	1.2
1000	19	142			22	1.9
950	19	568	11.0	32	343	5.1
900	19	1,018	8.4	32	358	6.8
850	19	1,488	5.1	34	6	5.2
800	19	1,979	1.9	38	330	5.8
750	19	2,493	- .7	34	322	8.7
700	19	3,045	- 3.9	36	316	9.7
650	19	3,621	- 7.0	29	310	14.0
600	19	4,246	-10.9	29	299	18.5
550	19	4,901	-15.9	33	289	18.8
500	19	5,619	-21.3	29	282	22.7
450	19	6,378	-27.3	32	288	27.8
400	19	7,223	-33.8	33	289	31.1
350	19	8,145	-40.6	40	288	35.7
300	19	9,177	-48.3		289	39.8
250	18	10,347	-55.5		286	43.1
200	18	11,757	-57.6		284	44.3
175	18	12,603	-55.8		280	46.2
150	17	13,586	-56.5		278	46.8
125	14	14,731	-58.3		273	39.0
100	13	16,133	-60.3			

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. They were also equipped with carbon hygristors. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

R More than half of the observations are from statistical values.

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from lithium chloride hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

FEBRUARY 1966

Sun's zenith distance

ALBUQUERQUE, N. MEX.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Feb.									
2	----	----	1.23	1.41	----	1.43	----	1.11	1.01
3	1.05	1.15	1.29	1.42	1.53	1.46	----	----	1.09
4	1.12	1.22	1.34	1.47	1.52	1.41	----	----	----
5	----	----	----	1.44	1.51	1.52	1.27	1.14	1.01
6	----	----	----	1.40	----	----	----	----	----
8	----	----	----	1.39	----	----	----	1.08	1.00
9	----	----	----	1.35	----	----	----	----	----
10	----	----	----	1.33	----	----	----	----	----
11	.98	1.09	1.20	1.39	1.46	1.43	1.26	1.13	1.03
12	1.11	1.20	1.31	1.44	1.52	1.44	----	----	----
14	1.07	1.19	1.23	1.39	1.53	1.44	1.28	1.15	1.01
15	----	----	----	1.40	1.50	----	----	----	----
16	1.06	1.13	1.27	1.43	1.54	1.43	1.29	1.16	1.04
17	1.07	1.19	1.29	1.45	1.55	1.43	1.28	1.15	1.04
18	1.08	1.18	1.19	1.42	1.54	----	1.24	----	.99
19	1.09	1.20	1.29	----	1.56	1.41	1.20	1.13	1.00
20	1.01	1.09	1.22	1.47	1.51	1.41	1.37	1.12	1.02
21	.98	1.06	1.18	1.34	1.46	1.33	1.13	----	.91
22	.84	.97	1.10	1.29	----	----	----	----	----
23	.96	1.08	1.20	1.36	1.50	1.40	1.23	1.14	1.01
24	1.11	1.09	----	----	----	----	----	----	----
27	----	----	----	----	----	1.28	1.13	1.02	.90
28	----	----	1.10	1.36	1.54	1.41	1.25	1.13	1.02
Averages	1.04	1.13	1.23	1.40	1.52	1.42	1.24	1.12	1.01

BLUE HILL OBS., MASS.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Feb.									
18	0.84	0.94	1.08	1.25	----	----	----	----	----
20	.89	.99	1.13	1.29	1.35	----	----	----	----
21	.87	.98	1.08	1.25	1.36	1.25	----	----	----
22	.88	.99	1.17	1.28	1.35	1.27	1.08	0.96	0.86
23	.83	.95	1.08	1.24	----	----	----	----	----
27	.98	1.07	1.21	1.39	1.49	1.40	1.21	1.07	.98
	Recorder inoperable January 26-February 11, 1966								
Averages	0.88	0.99	1.13	1.28	1.39	1.31	1.15	1.02	0.92

MAUNA LOA OBS., HAWAII

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Feb.									
1	1.19	1.26	1.37	1.50	1.61	1.49	1.38	1.29	1.20
2	1.23	1.32	1.41	1.53	1.63	1.52	1.40	1.32	1.23
3	1.19	1.28	1.38	1.50	----	1.49	1.37	1.27	1.19
4	1.16	1.25	1.35	1.46	1.58	1.46	1.33	1.22	1.15
9	1.15	1.22	1.33	1.46	1.59	1.47	1.35	1.25	1.16
10	1.17	1.25	1.35	1.47	1.58	1.46	1.35	1.25	1.17
11	1.23	1.31	1.41	1.52	1.60	1.47	1.35	1.27	1.18
12	1.23	1.31	1.40	1.51	1.58	----	----	----	----
13	1.23	1.31	1.40	1.50	----	----	----	----	----
18	1.16	1.25	1.34	1.46	----	----	----	----	----
21	----	----	----	1.45	1.59	1.47	1.35	1.26	1.18
27	(1.13)	----	----	1.43	1.58	(1.43)	(1.31)	(1.22)	(1.13)
28	----	----	(1.31)	(1.41)	----	----	----	----	----
Averages	1.19	1.28	1.37	1.48	1.59	1.48	1.36	1.27	1.18

Sun's zenith distance

MADISON, WIS.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Feb.									
2	----	----	----	----	S 1.21	S 1.21	----	S 0.88	----
4	S 0.81	S 0.92	S 1.07	S 1.28	S 1.29	S 1.29	S 1.14	----	----
12	M .81	M .92	M 1.05	----	----	----	----	----	----
21	----	----	----	----	----	S 1.30	S 1.14	S .99	S 0.88
26	----	----	M .95	----	----	----	----	----	----
Averages	0.81	0.92	1.02	1.28	1.25	1.27	1.14	0.93	0.88

TUCSON, ARIZ.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Feb.									
1	----	----	----	----	----	----	----	----	0.73
2	----	----	----	----	----	----	----	----	.35
3	----	----	----	----	----	----	----	----	1.02
4	----	1.11	1.22	----	----	----	----	----	----
5	----	1.05	----	----	----	----	----	----	----
11	----	----	.26	----	----	----	----	----	----
12	0.87	.97	1.09	----	----	----	1.10	0.94	.86
13	.83	.99	1.06	----	----	----	----	.89	.78
14	----	1.01	1.12	----	----	----	1.16	1.00	.91
15	.75	1.02	----	----	----	----	1.08	.93	.82
16	----	----	----	----	----	----	----	1.04	.95
17	.92	1.01	1.11	----	----	----	1.18	1.01	.91
19	----	1.01	----	----	----	----	----	----	----
20	.81	.97	----	----	----	----	----	----	----
21	----	----	----	----	----	----	----	.98	.87
27	----	----	----	----	----	----	1.14	----	.95
28	----	----	----	----	----	----	----	----	.87
Averages	0.84	1.02	0.99	----	----	----	1.13	0.97	0.84

OMAHA, NEBR.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Feb.									
2	0.90	1.02	1.12	1.28	----	----	----	----	----
4	----	----	----	----	HS1.34	----	----	----	----
5	----	----	----	----	HM1.19	----	----	----	----
10	HS .80	HS .92	HS1.04	----	----	----	----	----	----
11	HS1.04	HS1.11	----	----	----	----	----	----	----
12	HM .91	HM1.01	HM1.12	----	----	----	HM1.02	HM0.82	HM0.60
14	----	----	----	----	HS1.30	HS1.24	----	----	----
16	HS .91	HS1.02	HS1.14	HS1.31	----	----	HS1.09	HS .90	HS .71
17	----	----	----	HS1.30	----	----	----	----	----
21	----	----	----	----	1.40	HS1.34	HS1.13	HS .97	HS .74
22	----	----	----	----	HM1.35	----	----	----	----
23	HS .74	HS .90	HS1.05	HS1.22	HS1.21	HM1.14	HS .99	HM .89	#
24	HS .80	HS .87	HS1.04	HS1.18	HS1.31	----	----	----	----
25	----	----	----	HS1.20	HS1.12	HS1.34	HS1.28	HS1.09	#
28	----	----	----	----	HM1.12	HS1.30	HS1.12	#	HS .91
Averages	0.87	0.98	1.09	1.25	1.26	1.27	1.11	0.93	0.74

HS	Slight haze	S	Slight haze - indeterminable
HM	Moderate haze	M	Moderate haze - indeterminable
( )	Clouds present	*	Values corresponding to true solar noon
#	Windmast		

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

FEBRUARY 1966

Station	Day of month																															Avg.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
ALBUQUERQUE N.M.	259	312	389	390	383	318	100	299	324	284	393	385	249	408	376	423	421	423	427	425	440	373	438	404	232	288	369	460				357
AMES IOWA	260	300	155	317	260	283	88	55	73	127	231	318	215	---	---	365	330	242	327	322	388	374	370	383	391	364	165	245				267
ANNETTE ALASKA	81	34	40	42	93	69	20	68	118	32	173	133	61	179	27	14	188	40	27	83	20	---	11	14	126	108	164	254				82
APALACHICOLA FLORIDA	254	415	437	463	469	439	450	421	294	200	76	86	464	396	109	184	146	54	133	495	496	462	201	224	520	334	183	149				305
ARGONNE NAT. LAB.	98	273	192	305	176	253	86	71	58	29	254	295	205	184	308	258	274	188	250	365	365	145	159	210	280	283	159	24				205
ASTORIA OREGON	227	152	49	53	21	41	171	60	34	199	24	258	70	227	250	83	64	204	51	195	238	67	205	217	125	110	57	142				128
ATLANTA GEORGIA	---	129	402	407	427	420	186	357	172	130	69	40	71	368	46	67	431	96	455	461	394	406	135	72	375	422	41	91				247
BARROW ALASKA	2	7	4	16	22	---	11	---	23	28	34	---	---	17	---	---	---	---	---	---	---	---	---	---	---	---	---	---				---
BETHEL ALASKA	---	47	87	44	50	54	45	86	57	65	50	42	77	54	105	62	66	84	---	68	79	80	112	83	126	128	213	168				82
BISMARCK N.DAK.	263	166	204	214	246	257	88	164	---	---	301	274	312	311	284	345	177	292*	317	235	296	357	298*	378	271	262	---	344				266*
BLUE HILL MASS.	---	---	---	---	---	---	---	---	---	---	146	247	37	261	175	109	314	335	167	393	377	389	321	266	61	226	449	187				---
BOISE IDAHO	276	258	157	125	208	127	259	226	161	338	182	263	315	217	367	206	324	310	217	345	354	310	111	169	163	190	198	91				231
BOSTON MASSACHUSETTS	---	---	---	---	---	---	---	---	---	238	---	219	35	239	121	117	342	---	---	---	---	---	---	---	45	224	419	160				---
BROWNSVILLE TEXAS	390	299	122	479	205	482	406	117	233	260*	205	353	311	62	131	156	156	494	545	463	138	70	62	256	188	262	162	562				270*
CANTON ISLAND P.I.	458	573	596	379	260	661	638	626	613	692	617	568	605	620	493	679	651	388	206	682	673	686	677	701	659	579	464	709				577
CAPE HATTERAS N.C.	324	232	384	370	390	408	414	209	419	303	222	82	176	401	191	319	296	86	265	219	448	427	258	107	372	399	327	54				289
CARIBOU MAINE	168	182	129	121	177	231	209	283	279	194	104	156	144	191	291	292	309	298	365	303	311	345	185	270	153	279	377	336				239
CHARLESTON S.C.	394	386	386	384	425	425	411	374	239	142	217	90	397	310	177	314	293	37	289	365	338	374	46	88	344	399	52	30				276
CLEVELAND OHIO	108	188	195	167	207	95	208	180	211	29	42	277	32	156	289	68	291	272	240	354	328	239	160	146	141	249	211	59				184
COLUMBIA MISSOURI	230	327	254	366	319	119	182	101	35	83	316	337	120	315	351	361	369	363	324	171	294	402	340	379	398	388	87	79				265
DAVIS CALIFORNIA	210	229	44	110	126	339	364	371	307	384	354	329	401	369	405	405	386	253	201	365	319	157	392	318	171	446	440	198				300
DODGE CITY KANSAS	312	336	313	353	334	316	243	101	291	282	348	357	226	402	367	386	377	366	308	93	356	384	402	418	310	252	56	437				312
E. LANSING MICHIGAN	86	148	154	243	208	107	260	43	129	17	190	312	248	300	315	107	192	131	367	375	316	175	197	159	99	298	233	139				198
EL CENTRO CALIF. NPF	293	---	---	---	---	---	---	---	---	---	---	360	382	376	366	376	375	376	373	384	390	321	309*	309*	366	404	410	411				---
EL PASO TEXAS	283	441	456	454	415	385	196	445	401	383	368	491	502	514	506	529	513	522	523	525	518	494	534	426	377	409	563	567				455
ELY NEVADA	283	355	250	306	244	87	306	401	286	349	423	202	432	282	416	372	424	335	428	437	442	399	298	197	277	340	469	330				336
EPPLEY NEWPORT R.I.	254	212	169	196	302	311	310	317	124	254	78	279	36	335	---	76	340	318	---	385	373	377	371	229	93	265	402	175				253
FAIRBANKS ALASKA	57	58	52	32	52	34	50	56	41	42	15	32	34	67	38	120	112	144	159	---	152	139	154	---	135	193	153	138				87
FORT WORTH TEXAS	271	431	431	446	435	361	135	43	78	461	277	348	385	325	74	251	512	492	466	488	210	142	464	521	419	58	142	536				329
FRESNO CALIFORNIA	173	319	229	67	129	145	318	331	265	330	387	358	356	381	368	376	384	350	406	405	371	322	311	183	324	282	405	358				308
GLASGOW MONTANA	226	252	224	194	213	249	102	283	257	292	240	288	214	321	259	249	195	288	293	317	359	350	357	378	372	370	378	342				281
GRAND JUNCTION COLO.	314	382	348	330	233	128	213	157	356	272	388	123	422	263	360	361	380	422	432	412	434	439	449	421	292	308	---	---				332
GREAT FALLS MONTANA	142	218	195	147	213	126	122	233	140	230	84	229	222	---	270*	244	62	230	278	216	273	303	295	251	185	276	277	243				211*
GREENSBORO N.C.	217	193	381	348	397	372	305	247	223	108	121	49	121	338	50	38	435	143	420	422	414	416	181	67	342	449	135	27				249
GRIFFIN EXP.STA.GA.	100	163	400	414	416	409	312	353	175	164	50	36	64	341	54	93	400	69	444	444	340	394	75	69	392	371	37	107				239
INDIANAPOLIS INDIANA	90	197	329	275	297	264	113	128	161	44	137	189	326	89	253	240	408	401	301	414	397	231	267	178	221	400	96	42				232
ITHACA NEW YORK	130	158	142	218	276	279	241	261	199	169	90	211	7	46	246	57	232	191	193	249	196	149	361	231	46	327	366	48				190
LAKE CHARLES LA.	417	414	425	439	436	88	388	146	65	203	387	44	453	100	30	67	304	389	498	488	477	375	142	371	462	64	98	467				294
LAKELAND FLORIDA	250	404	202	488	494	419	355	348*	411	359	327	268	312	339	446	405	328	218	420	540	480	327	221	211	419	530	219	276				358*
LANDER WYOMING	239	350	330	335	310	242	353	107	337	262	339	175	345	350	407	368	407	415	317	363	336	436	452	439	420	416	450	444				348
LARAMIE WYOMING	345	306	396	221	307	210	195	201	379	262	455	210	395	388	440	387	459	231	358	375	389	348	520	510	343	377	507	375				353
LAS VEGAS NEVADA	329	377	340	345	326	66	295	355	399	135	433	417	446	437	442	439	445	425	459	449	463	418	283	284	452	396	497	515				381
LITTLE ROCK ARKANSAS	88	335	344	372	371	84	122	191	18	283	372	55	379	248	54	94	447	409	412	391	395	139	158	365	431	677	78	113				265
LOS ANGELES CALIF.	244*	375*	---	---	212*	70*	280*	395	374	305*	424	381	435	398	396	438	417	408	411	420	407	438	321	435	---	474	463	413				373*
MADISON WISCONSIN	237	304	216	332	200	274	259	34	64	160	230	327	119	284	259	312	377	231	384	410	406	250	196	301	401	422	228	98				261
MATANUSKA ALASKA	32	78	101	110	13	29	53	84	38	37	18	96	106	68	48	71	84	141	166	144	153	118	144	104	139	77	167	224				94
MAUNA LOA OB.HAWAII	629	646	637	631	522	369	---	---	666	659	668	594	480	522	358	164	431	448	570	258	690	674	487	460	158	188	713	687				512
MEDFORD OREGON	259	171	137	220	217	231	282	174	106	324	219	300	301	195	264	332	305	233	210	332	261	88	311	316	128	220	299	138				235
MIAMI FLORIDA	328	363	458	484	502	440	485	485	449	435	461	396	393	409	455	492	438	449	243	497	397	118	288	488	440	542	440	465				423
MIDLAND TEXAS	386	409	431	426	---	---	---	---	395	400	183	449	382	350	473	495	479	492	489	487	48	279	520	509	364	432	198	---				395
NASHVILLE TENNESSEE	200	147	135	278	352	348	33	307	217	36	338	46	216	225	75	86	448	242	400	412	382	360	121	77	432	404	57	75				230
NEW YORK N.Y.U	275	91	152	219	282	316	218	298	209	93	80	311	8	298	214	12	389	289	280	315	390	388	378	55	125	292	366	54				229
NORTH OMAHA NEBRASKA	309	332	369	347	316	331	128	---	129	339	376	378	283	363	192	399	386	355	335	238	442	437	423	417	450	407	75	403				332
OKLAHOMA CITY OKLA.	141	278	327	341	330	136	131	21	148	347	205	352	178	375	333	362	404	385	381	258	162	277	429	414	315	65	40	430				270
PAGE ARIZONA	245	328	323	246	291	115	73	113	375	216	418	255	377	295	387	384	382	352	395	386	392	383	344	214	292	277	410	422				310

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

FEBRUARY 1966

Station	Day of month																															Avg.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
PHOENIX ARIZONA	297	337	359	312	314	167	72	217	278	70	384	395	401	405	396	417	399	399	410	417	428	349	387	319	412	212	440	445				337
PORTLAND MAINE	249	154	172	211	290	258	314	245	291	233	170	160	69	312	224	174	450	411	262	378	359	348	385	309	69	292	409	281				267
PROSSER WASHINGTON	195	137	109	184	168	221	255	247	145	298	129	308	170	171	270	240	160	286	185	301	309	171	183	214	131	349	249	207				214
RAPID CITY S.DAK.	236	162	186	206	191	191	130	48	216	228	297	145	269	287	294	268	262	296	227	213	266	222	354	358	349	275	340	270				242
RENO NEVADA	106	209	171	209	132	150	253	316	208	301	329	267	342	310	345	361	362	319	325	356	336	338	85	196	234	352	400	181				268
RICHLAND 25 NW WASH.	148	76	91	173	146	64	223	226	130	273	143	293	147	224	260	219	166	293	158	260	286	197	157	236	166	334	320	270				203
RUSTON LOUISIANA	234	321	367	374	370	119	311	128	12	312	385	52	374	127	34	60	434	358	417	393	410	316	47	408	402	142	84	190				257
SAINT CLOUD MINN.	284	235	254	298	236	182	99	70	73	285	93	82	354*	240	172	341	357	383	388	390	400	397	411	327	398	410	147	341				273*
SALT LAKE CITY UTAH	248	312	247	236	251	102	180	274	176	309	353	120	328	126	319	199	183	388	403	315	412	410	405	349	357	363	361	372				289
SAN ANTONIO TEXAS	432	430	439	436	194	254	158	71	263	456	361	394	468	150	130	453	494	488	494	465	208	78	209	491	327	56	395	537				333
SANTA MARIA CALIF.	173	318	---	62	88	189	345	359	337	224	379	373	382	393	383	394	398*	346	271	408	358	407	223	363	417	448	446	375				328*
SAULT STE MARIE MICH	107	176	200	280	286	280	93	58	98	66	123	206	86	306	322	120	---	377	374	---	256	178	181	142	258	387	246	---				208
SEATTLE TACOMA WASH.	205	173	84	41	63	72	117	163	139	172*	33	245	205	188	248	84	55	280	125	214	268	127	156	317	127	137	45	---				151*
SPOKANE WASHINGTON	115	103	142	106	120	55	29	119	217	277	58	279	255	273	265	166	109	256	196	87	163	243	89	195	207	182	170	277				170
STATE COLLEGE PENN.	274	133	215	184	270	265	113	248	279	123	131	233	8	227	322	42	387	312	258	423	404	211	346	244	213	251	30	---				228
STERLING VIRGINA	233	147	365	311	361	271	132	180	145	191	94	185	82	351	131	30	415	271	392	438	430	434	402	104	361	428	387	25				261
STILLWATER OKLAHOMA	146	314	308	326	296	73	94	5	94	106	230	363	150	389	350	353	385	377	362	159	118	299	414	411	361	79	24	416				250
SWAN ISLAND W.I.	441	476	50	140	333	487	412	338	468	554	531	547	574	417	---	466	517	580	586	571	525	552	559	541	492	334	579	576				468
TAMPA FLORIDA	204	410	226	494	507	457	452	453	360	349	370	295	367	325	442	412	274	149	428	536	479	386	334	222	447	518	141	350				371
TUCSON ARIZONA	143	378	405	404	385	232	35	81	186	161	301	436	444	454	455	460	462	458	459	---	467	375	439	239	239	212	493	500				344*
WAKE ISLAND,PACIFIC	426	437	406	338	441	412	404	242	416	373	375	323	432	449	325	385	392	459	483	470	374	468	397	372	464	420	462	---				405

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

FEBRUARY 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	55	17	7	17	22	17	23	-10	-2	-30	5	1	21	18	-57	-15	-4	54	71	55	35	57	87	105	125	119	144	65				36

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. **The value represents the total incoming minus the total outgoing radiation of all wave lengths.**

These data are of an experimental nature and are published as received from the Huntley Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

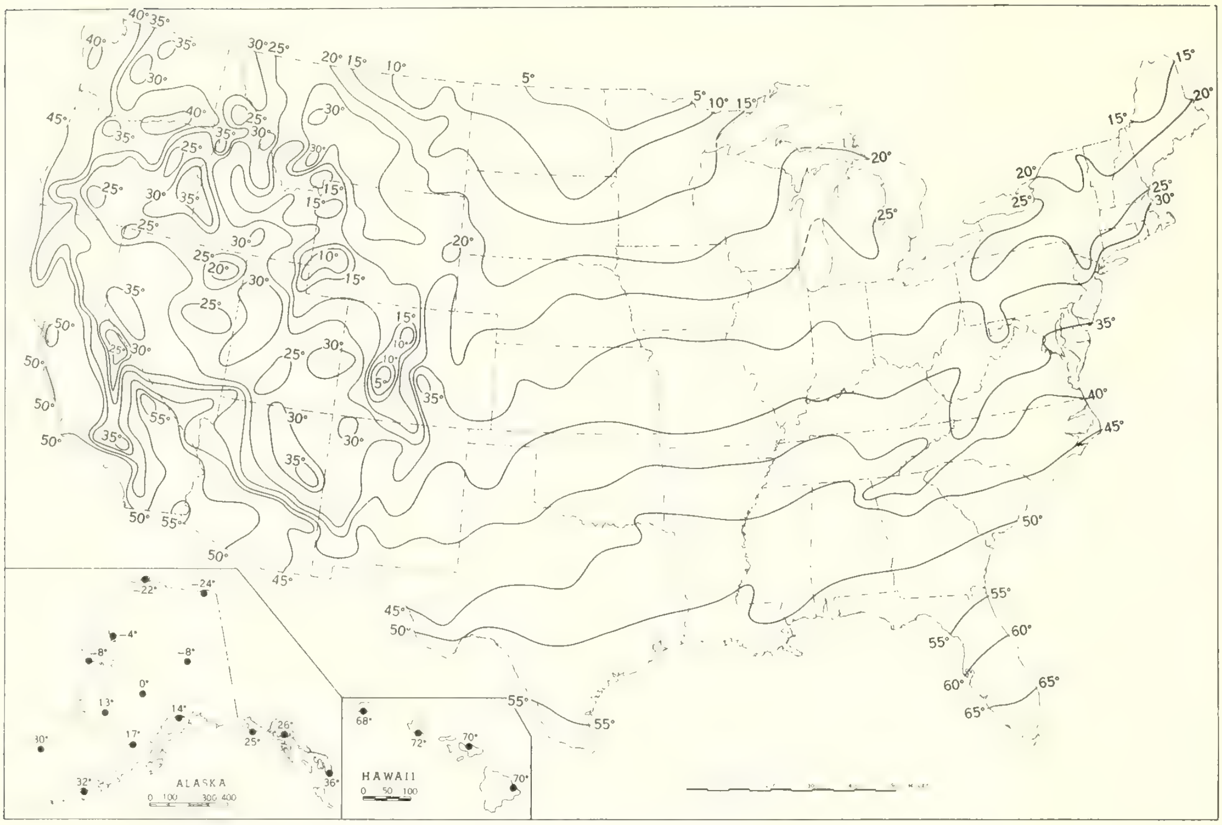
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λsΩΩΩ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

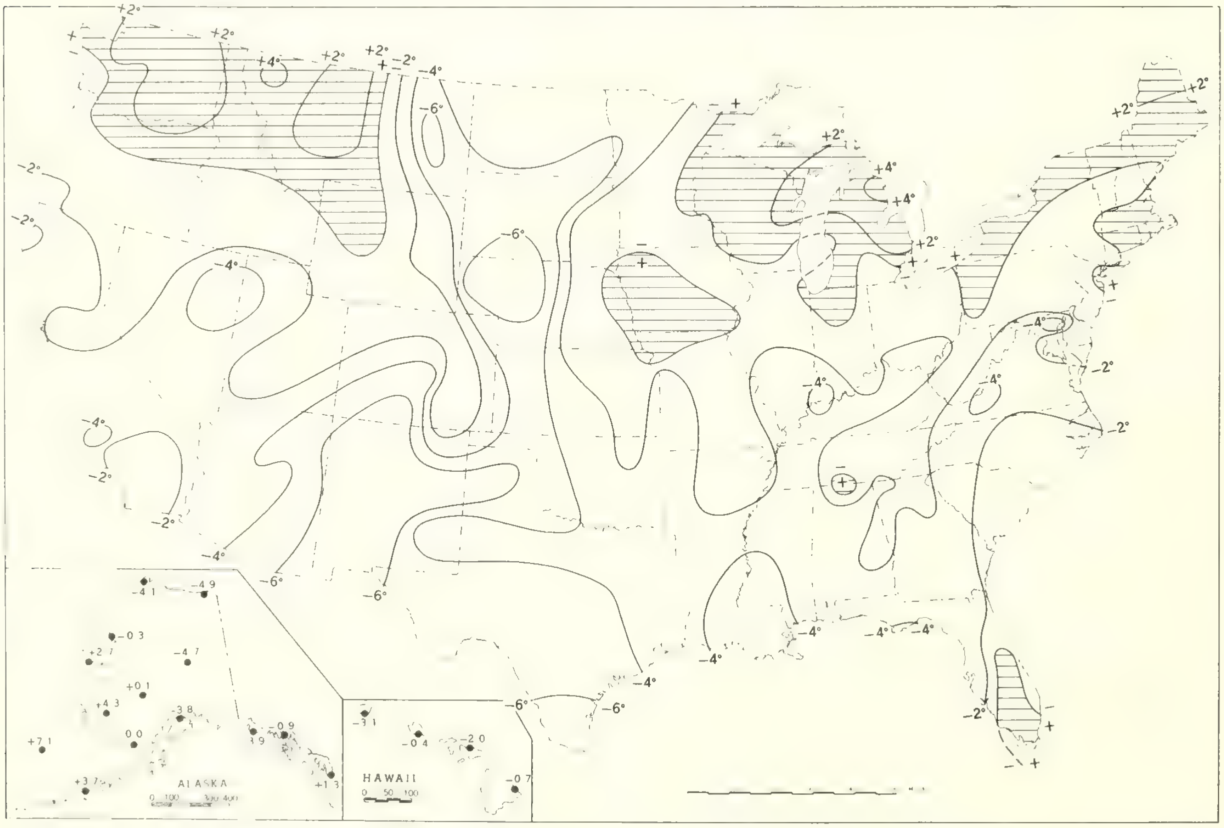
Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded ΩΩΩ) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

Chart I. A. Average Temperature (°F.) at Surface, February 1966.



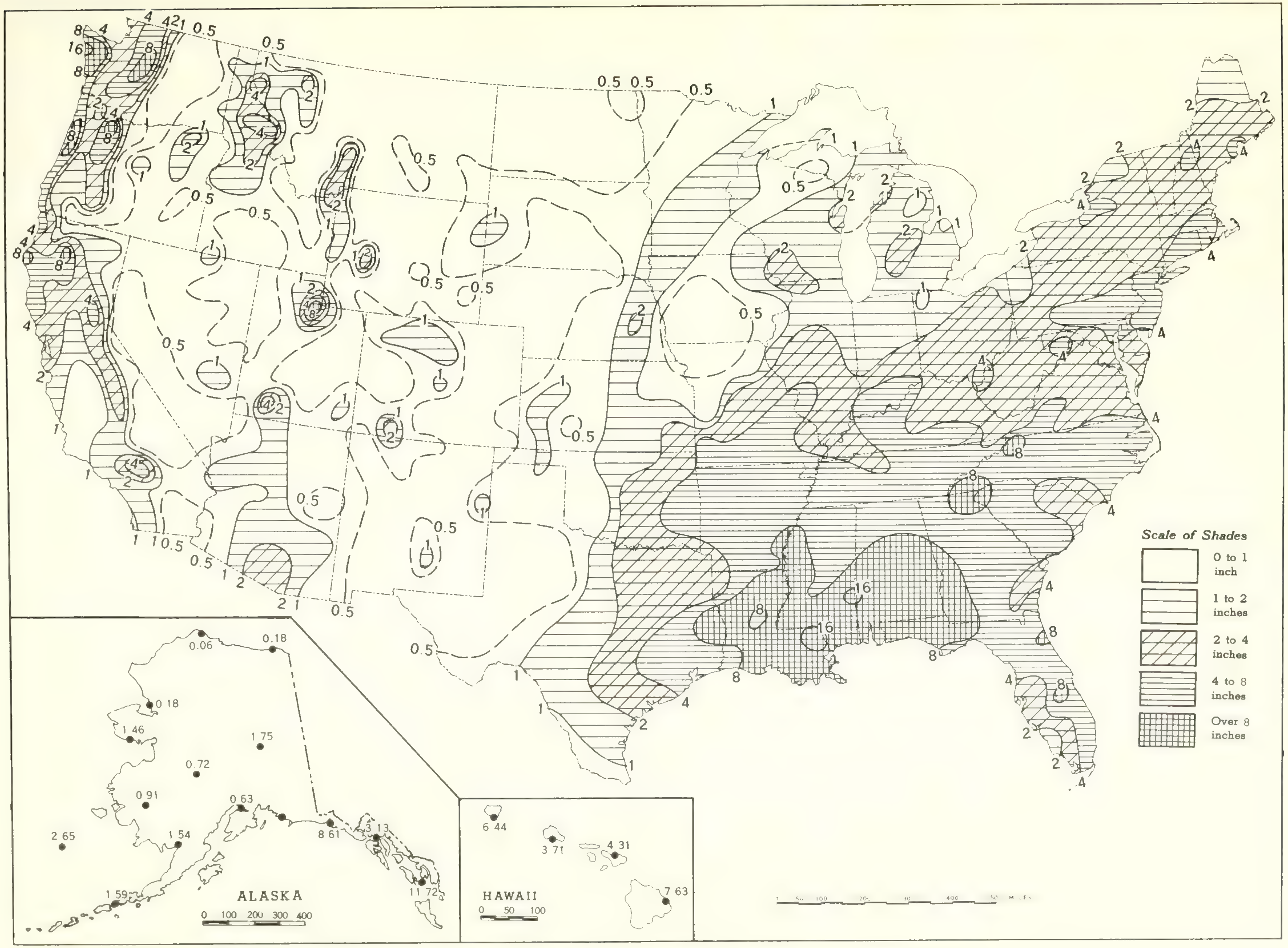
B. Departure of Average Temperature from Normal (°F.), February 1966.



A. Based on reports from over 870 Weather Bureau and cooperative stations. The monthly average is half the sum of the monthly average maximum and monthly average minimum, which are the average of the daily maxima and daily minima, respectively.

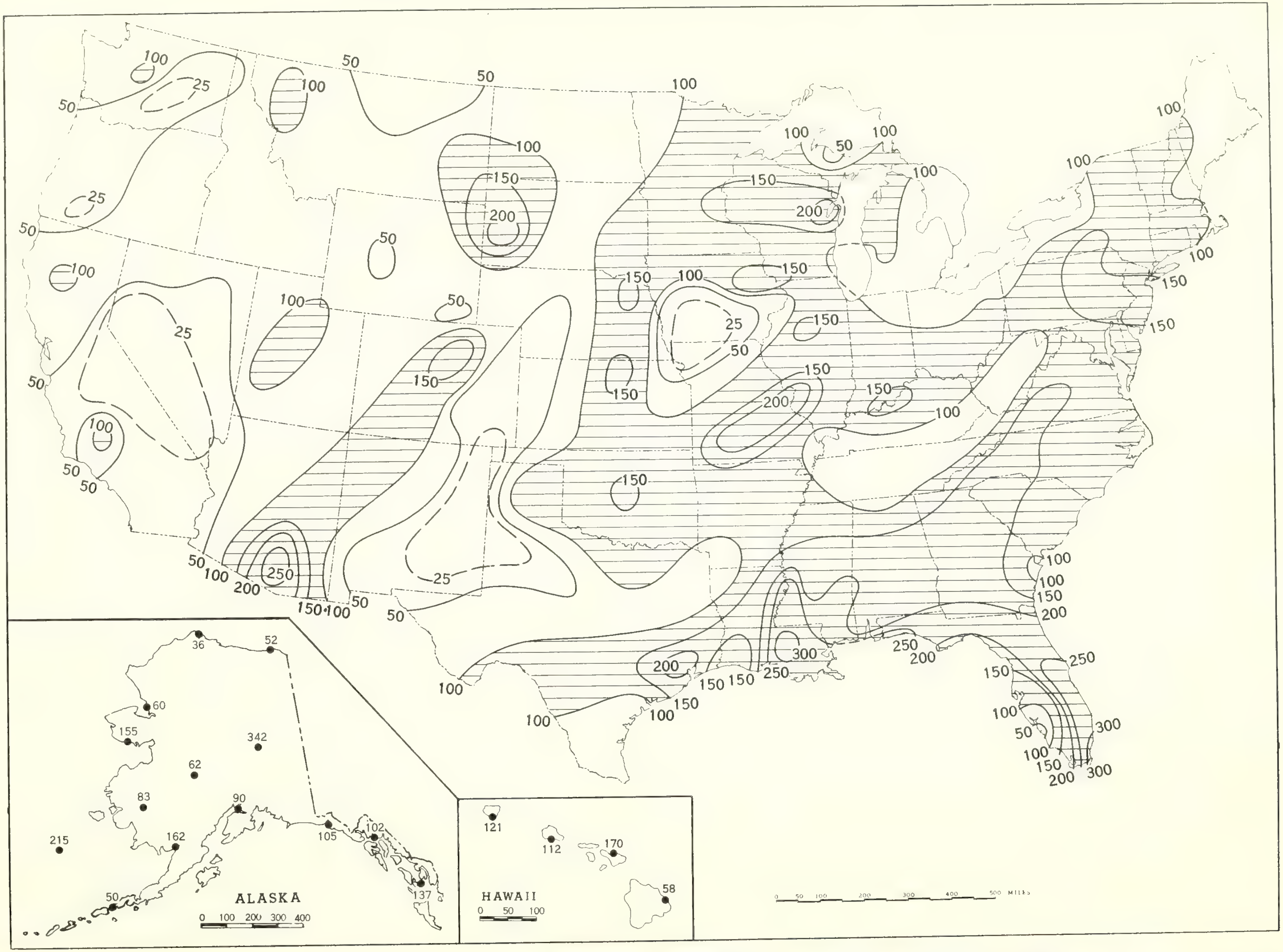
B. Departures from normal are based on the 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart II. Total Precipitation (Inches), February 1966.



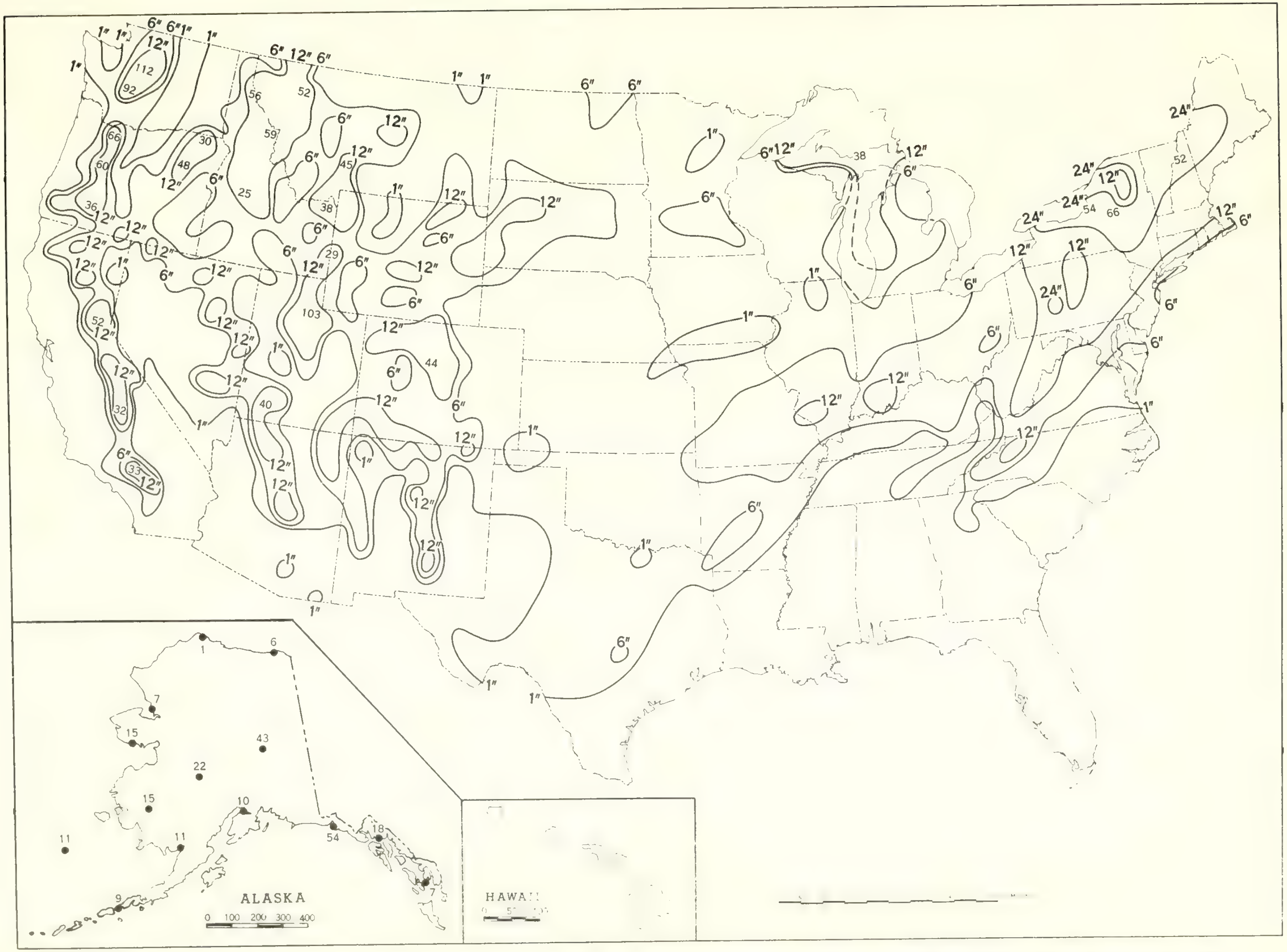
Based on daily precipitation records at about 870 Weather Bureau and cooperative stations.

Chart III. Percentage of Normal Precipitation, February 1966.



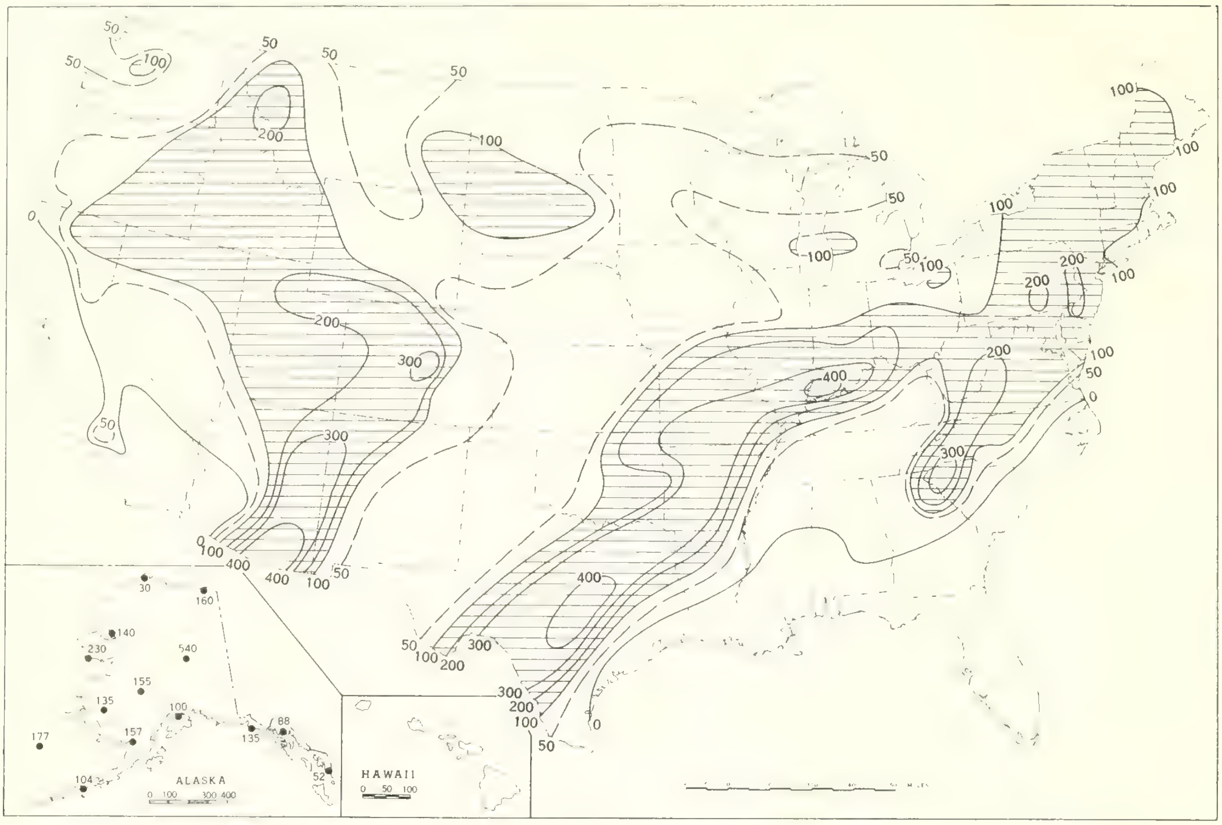
Normal monthly precipitation amounts are computed from 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart IV. Total Snowfall (Inches), February 1966.

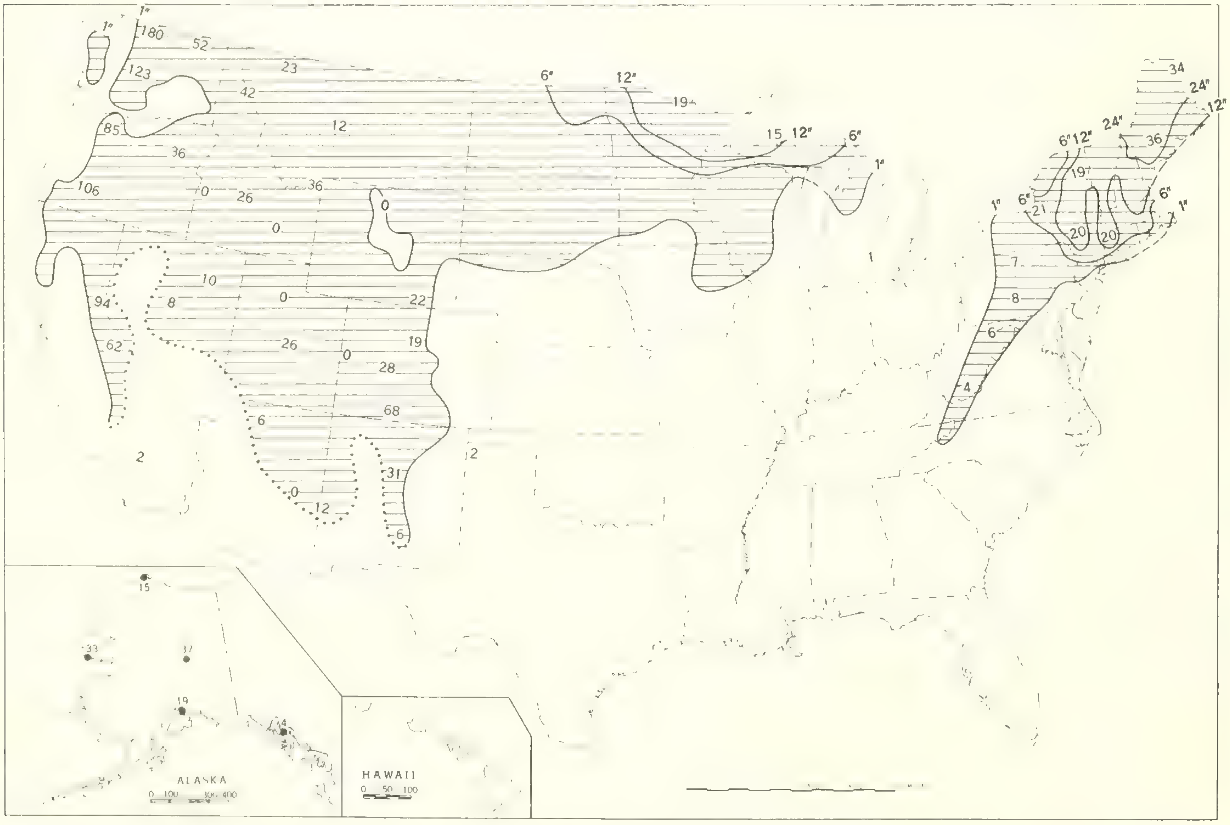


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, February 1966.

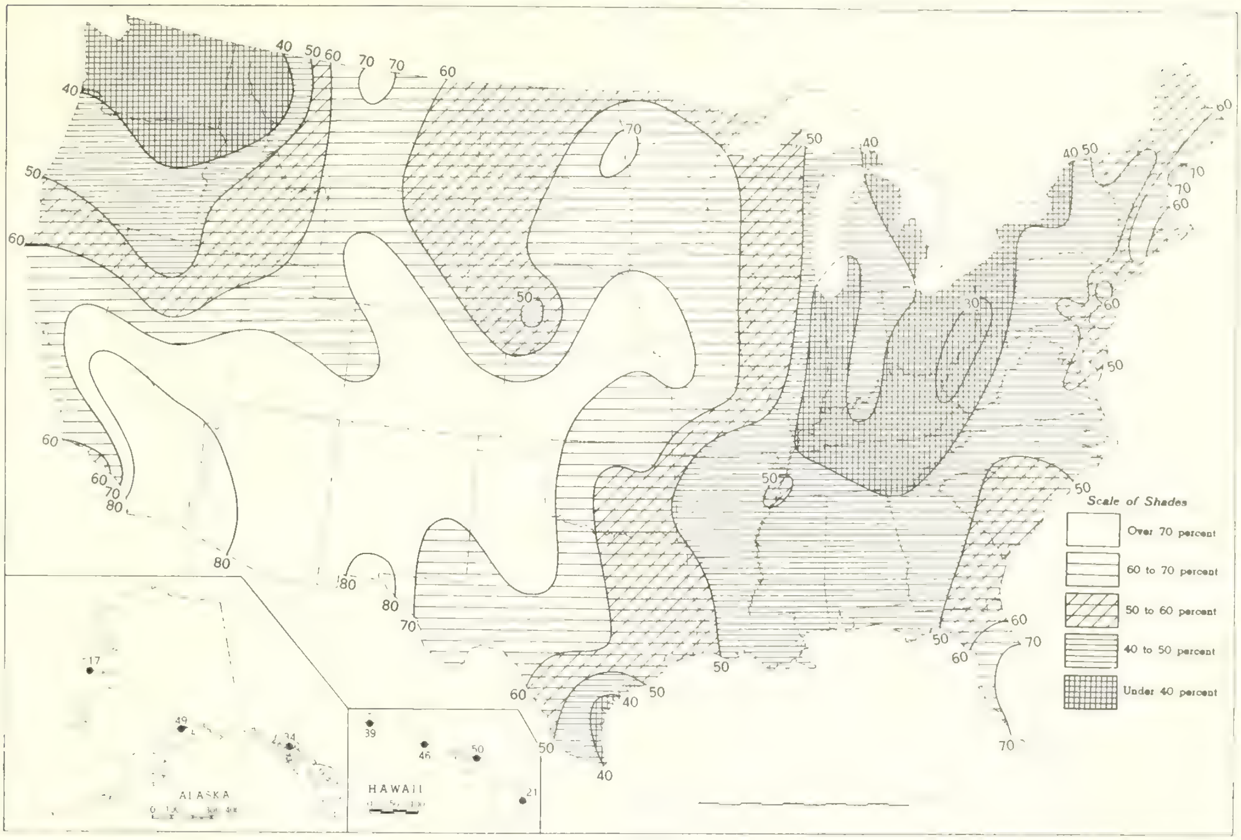


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., February 28, 1966.

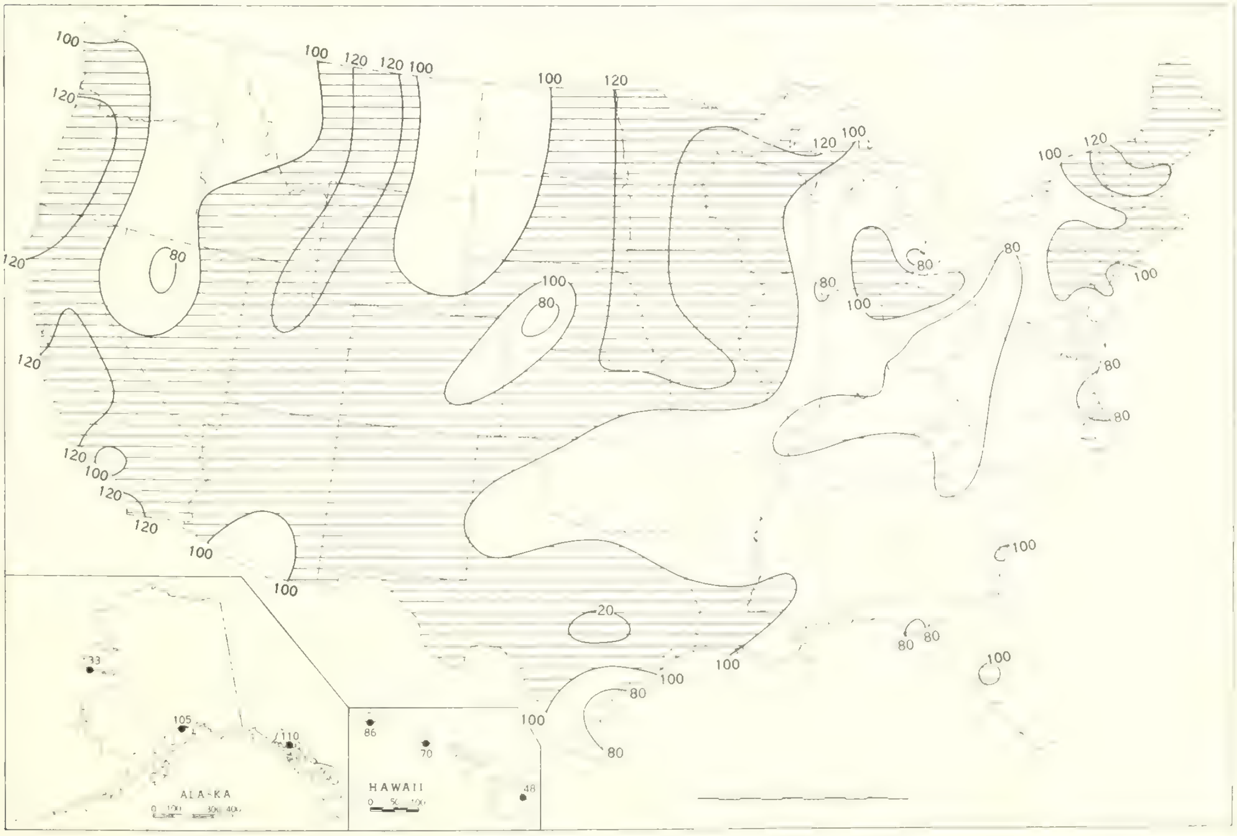


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a. m. E. S. T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, February 1966.

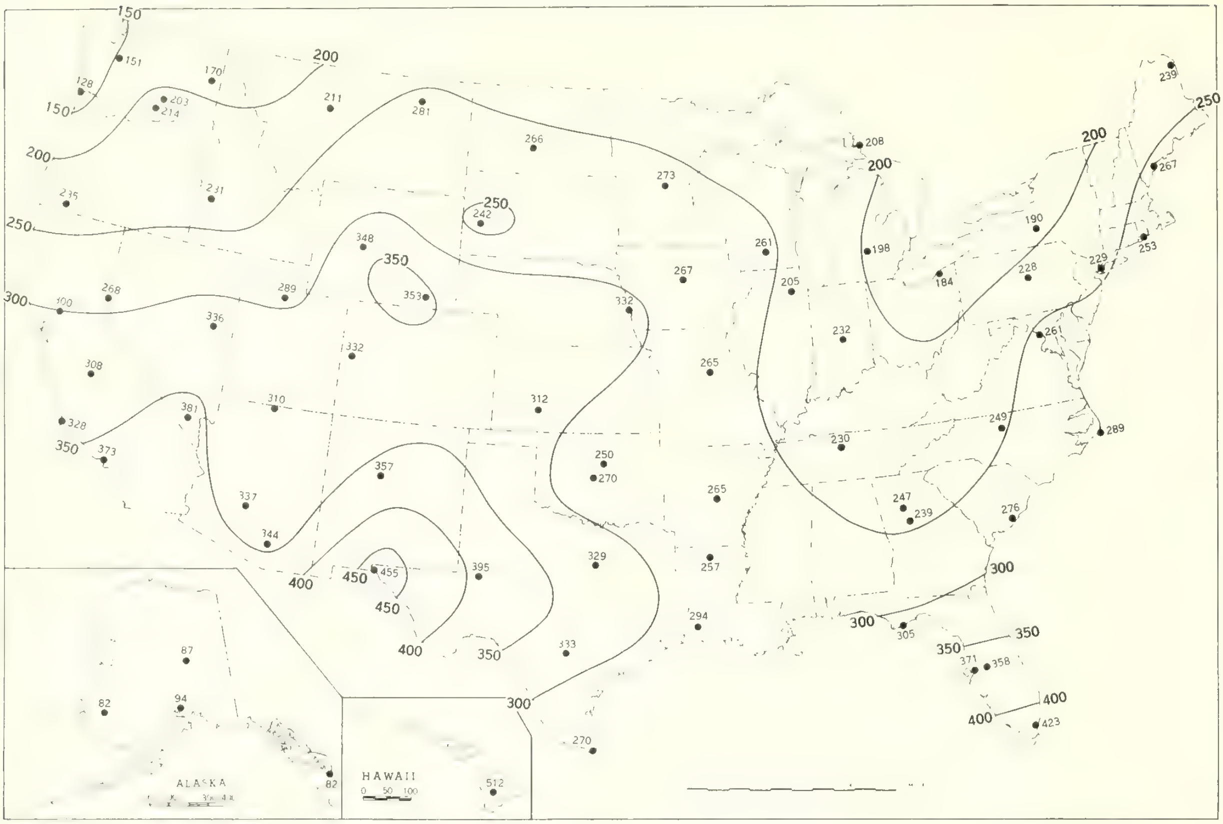


B. Percentage of Mean Monthly Sunshine, February 1966.

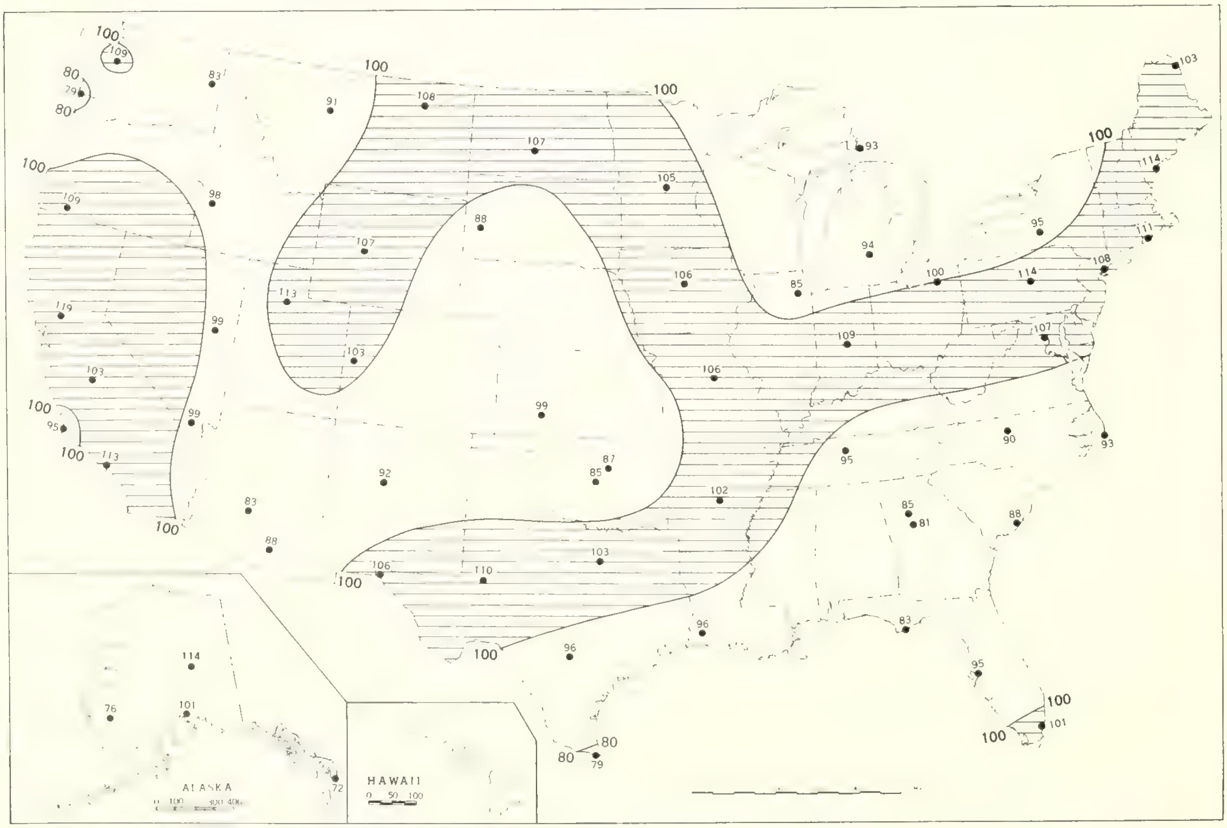


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, February 1966.

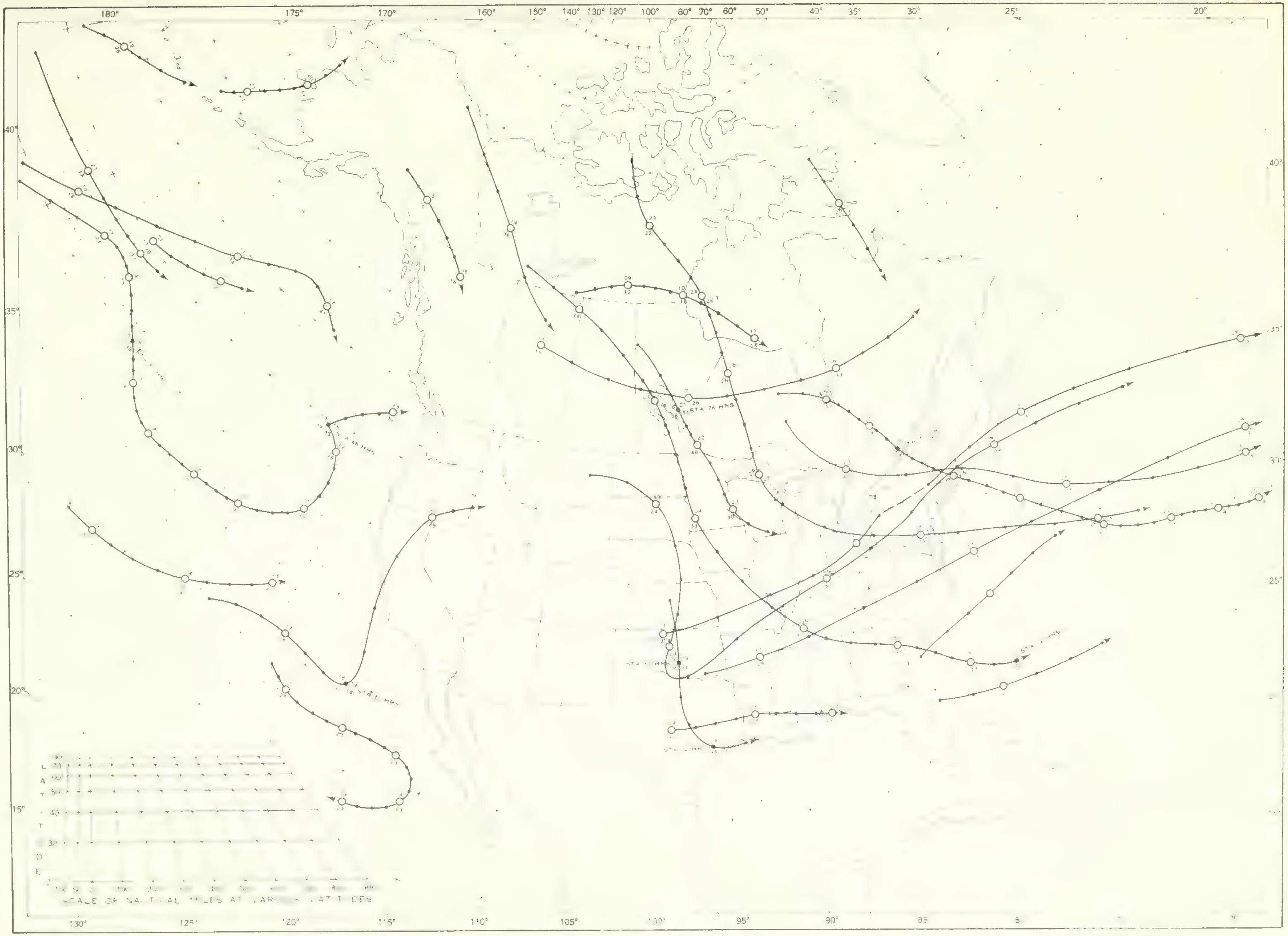


B. Percentage of Mean Daily Solar Radiation, February 1966.



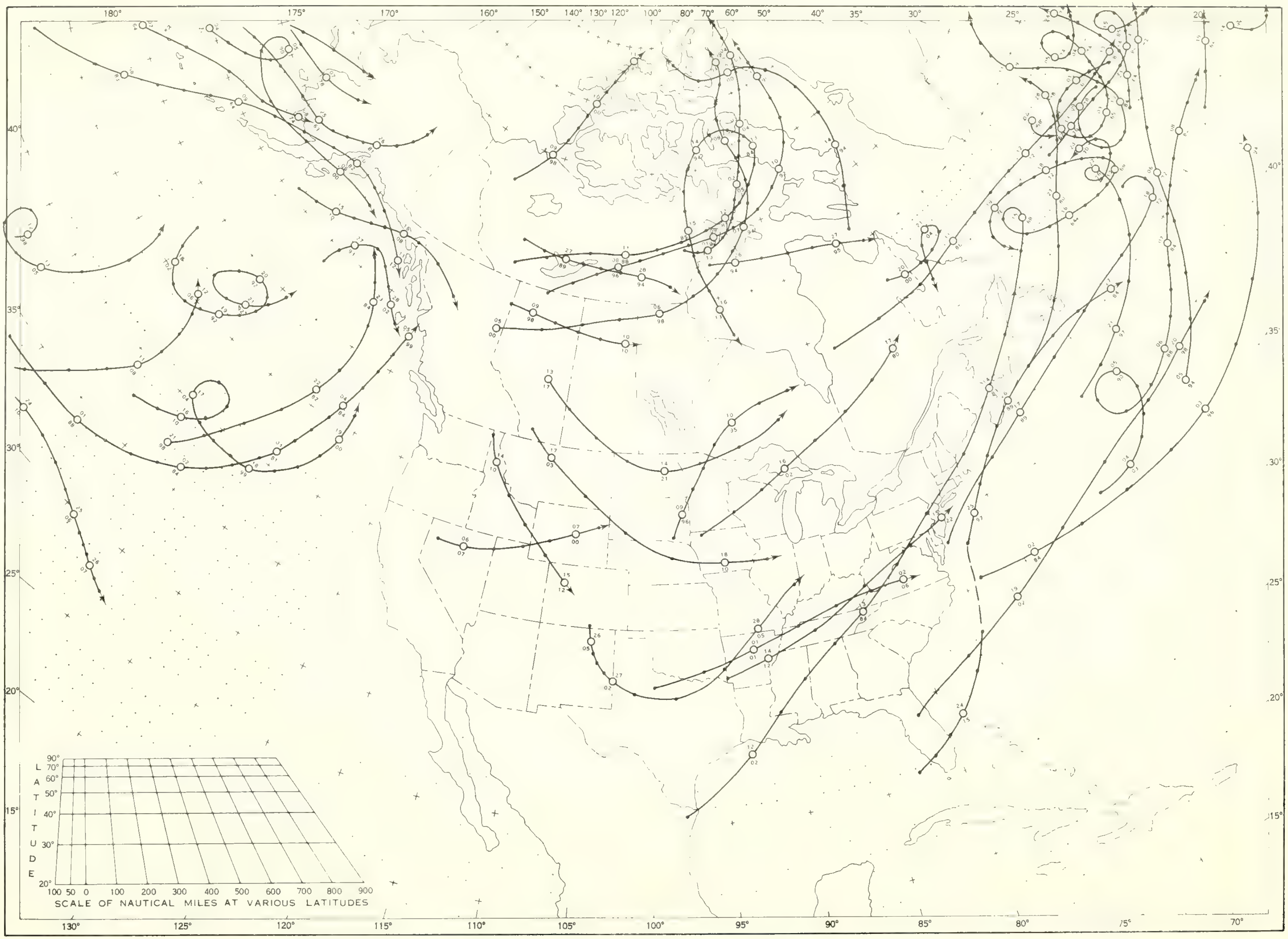
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, February 1966.



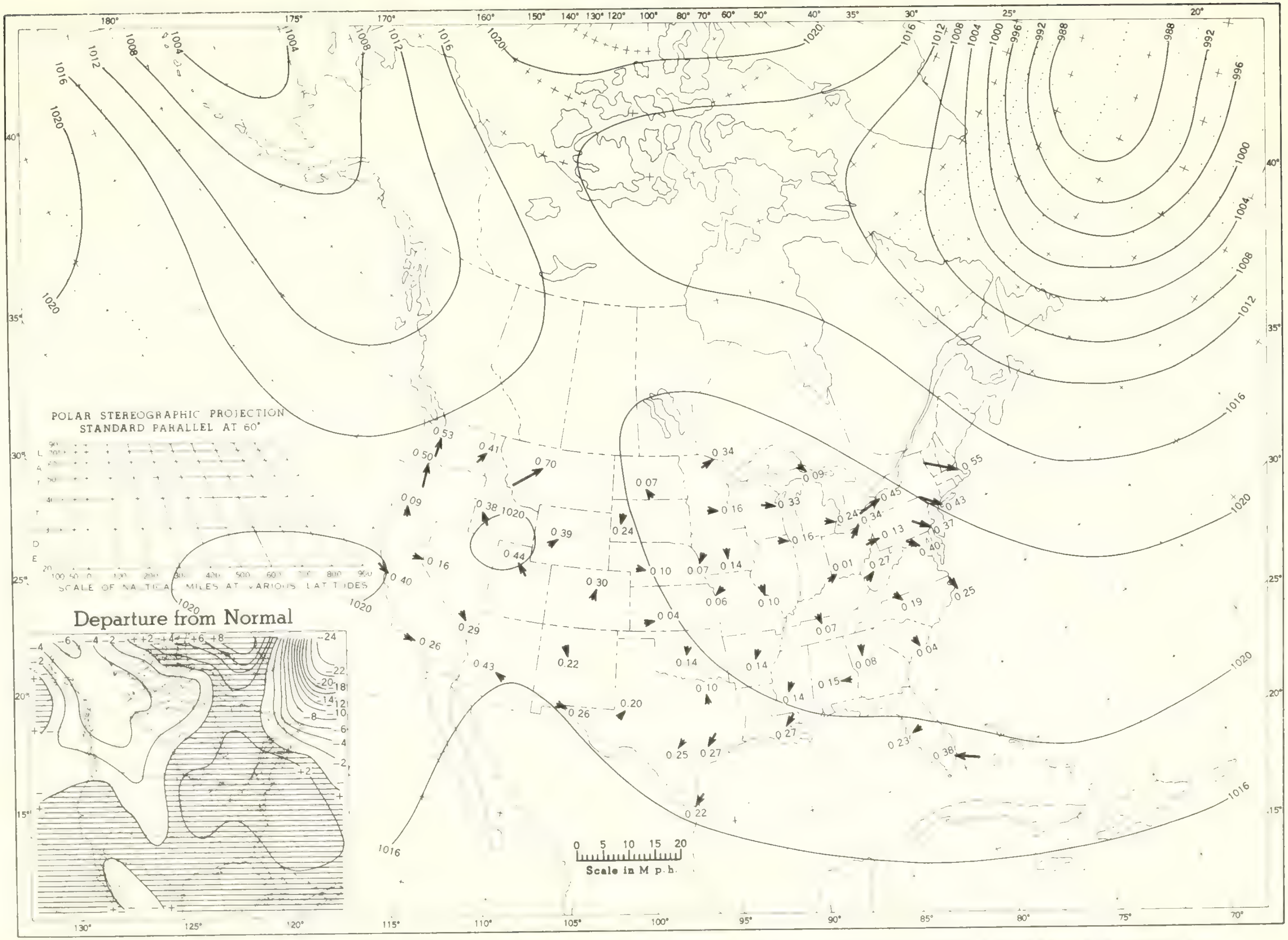
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, February 1966.



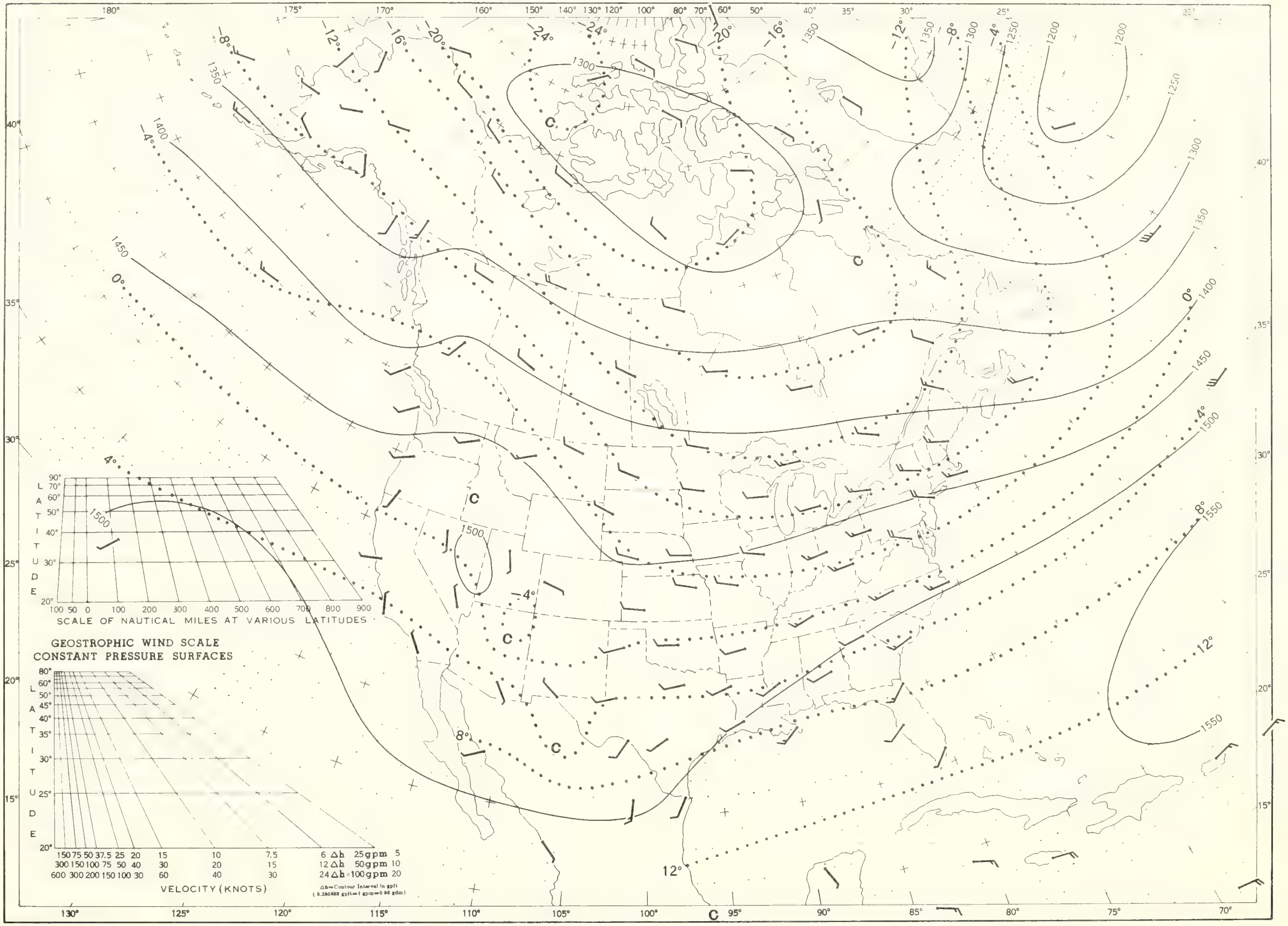
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, February 1966. Inset: Departure of Average Pressure (mb) from Normal, February 1966.



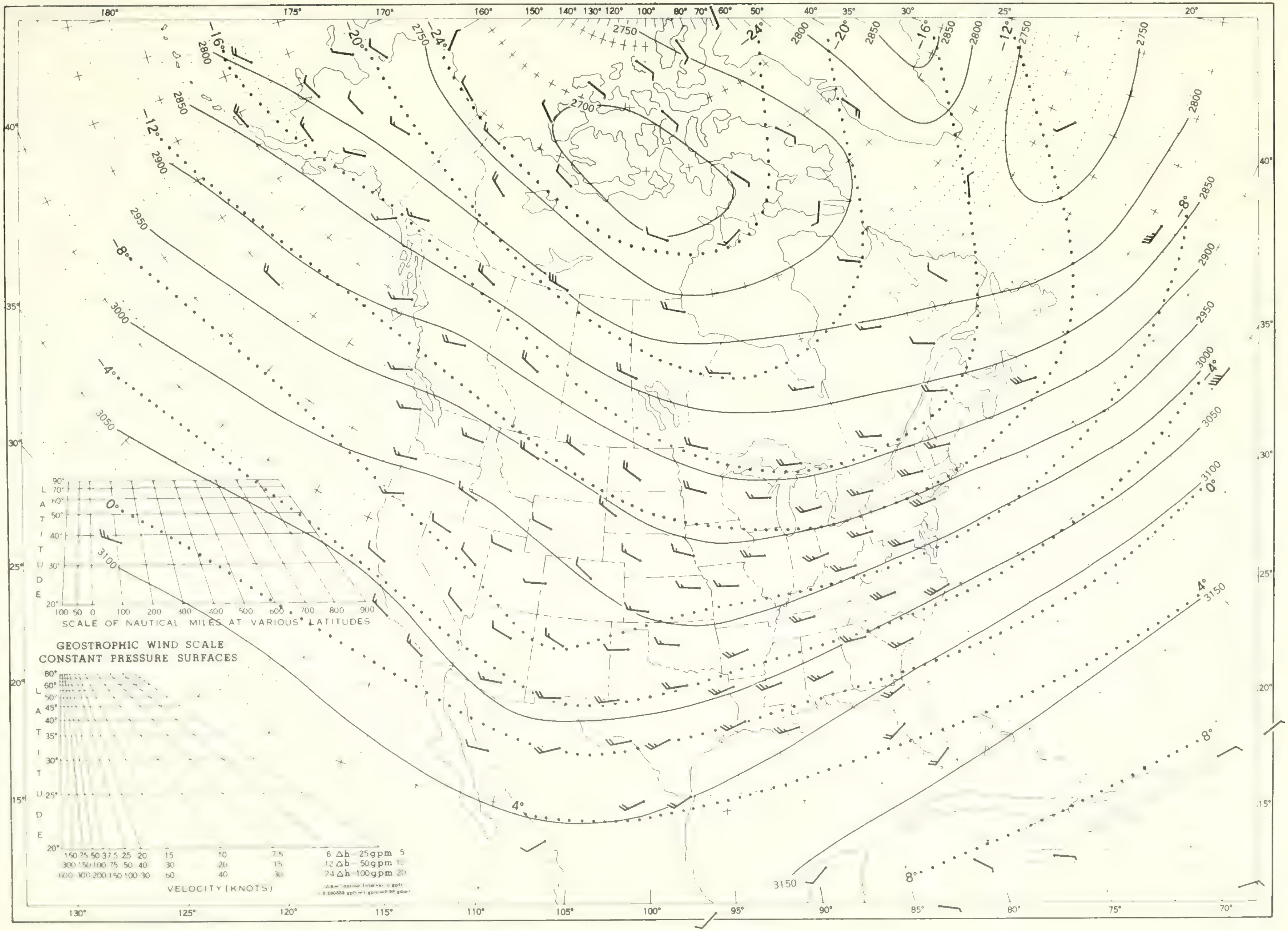
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed—average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, February 1966. Average Height and Temperature, and Resultant Winds.



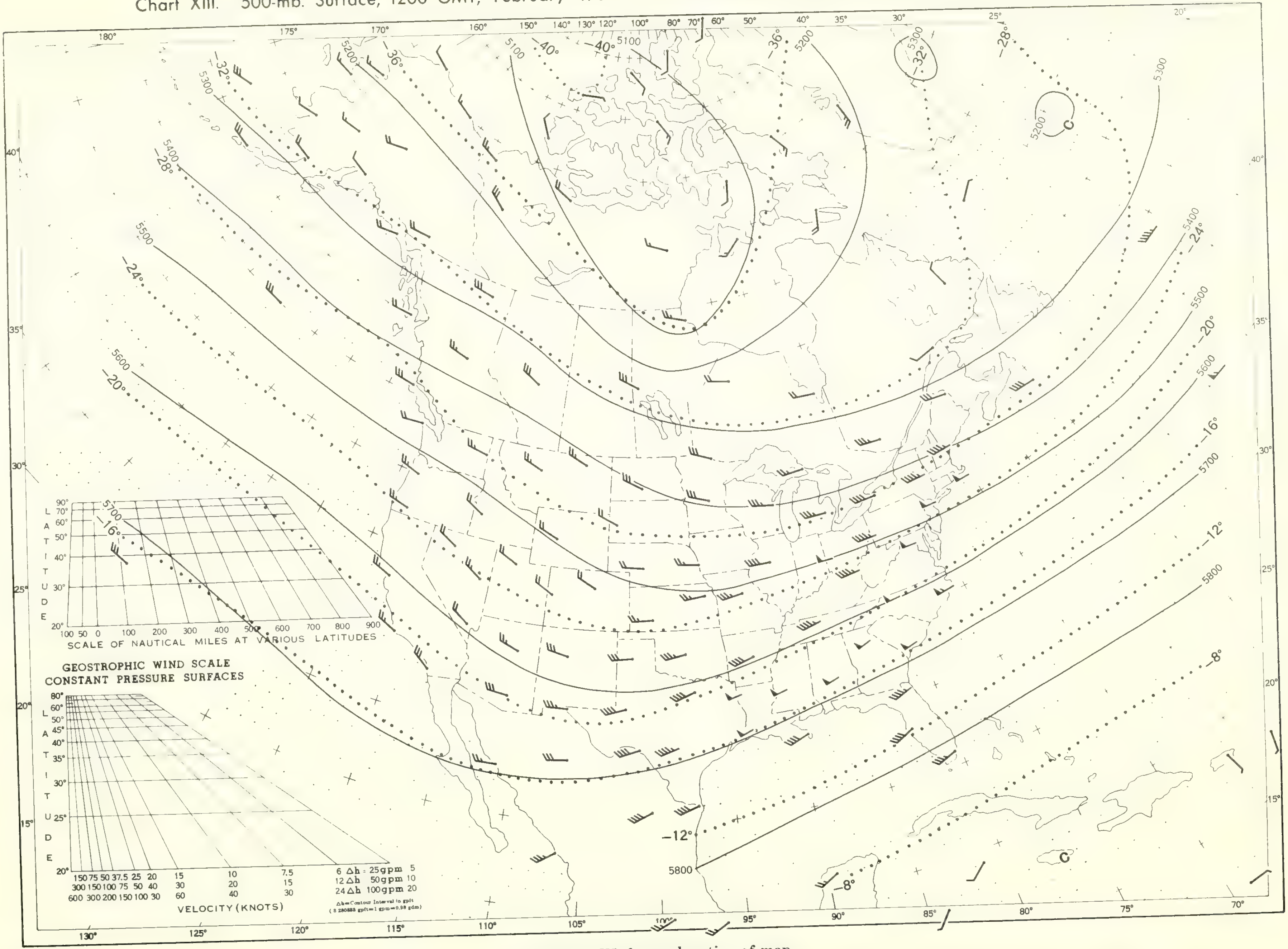
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, February 1966. Average Height and Temperature, and Resultant Winds.



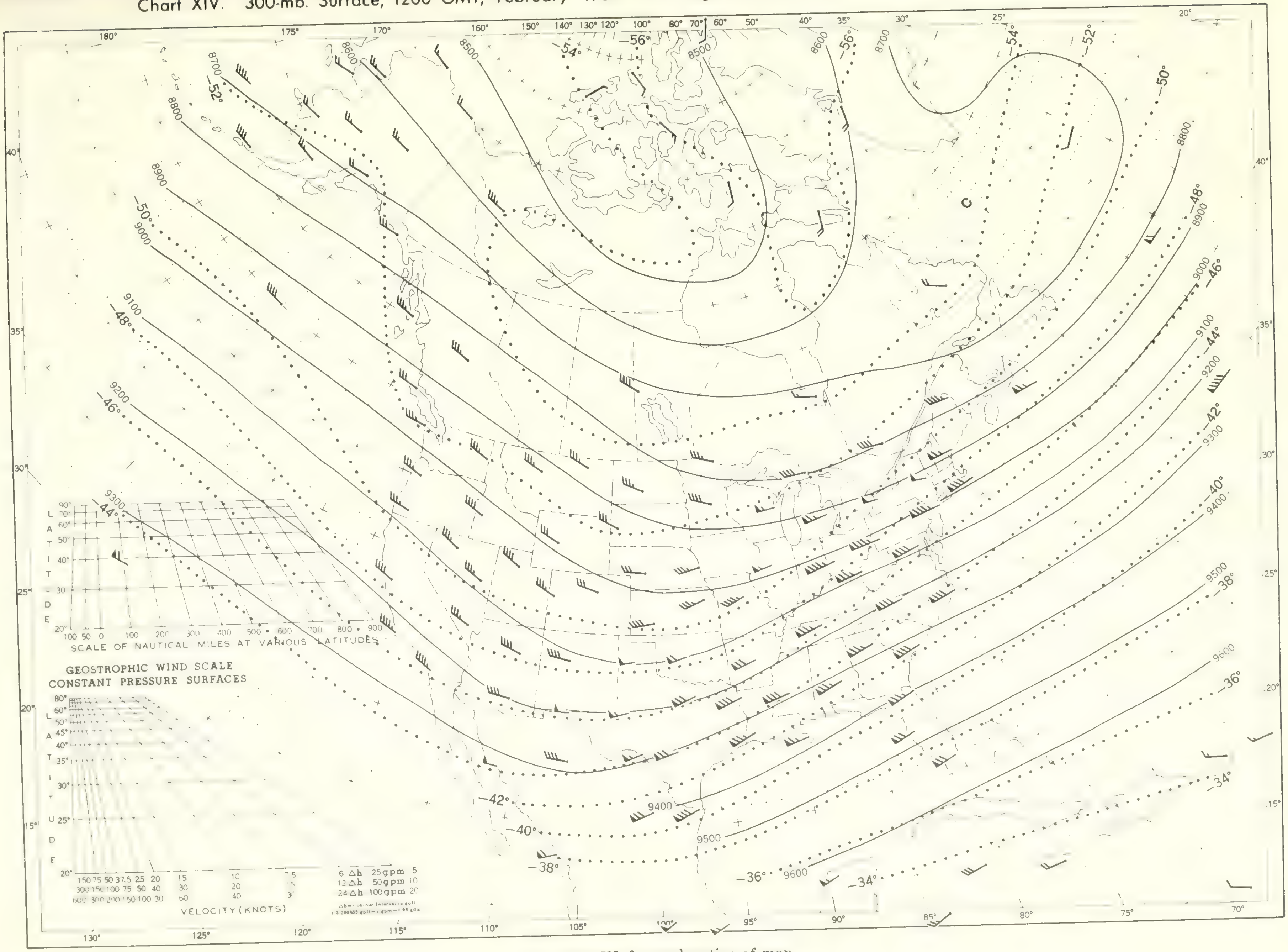
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, February 1966. Average Height and Temperature, and Resultant Winds.



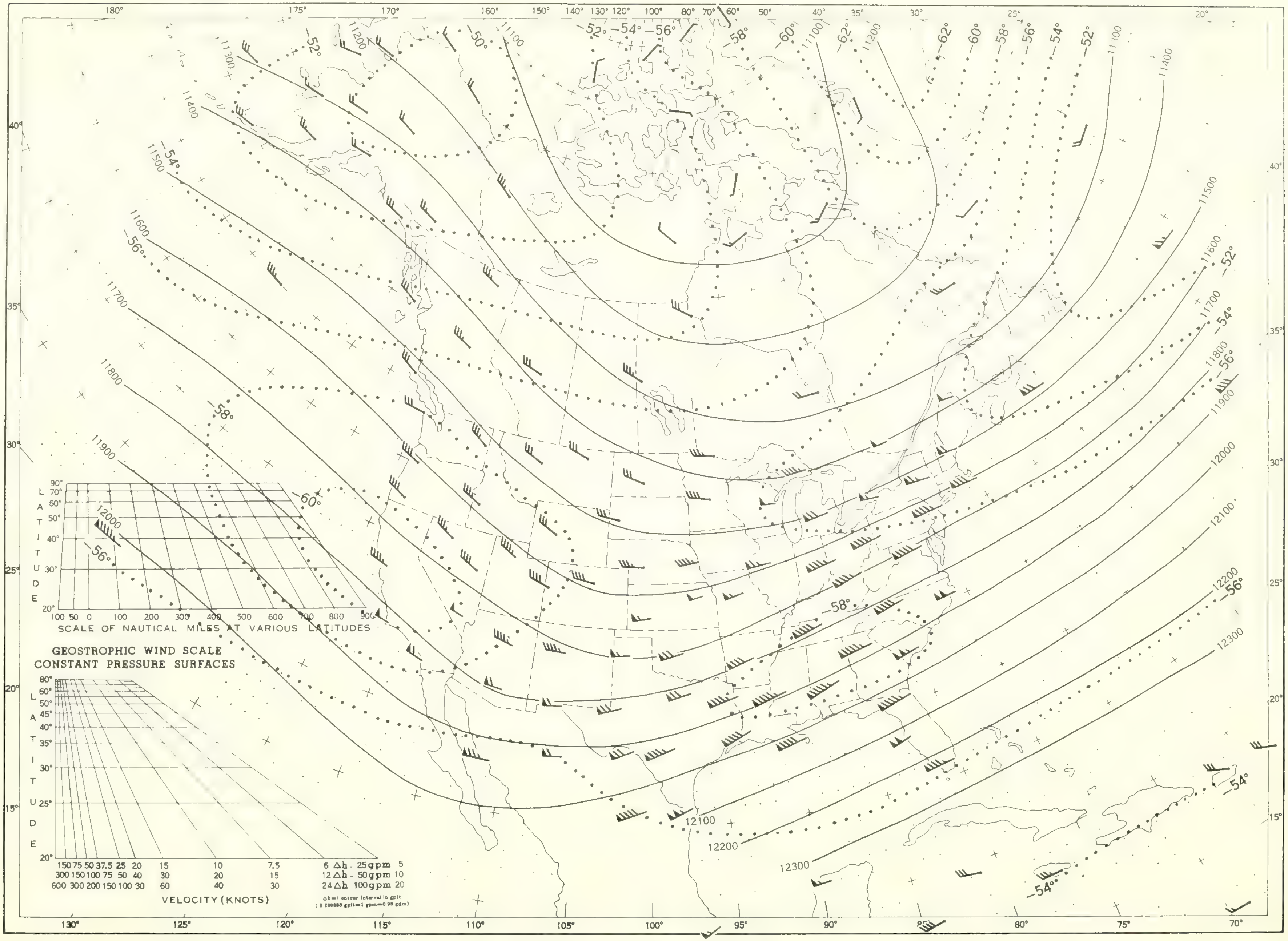
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, February 1966. Average Height and Temperature, and Resultant Winds.



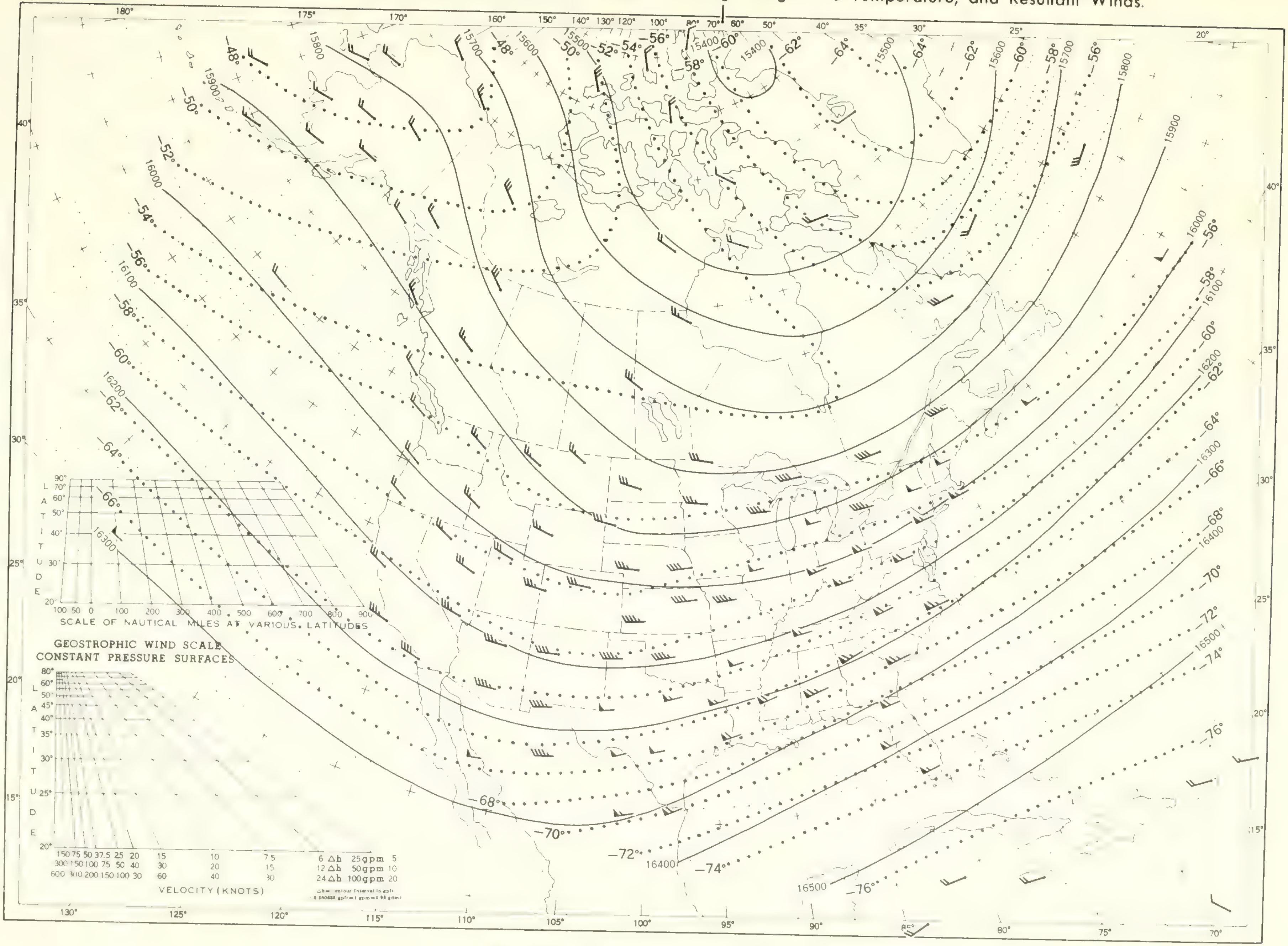
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, February 1966. Average Height and Temperature, and Resultant Winds.



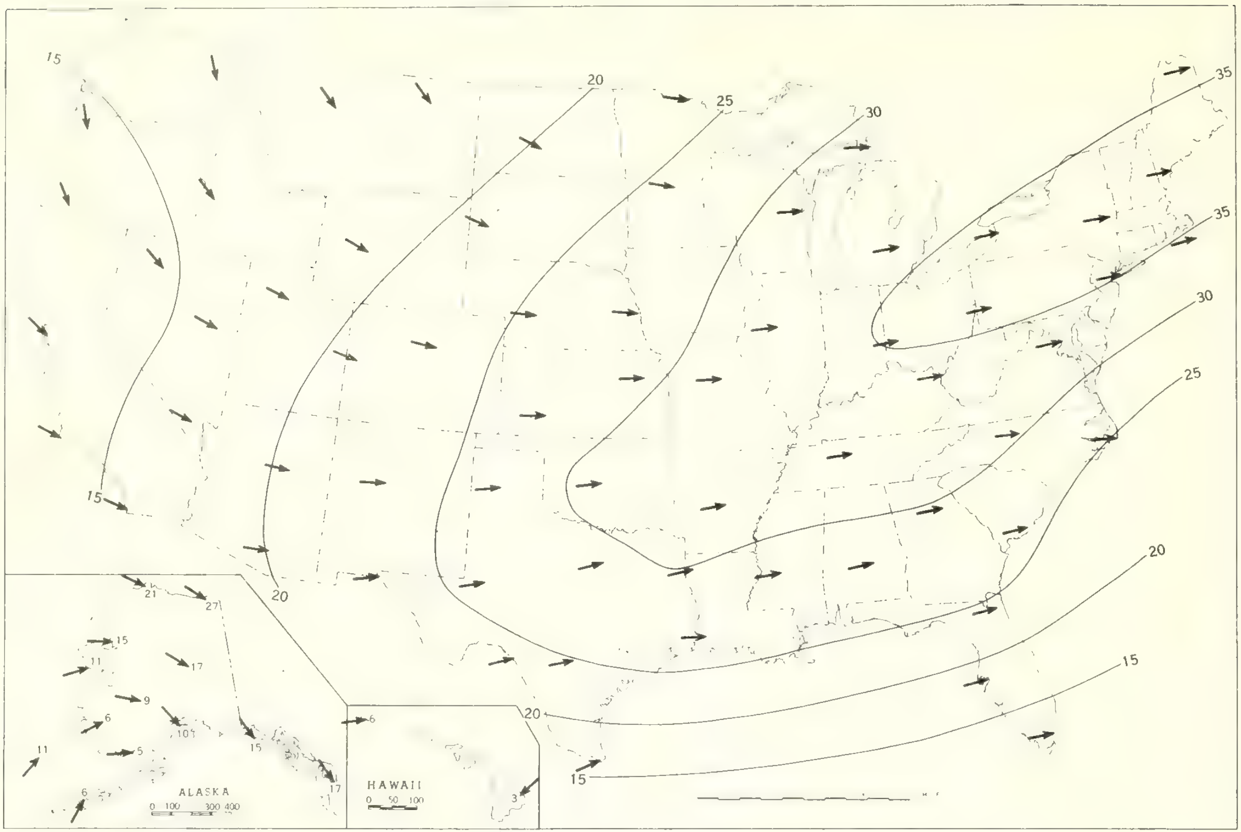
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, February 1966. Average Height and Temperature, and Resultant Winds.

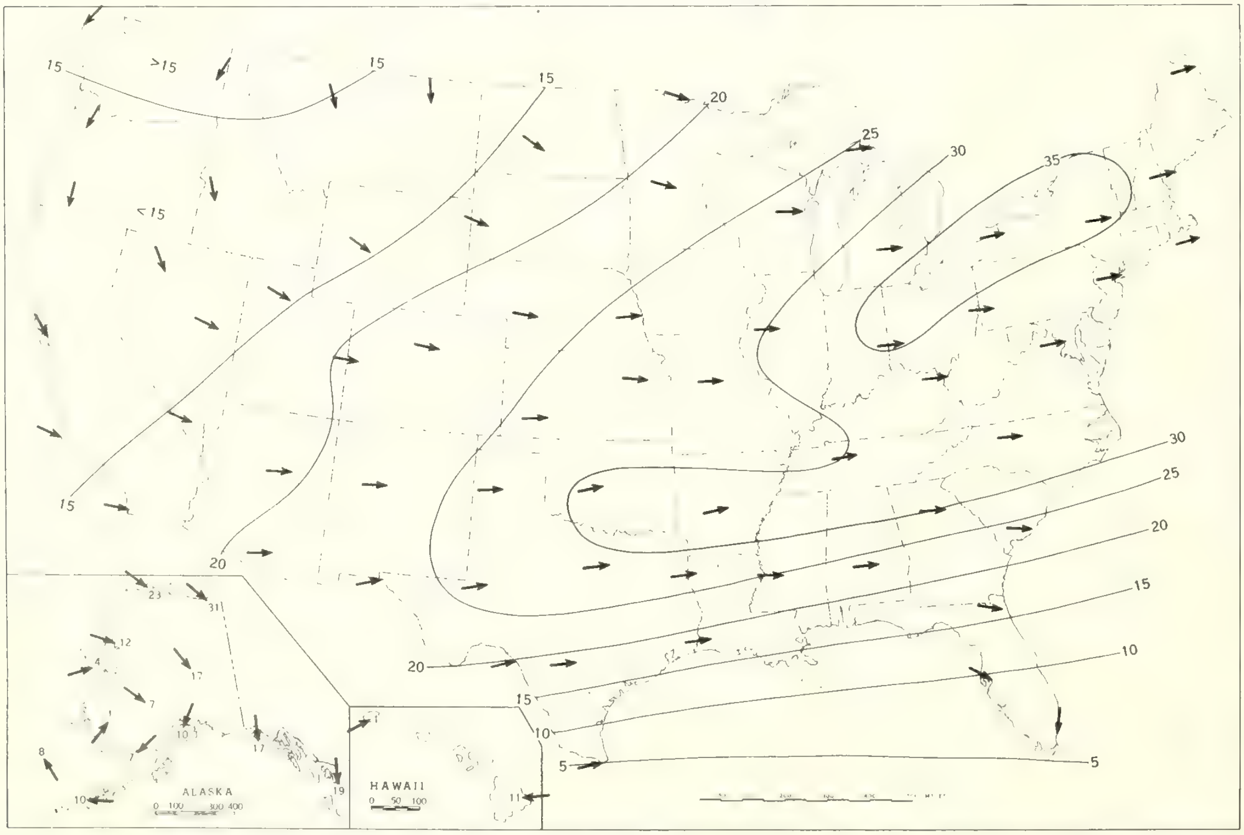


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, February 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, February 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

U. S. DEPARTMENT OF COMMERCE
JOHN T. CONNOR, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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MARCH 1966
Volume 17 No. 3

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 3 MARCH 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Two major blizzards in northern Great Plains.
2. Relatively dry month most areas.
3. Major tornado at Jackson, Mississippi.
4. Deficient snowfall much of Far West.

TEMPERATURE.--Temperatures for March averaged above normal nearly everywhere except normal to 3° below in parts of the Southeast. This was the reverse of February temperatures which averaged below normal nearly everywhere. At Grand Junction, Colo., this was the warmest March on record, and at Boston, Mass., and Minneapolis, Minn., the warmest in 20 years. Temperatures fluctuated widely during the month and occasionally reached record levels. Fresno, Calif., had a low of 26° on the 4th and a high of 89° on the 31st, both March records.

The first week was unusually cold in the western half of the 48 states. On the 4th, Phoenix, Ariz., recorded a late season low of 25°, and Flagstaff, Ariz., a record March low of -16°. Brownsville, Tex., reported frost on the 6th and Baton Rouge, La., and Orlando, Fla., on the 7th. In the northeastern quarter of the Nation the first week was as much as 12° above normal. The next 2 weeks were unseasonably warm except cold in the Gulf area the second week and in the Pacific Northwest the third week. Temperatures reached unseasonably high levels in the midcontinent area about midmonth. Valentine, Nebr., recorded an early season high of 79° on the 16th and Rockford, Ill., a March high of 73° on the 17th. The second week was the first warmer than normal such period in Colorado and New Mexico since January.

During the last 10 days temperatures rose steadily in the Far West but continued to fluctuate east of the Rockies. Freezing reached the Texas Panhandle on the 22d and 23d, damaging apricots and peaches. At Little Rock, Ark., the last freeze on the 25th was 9 days later than usual. Early season highs included 75° at Burns, Oreg., on the 29th, 74° at Helena, Mont., and 78° at Boise, Idaho, on the 30th. On the 31st a number of stations recorded their highest temperatures for March. Among these were Sacramento, Calif., 90°; Kalispell, Mont., 71°; and Reno, Nev., 83°. By the end of the month ice deterioration in the Great Lakes was ahead of normal. Nearly all the ice in Green Bay disappeared on March 22 and 23.

The month was among the coldest Marches on record in Alaska. In central Alaska, Fairbanks reported its second coldest March on record even with relatively warm weather the last 10 days.

PRECIPITATION.--With few exceptions, precipitation for March was below normal in the southern two-thirds of the 48 states. In the northern third monthly totals were unusually heavy from the Dakotas to Lake Michigan, slightly above normal in parts of the Pacific Northwest and northern portions of New York and New England, below normal in the rest of the area.

Precipitation in the Northeast totaled 2 inches or more in New York and New England, but was less than an inch in an area including southern New Jersey, Delaware, eastern Maryland, and parts of eastern and southern Virginia. In this latter area drought continued, but ground water levels rose in the rest of the Northeast and streamflow was above normal in Maine. Rainfall in the Northeast was well distributed through the month.

Precipitation generally ranged from 25 to 50 percent of normal from the western portion of the lower Great Plains to the Pacific coast and in the Ohio and lower Mississippi Valleys. This was the driest March in many years at numerous stations scattered across the Nation. This was the driest March since 1909 at Grand Junction, Colo., since 1910 at Lynchburg, Va., and Charleston, W. Va., since 1925 at Little Rock, Ark., and since 1941 at Evansville, Ind., and Memphis, Tenn.

In the Southeast, however, heavy rainfall ranging up to more than 4 inches during the first week continued lowland flooding along principal streams in Georgia and the Carolinas. Dry, windy weather in these States the rest of the month created a high fire hazard. During the last week hundreds of fires broke out.

From the Dakotas to Lake Michigan precipitation at many stations was 200 to more than 300 percent of normal and monthly totals ranged up to more than 4 inches. Much of this precipitation was in the form of snow which was particularly heavy during the first and last weeks. Nevertheless additional moisture from heavy snowmelt, with ice action a contributing factor, by the third week caused flooding in Minnesota and the Dakotas. Flooding continued in the Red River of the North Valley the rest of the month. In Upper Michigan, Marquette measured 4.46 inches of precipitation which equaled the greatest total for March there during the past 95 years.

SNOW.--In the Far West, where mountain snow accumulation is an important factor in determining warm season water supplies, March snowfall was below average in nearly all sections except near or above in parts of the Pacific Northwest. In addition, above normal temperatures caused more rapid melting of the snow than is usual for March and the snowpack declined in most areas, generally ranging from 60 to 80 percent of normal on April 1. By the end of the month the ground was bare at lower elevations.

At the beginning of March the northeastern highlands were covered with snow, ranging up to 3 feet deep and a light cover reached from Wisconsin and Upper Michigan to the Rockies. The ground was bare from eastern Pennsylvania through Ohio, Indiana, and Lower Michigan.

The first of two major snowstorms east of the Rockies occurred in northern areas the first week as a storm moved eastward from the northern Rockies. Two records were set at Bismarck, N. Dak., during this storm-- 15.5 inches in 24 hours on the 3d and 22.4 inches for a 3-day storm in March. Up to 2 feet of snow fell in northern Minnesota, up to 20 inches or more in eastern and south-central North Dakota, and up to 31 inches in north-central South Dakota.

During the fourth week another storm moved northeastward from the central Rockies. Six inches of snow fell in Kansas and a foot or more from northeastern Nebraska to Upper Michigan. Much of this snow soon melted.

By the end of the month the snow cover in north-central areas had retreated from northeastern North Dakota to areas bordering Lake Superior, and in the Northeast to the St. Lawrence Valley and northern portions of New York and New England.

Marquette, Mich., measured 31.5 inches of snow for the month, the most since 1923, while Portland, Maine, had the least since 1946.

SEVERE STORMS.--Tornadoes and blizzards accounted for most storm losses during March 1966. During a stormy period March 2-5, one of the most severe blizzards of record swept across the northern Great Plains. This blizzard was notable for long duration, heavy snowfall, and strong winds. Wind gusts of 101 m.p.h. were reported at Broken Bow, Nebr., and 130 m.p.h. at the Air Force Station at Gettysburg, S. Dak. Several stations measured more than 30 inches of snow on the level on the 5th and drifts ranged up to 20 feet high. During the storm 35 inches of snow fell at Mobridge, N. Dak., and a depth of 34 inches was reported on the 5th. During the height of the storm on the 3d at Bismarck, N. Dak., visibility was zero for 11 consecutive hours - from 2 a.m. to 1 p.m. The storm was blamed for many deaths and livestock losses of many millions. Power failures occurred over wide areas for as long as 3 days in some cases, and traffic was paralyzed. As the blizzard raged in the northern Great Plains on the 3d, a series of tornadoes left paths of destruction in Mississippi and Alabama. Heaviest losses occurred in suburban Jackson, Miss., where a shopping center was leveled and power and communications were knocked out. At least 57 persons were killed, over 400 injured, and property losses ammounted to several million. This was the worst tornado disaster in Mississippi since 1936.

On the 22d and 23d the second blizzard of the month swept across the northern Great Plains. Up to a foot of snow drifted by hurricane-force winds forced schools and businesses to close and blocked highways. Numerous deaths were blamed on the storm.

CONDENSED CLIMATOLOGICAL SUMMARY

MARCH 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Jasper 4N	87	21	Hamilton 3S	14	8+	Phenix City 2NNW	8.13	Fort Morgan	0.76
Alaska	Data Delayed									
Arizona	Parker	99	31	Maverick	-26	4	Fort Valley	1.48	19 Stations	.00
Arkansas	6 Stations	90	31	2 Stations	11	7	Huntsville	2.70	Lake City	.10
California	Palm Springs	104	31	Bodie	-16	4	Gasquet Ranger Station	17.94	16 Stations	.00
Colorado	Las Animas	86	31	Taylor Park	-38	6	Wolf Creek Pass 4W	1.70	14 Stations	.00
Connecticut	Falls Village	69	18	Norfolk 2SW	5	9	Colchester	3.97	Bridgeport WBAP	1.62
Delaware	4 Stations	76	24+	Georgetown 5SW	18	17	Georgetown 5SW	2.03	Wilmington Newcastle WBAP	.81
Florida	DeLand 3N	91	4	Fountain 3SSE	22	7	Wewahitchka	8.38	Bushnell 2E	.12
Georgia	Americus 4ENE	87	22	2 Stations	15	29+	Dawson	10.67	Millen 4N	2.34
Hawaii	Data Delayed									
Idaho	2 Stations	85	30+	Island Park Dam	-36	4	Headquarters	6.37	May Ranger Station	.00
Illinois	Quincy FAA AP	83	21	Stockton	10	25	Galena	3.59	Pleasant Hill	.32
Indiana	Evansville WBAP	82	21	Greensburg 3SW	7	7	Wanatah 2WNW	3.08	Osgood	.82
Iowa	2 Stations	82	31	2 Stations	-3	7	Dubuque WBAP	5.50	Norwich Exp Farm	.19
Kansas	Wellington	91	31	McDonald	5	24	Paola	2.14	13 Stations	.00
Kentucky	2 Stations	88	23+	Owenton 2S	9	8	Middlesboro	3.22	Hickman 1E	.26
Louisiana	De Quincy 4N	91	31	Plain Deadline	20	7	Pearl River Lock No. 1	5.29	Farmerville	.38
Maine	Woodland	62	24	Middle Dam	-15	9	East Sangerville 5SE	5.00	Fort Fairfield	1.29
Maryland	Westernport	85	22	Oakland 1SE	-5	8	Sines Deep Creek 2	2.47	Rockville	.59
Massachusetts	Farmingham	69	19	2 Stations	6	9	New Salem	3.53	Salem CG Air Station	1.29
Michigan	3 Stations	74	18+	Champion Van Riper Pk	-15	27	South Haven Exp Farm	5.53	Lake City Exp Farm	.79
Minnesota	Luverne	75	16	2 Stations	-27	7	Two Harbors	5.18	Pipestone	.32
Mississippi	2 Stations	89	31+	University	15	7	McHenry 5ESE	7.01	Scott	.33
Missouri	St Joseph 4WNW	90	31	Tarkio	5	7	Steffenville 1E	3.34	Bunker	.00
Montana	Miles City	81	30	West Yellowstone	-35	4	Heron 2NW	3.95	Westby	.00
Nebraska	Falls City	85	31	Ellsworth 15NNE	-6	6	Geneva	2.15	Harrisburg 10NW	.07
Nevada	Amargosa Ranch	96	31	Charleston	-27	4	North Fork Mntc Sta	1.15	7 Stations	.00
New Hampshire	Keene	67	18	Mount Washington	-16	29+	Pinkham Notch	5.54	Jefferson 4S	1.69
New Jersey	Hammonton 2NNE	75	25	High Point Park	10	28+	Phillipsburg Bridge	3.69	Atlantic City	.68
New Mexico	2 Stations	90	31	Gavilan	-30	5	McGaffey 4SE	1.30	38 Stations	.00
New York	South Wales Emery Park	80	24	Hinckley	-11	28	Tannersville 2E	6.16	Paul Smith	D .84
North Carolina	2 Stations	86	22	Grandfather Mountain	4	8	Trenton	6.80	Wilbar 2NW	.54
North Dakota	Minot FAA AP	79	30	3 Stations	-18	7+	Courtenay	5.05	10 Stations	T
Ohio	Ironton	86	22	do	2	8	Chardon	3.73	Columbus WB City	.71
Oklahoma	Frederick	95	31	Kenton	0	4	Colgate	3.48	20 Stations	.00
Oregon	Pelton Dam	86	29	Seneca	-16	2	Valsetz	21.24	Adel 1S	.06
Pennsylvania	Uniontown	85	23	Conneautville	-9	8	North East 2SE	4.87	Butler 4WNW	.25
Puerto Rico	Mayaquez	95	31	Cayey 1E	51	10+	Corozal 4W	11.34	Rio Jueyes	.43
Rhode Island	Providence WBAP	67	18	Greenville	14	28	Kingston	2.85	Block Island WBAP	1.16
South Carolina	Ridgeland 2SE	87	22	Ninety Nine Islands	12	9	Ridgeland 2SE	6.47	Johnston 2SSW	1.93
South Dakota	Chamberlain	82	16	2 Stations	-12	6	Deadwood	5.84	Buffalo Gap	.20
Tennessee	Savannah	89	22	Mountain City No. 2	9	29	Copperhill	4.87	Samburg Wildlife Ref	.17
Texas	Presidio	97	20	Morton	8	4	Sequin	3.40	42 Stations	.00
Utah	Saint George Pwr House	88	31	Woodruff	-32	4	Silver Lake Brighton	3.01	12 Stations	.00
Vermont	Bennington 2NNW	69	18	Mount Mansfield	-11	16	Danville	5.37	South Newberg	2.24
Virginia	Quantico 1S	88	22	Big Meadows	7	8	Halifax 2SSE	3.28	Roanoke WBAP	.43
Washington	Pleasant View	81	30	2 Stations	-1	22+	Aberdeen 20NNE	19.13	Sunnyside	.28
West Virginia	Williamson	88	23	Terra Alta No. 1	-9	9	Pickens 1	3.56	Berkeley Springs	.21
Wisconsin	2 Stations	75	17	Long Lake Dam	-14	27	2 Stations	4.84	Prairie Du Chien	1.53
Wyoming	do	80	31+	Bondurant 3NW	-37	4	Alva 5SE	2.70	2 Stations	.01

+ And also on an earlier date or dates

NOTE Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown (See individual Climatological Data for times of observations)

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	997.0	1019.8	65	40	52.3	- 2.2	82	21	22	8	0	8	37	60	3.77	- 2.23	1.77	10	6	T	0	1.9	25	30	W	23	10	10	11	5.2	73
HUNTSVILLE	600	995.9	1019.5	64	41	52.4	0.6	84	21	22	8	0	9	36	57	2.16	- 3.41	1.45	6	3	T	0	1.8	24	32	25	23	12	8	11	5.3	
MOBILE	211	1011.9	1019.9	69	49	58.8	- 1.5	83	31	29	7	0	1	47	70	3.21	- 4.02	0.94	9	4	0.0	0	0.8	16	31	20	3	8	11	12	6.1	
MONTGOMERY	194	1012.9	1020.1	67	44	55.4	- 0.6	81	31+	27	7	0	5	41	62	4.26	- 1.90	1.84	9	6	0.0	0	0.9	26	29	W	5	12	6	13	5.4	66
ALASKA												B																				
ANCHORAGE PRK STRIP	85			26	9	17.6	- 5.7	47	30	-12	18+	0	31			0.28	- 0.23	0.15	6		3.1	18										
ANCHORAGE	141	998.6	1003.6	26	8	16.7		42	30+	-15	18+	0	30	6	60	0.44		0.20	8	0	5.2	20	3.9	36	33	2	6	9	4	18	6.6	52
ANNETTE	110	1002.7	1006.7	44	35	39.2	1.4	54	15	19	2	0	11	32	76	17.13	7.58	4.02	24	0	20.3	5	9.7	13	40	14	23	1	1	29	9.3	
BARROW	22	1023.0	1023.7	-16	-30	-22.9	- 8.3	13	5	-48	15	0	31	-30	69	0.20	0.09	0.13	5	0	2.2	17	2.5	4	24	8	30	12	7	12	5.1	
BARTER ISLAND	39	1020.3	1022.5	-17	-28	-22.4	- 7.5	12	6	-42	10+	0	31	-28	74	0.21	0.01	0.13	6	0	6.0	31	8.0	27	44	28	7+	12	5	14	5.9	
BETHEL	125	1006.4	1012.5	6	-12	- 3.1	-14.7	27	6	-35	21	0	31	-11	70	0.12	- 0.91	0.05	4	0	2.3	16	9.4	35	36	35	6	16	5	10	4.6	
COLD BAY	94	1005.1	1009.1	27	15	21.4	- 7.4	36	1	0	21	0	31	17	82	1.40	- 0.35	0.27	19	0	14.0	8	11.2	34	42	34	2	2	5	24	8.3	
FAIRBANKS	436	994.2	1012.3	11	-16	- 2.5	-11.4	45	30+	-38	13	0	31	- 8	76	0.34	- 0.06	0.11	9	0	8.9	36	2.3	1	22	2	9	8	9	14	6.2	
JUNEAU	12	1004.7	1005.5	37	24	30.2	- 0.2	47	28	0	2	0	24	28	91	6.36	3.09	1.38	21	0	49.0	29	7.2	11	35	12	25	3	2	26	8.8	28
KING SALMON	43	1004.1	1006.2	14	- 4	4.8	-14.7	34	28+	-29	17	0	31	- 2	69	0.81	- 0.15	0.20	14	0	9.9	13	7.0	36	45	6	24	12	6	13	5.4	
KOTZEBUE	10	1016.9	1017.6	- 4	-20	-12.0	- 9.9	20	28	-42	17+	0	31	-19	71	0.07	- 0.21	0.03	4	0	2.9	32	2.3	31	43	30	6	15	9	7	4.3	
MC GRATH	349	998.0	1011.6	10	-17	- 3.7	-12.0	39	29	-51	17	0	31	-15	54	0.12	- 0.81	0.06	3	0	4.2	31	4.2	1	28	35	6	11	7	13	5.3	
NOME	13	1014.9	1015.8	7	-14	- 3.1	-11.0	26	7	-42	15	0	31	-10	71	0.32	- 0.56	0.17	4	0	3.2	33	4.7	3	37	7	1	15	7	9	4.8	54
ST. PAUL ISLAND	22	1013.2	1014.3	27	17	21.8	- 2.4	40	5	2	31	0	31	17	82	1.64	0.58	0.81	19	0	16.3	15	11.2	36	46	35	21	2	3	26	8.8	
SHEMYA	122	1010.5	1014.4	35	28	31.5	- 0.9	39	7	19	25	0	22	27	82	0.66	- 1.91	0.21	12	0	2.6	1	5.7	10	44	6	19+	0	9	22	8.6	
YAKUTAT	28	1001.0	1002.0	33	15	24.1	- 7.3	40	31	-10	6+	0	30	22	87	11.76	3.07	2.35	21	0	44.0	55	6.6	11	35	14	28+	3	1	27	8.6	
ARIZONA																																
FLAGSTAFF	6993	787.0	1017.7	54	21	37.2	1.6	73	31	-16	4	0	30	18	52	0.95	- 0.50	0.76	4	1	7.4	7	0.9	19	31	23	2	9	9	13	5.9	
PHOENIX	1117	974.9	1014.1	78	44	61.2	2.2	92	31	25	4	1	3	36	44	0.34	- 0.32	0.24	2	1	0.0	0	2.0	12	40Y	W	2	11	5	15	5.5	82
TUCSON	2584	925.8	1013.7	75	45	60.1	2.1	85	31	24	4	0	3	29	36	0.19	- 0.34	0.10	3	1	0.0	0	2.1	16	35	E	24+	13	5	13	5.4	94
WINSLOW	4895	852.0	1017.7	64	29	46.4	0.8	79	31	12	4	0	20	20	42	0.26	- 0.13	0.18	3	3	1.3	1	3.2	23	40	25	2	11	7	13	5.6	
YUMA	194	1006.8	1014.1	81	50	65.4	2.4	98	31	35	4+	4	0	33	34	0.06	- 0.18	0.03	2	0	0.0	0	2.3	35	37	W	2	11	10	10	4.9	89
ARKANSAS																																
FORT SMITH	449	1001.4	1018.3	66	39	52.5	1.4	89	31	19	7	0	7	35	56	1.17	- 2.30	0.32	5	3	T	0	1.6	28	35	W	5	9	10	12	5.9	65
LITTLE ROCK	257	1009.1	1019.0	67	42	54.6	2.8	87	31	24	7	0	5	36	54	0.73	- 4.08	0.52	6	2	0.0	0	3.2	24	36	NW	22	11	9	11	4.9	70
TEXARKANA	372	1005.8	1019.0	68	44	56.3	1.4	88	31	25	7	0	4	38	56	0.75	- 3.99	0.37	6	1	0.0	0	2.5	22				12	7	12	5.1	
CALIFORNIA																																
BAKERSFIELD	494	1000.7	1018.5	70	45	57.5	0.6	87	31	31	3	0	2	40	56	0.29	- 0.77	0.29	2	0	0.0	0	1.7	1	22	12	22	13	8	10	4.9	
BISHOP	4108			69	31	49.6	2.0	87	31	12	4	0	17			T	- 0.55	T	0		0.0	0						11	7	13	5.4	
BLUE CANYON	5280			48	34	40.8	1.3	72	31	14	3	0	13			4.36	- 4.09	1.23	13		11.5	60			25	7	22	11	5	15	5.7	
BURBANK	724	990.9	1016.0	73	49	61.0	3.1	96	31	37	4	1	0	42	59	0.42	- 1.74	0.42	2	1	0.0	0	1.7	15	29	33	16	8	9	14	5.8	
EUREKA U	43			54	43	48.0	- 0.7	60	18+	31	3	0	3			6.57	1.32	1.21	17		1.0	1			42	SE	4	2	5	24	8.2	36
FRESNO	328	1006.4	1018.3	70	42	56.3	1.3	89	31	26	3	0	3	43	65	0.01	- 1.95	0.01	1	0	0.0	0	3.6	32	29	NW	1	11	11	9	4.9	86
LONG BEACH	34	1015.6	1016.9	69	50	59.1	2.4	85	31	37	3	0	0	46	69	0.47	- 0.90	0.41	3	0	0.0	0	1.6	25	26	28	1	8	10	13	6.3	
LOS ANGELES	97	1012.9	1016.6	65	50	57.5	0.5	78	23	39	4	0	0	44	69	0.49	- 1.30	0.37	3	0	0.0	0	3.9	27	43Y	W	2+	7	8	16	6.7	
LOS ANGELES U	270			71	52	61.3	1.9	90	31	42	4	1	0			0.53	- 1.73	0.52	3		0.0	0			19	NW	16	14	10	7	4.9	52
MT SHASTA R	3544			54	31	42.3	1.1	80	31	16	17+	0	17			2.58	- 1.88	0.75	16		6.7	2										
OAKLAND	6	1019.3	1019.5	61	49	55.0	1.4	75	31	35	4	0	0	44	70	0.49	- 1.93	0.31	6	0	0.0	0	4.6	29	26	31	2	6	12	13	6.4	
RED BLUFF	341	1005.4	1018.3	65	42	53.0	- 1.1	87	31	26	4	0	4	39	65	0.71	- 1.99	0.38	7	0	0.0	0	1.3	21	32	S	8	12	7	12	5.3	69
SACRAMENTO	17	1018.0	1018.8	66	43	54.3	0.9	86	31	28	3+	0	3	42	70	0.14	- 2.22	0.06	3	0	0.0	0	2.8	24	25	N	22+	11	9	11	5.3	83
SANDBERG R	4517			57	40	48.4	3.4	80	31	21	2	0	7			0.07	- 1.37	0.06	2		0.6	T			46	34	16	11	6	14	5.9	
SAN DIEGO	13	1015.6	1016.6	65	51	58.1	- 0.9	82	23	42	3	0	0	47	71	0.17	- 1.40	0.09	3	0	0.0	0	3.7	30	29	NW	2	9	9	13	5.9	71
SAN FRANCISCO	8	1019.3	1019.8	59	44	51.6	- 1.7	76	31	31	3	0	1	42	73	0.59	- 2.10	0.37	10	0	0.0	0	5.7	29	36	WNW	20+	7	10	14	6.3	
SAN FRANCISCO U	52			60	48	53.8	- 0.9	75	31	39	1	0	0			0.80	- 2.13	0.31	8		0.0	0			26	W	1					64
SANTA CATALINA	1568			64	49	56.5	2.0	90	31	40	2	1	0			0.23	- 1.72	0.16	2	0	0.0	0						9	8	14	5.9	
SANTA MARIA	236			66	41	53.8	0.5	85	31	27	3	0	2			0.20	- 1.86	0.20	2		0.0	0						14	7	10	5.1	
STOCKTON	22	1018.3	1019.4	67	42	54.1	0.4	87	31	29	4+	0	4	42	68	0.18	- 1.87	0.11	4	0	0.0	0	4.8	30	25	29	1	11	11	9	5.2	
COLORADO																																
ALAMOSA	7536			52	14	33.2	1.1	70	31	- 6	5	0	31			0.11	- 0.15	0.08	2		3.3	2						13	9	9	4.8	
COLORADO SPRINGS	6145	809.0	1015.6	56	25	40.8	4.6	76	31	7	4	0	22	10	32	0.01	- 0.60	0.01	1	0	0.1	T	2.2	1	48	36	22	10	8	13	6.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M p h							%
COLORADO																																
DENVER	5283	834.4	1014.1	59	26	42.5	6.1	76	31	7	3	0	23	17	43	0.32	- 0.89	0.21	5	1	2.8	1	1.9	22	42	NE	21+	7	13	11	5.8	86
GRAND JUNCTION	4855	852.7	1016.7	61	32	46.1	4.6	76	31	13	4	0	16	19	39	0.04	- 0.71	0.03	2	0	0.3	T	0.2	8	35	SW	21	11	8	12	5.6	71
PUEBLO	4684	854.0	1014.4	63	25	44.1	4.0	84	31	3	5	0	24	11	28	0.05	- 0.47	0.03	2	0	0.5	T	1.2	33	56	N	22+	10	9	12	5.7	87
CONNECTICUT																																
BRIDGEPORT	7	1016.6	1017.4	44	29	36.6	- 0.9	53	24	17	28	0	22	27	71	1.62	- 2.63	0.37	13	1	0.5	T	4.9	31	45	29	1	10	8	13	5.8	
HARTFORD	169	1009.5	1016.3	48	31	39.1	3.1	65	18	18	28	0	17	27	66	3.15	- 0.65	1.28	9	1	10.6	10	3.7	32	32	NW	2	8	7	16	6.5	65
NEW HAVEN	6			46	31	38.8	1.9	55	24	19	28	0	18			1.76	- 2.86	0.47	12		2.9	2			34	W	1	11	6	14	5.8	62
DELAWARE																																
WILMINGTON	78	1014.6	1017.7	53	33	42.9	1.6	70	22	21	28	0	16	29	63	0.81	- 3.21	0.59	5	1	T	T	3.2	28	30	27	1	8	10	13	6.2	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.6	1017.8	59	37	47.5	2.7	82	22	24	9+	0	10	31	57	1.44	- 1.77	0.86	7	0	T	0	2.4	29	38	W	1	9	10	12	5.8	62
FLORIDA																																
APALACHICOLA U	13			66	52	59.1	- 1.9	78	31	39	8	0	0			1.32	- 3.20	0.77	5	1	0.0	0			26	W	5	12	10	9	4.8	71
DAYTONA BEACH	31	1018.6	1020.0	72	52	61.9	- 1.9	86	4	36	7	0	0	49	66	0.36	- 3.20	0.17	6	1	0.0	0	1.7	35	29	26	5	13	9	9	4.7	
FORT MYERS	15	1019.0	1019.2	78	57	67.2	- 1.0	86	3	43	8	0	0	57	74	0.37	- 2.25	0.20	3	0	0.0	0	3.3	3	28	23	5	13	8	10	5.2	
JACKSONVILLE	20	1019.0	1020.0	71	48	59.3	- 2.9	83	31+	30	7	0	2	46	66	0.71	- 2.78	0.51	5	2	0.0	0	1.3	33	32	SW	5	11	11	9	5.0	82
KEY WEST	4	1017.6	1018.1	75	66	70.9	- 1.6	80	4+	58	8	0	0	61	73	1.33	- 0.44	0.61	6	1	0.0	0	6.9	6	26	E	23+	8	15	8	5.6	70
LAKELAND U	214			74	55	64.0	- 2.5	85	4	41	8+	0	0			1.81	- 2.44	1.51	5	3	0.0	0						12	11	8	4.6	85
MIAMI	7	1018.3	1018.5	77	61	69.2	- 1.3	82	5+	47	8	0	0	58	70	3.25	0.98	2.09	8	2	0.0	0	4.2	7	46	4	29	7	14	10	6.2	
ORLANDO	108	1015.6	1019.7	74	54	64.4	- 1.5	85	4	40	7	0	0	51	67	2.57	- 0.84	1.62	5	2	0.0	0	2.3	1	25	30	5	13	9	9	4.8	
PENSACOLA	112	1015.9	1020.2	67	49	58.4	- 2.6	80	31	32	7	0	1	47	68	1.83	- 4.21	1.06	10		0.0	0	1.3	16	32	NW	4					64
TALLAHASSEE	55	1018.0	1020.2	71	47	58.7	- 1.9	85	31	28	7	0	2	46	68	3.24	- 1.94	2.68	6	3	0.0	0	0.8	33	23	24	5	10	11	10	5.4	
TAMPA	19	1019.3	1019.4	73	53	63.1	- 2.9	81	22+	38	8	0	0	51	69	1.16	- 2.59	0.52	3	1	0.0	0	2.4	3	23	19	4	14	9	8	4.7	79
WEST PALM BEACH	15	1018.0	1018.7	77	59	68.1	- 1.8	83	4	43	8	0	0	56	68	2.38	- 1.06	1.62	6	0	0.0	0	4.1	7	24	7	17+	6	13	12	6.2	
GEORGIA																																
ATHENS	802	990.5	1019.8	63	39	51.0	- 0.6	80	22	24	8+	0	9	34	57	4.73	- 0.37	3.74	6	2	0.0	0	2.9	27	35	34	4	16	6	9	4.5	
ATLANTA	1010	982.4	1019.5	61	39	50.2	- 1.2	78	21	21	7	0	10	34	59	4.02	- 1.35	2.16	8	3	T	T	1.9	26	30	NE	14	14	6	11	4.6	72
AUGUSTA	143	1014.2	1019.4	67	38	52.5	- 2.4	81	22+	23	9	0	10	35	58	3.73	- 0.44	2.92	5	2	0.0	0	2.6	27	25	29	24	15	6	10	4.6	
COLUMBUS	385			67	41	54.0	- 1.3	79	31+	24	7	0	6	39	63	7.30	1.29	5.30	9		0.0	0	1.0	29	23	30	4	12	8	11	5.2	
MACON	354	1007.1	1020.2	66	41	53.4	- 3.5	82	21	25	7	0	8	38	63	5.04	0.10	3.30	8	2	0.0	0	2.1	29	31	W	5	14	6	11	4.7	74
ROME	637			65	36	50.1	- 0.3	83	21	20	9	0	14			4.71	- 1.16	3.75	9		0.0	0										
SAVANNAH	46	1013.0	1019.9	69	43	55.6	- 2.7	84	21	26	7	0	4	41	64	3.79	- 0.18	2.23	6	2	0.0	0	1.5	27	27	NW	31	15	6	10	4.7	69
HAWAII																																
HILO	31	1015.2	1016.5	79	64	71.6	1.0	84	28+	60	8+	0	0	63	76	5.59	- 9.11	1.36	20	1	0.0	0	0.5	1	32	35	30	1	11	19	7.5	31
HONOLULU	7	1015.6	1016.2	83	67	75.2	2.4	86	19+	62	5	0	0	61	63	0.39	- 2.50	0.32	6	0	0.0	0	5.3	4	27	N	30	10	11	10	5.4	80
KAHULUI	48	1013.9	1016.1	80	64	72.0	- 0.2	87	27+	56	5	0	0			0.75	- 1.47	0.41	8	0	0.0	0	7.3	6	30	NE	19	11	14	6	5.2	77
LIHUE	103	1012.2	1017.2	76	64	70.3	- 0.7	82	9	59	8+	0	0	62	79	0.49	- 4.07	0.30	9	0	0.0	0	5.6	5	26	NW	30	5	18	8	5.8	63
IDAHO																																
BOISE	2838	917.4	1018.9	55	31	43.2	1.5	78	30	14	3	0	17	26	55	0.60	- 0.72	0.16	8	1	0.2	T	3.5	14	32	W	21	13	5	13	5.5	76
IDAHO FALLS 42NW R	4790			48	16	31.6	2.3	72	30	- 6	4	0	31			0.09	- 0.37	0.08	2						38	SW	19					
IDAHO FALLS 46W R	4932			48	19	33.5	3.5	70	31+	- 9	4	0	29			0.24	- 0.38	0.14	6		1.2	T	3.9	24	35	WSW	19					
LEWISTON	1413			55	33	43.7	1.1	74	29	19	2	0	13			0.97	- 0.21	0.22	9		2.0	1						7	8	16	6.5	
POCATELLO	4454	864.2	1019.7	51	23	37.1	1.3	71	30	7	4	0	29	21	58	0.42	- 0.60	0.20	7	0	1.5	T	5.3	22	41	SW	19	10	7	14	5.7	70
ILLINOIS																																
CAIRO U	314			60	41	50.6	2.4	81	21	23	7	0	7			1.12	- 3.67	0.76	7		T	0			39	SW	21	9	8	14	5.5	66
CHICAGO O HARE	658	990.5	1015.4	49	30	39.6	4.9	76	17	16	25	0	21	28	66	2.64	- 0.04	0.76	14	2	0.7	1	3.5	24	35	24	23	3	10	18	7.3	
CHICAGO MIDWAY	607	992.9		49	32	40.2	3.9	73	17	18	25+	0	16	27	62	2.58	- 0.16	1.22	16	3	3.8	2	4.4	23	37	SW	23	4	9	18	7.3	53
MOLINE	582	992.9	1015.0	50	29	39.2	3.8	75	17	14	7	0	20	28	67	0.85	- 1.54	0.41	9	3	0.7	T	3.8	23	47	NW	31	3	6	22	7.5	39
PEORIA	652	991.5	1016.1	51	30	40.7	3.1	74	21+	13	7	0	18	30	68	1.78	- 1.07	0.87	10	1	0.8	1	4.3	22	45	W	23	4	5	22	7.5	50
ROCKFORD	724	987.1	1014.8	48	28	37.6	3.6	73	17	14	25+	0	23	27	67	2.75	0.29	0.94	12	3	1.0	T	2.5	22	29	26	18	4	9	18	7.1	
SPRINGFIELD	588	993.6	1016.0	53	33	43.1	2.9	77	21	17	7	0	16	33	71	1.04	- 1.84	0.45	11	2	3.5	1	6.0	21	42	W	23	5	11	15	6.9	52

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1003.7	1018.1	59	34	46.6	1.3	82	21	17	8	0	15	34	64	1.34	- 2.97	0.68	8	0	0.8	1	4.6	25	29	S	22	8	6	17	6.4	61
FORT WAYNE	791	985.8	1016.3	49	30	39.4	3.1	72	22	17	8	0	21	31	73	1.87	- 0.91	0.85	13	2	1.3	1	4.9	24	36	SW	23	3	11	17	7.2	58
INDIANAPOLIS	792	987.1	1016.9	55	32	43.3	4.4	77	22+	16	7+	0	17	30	63	1.31	- 2.10	0.40	11	1	0.8	1	3.9	23	42	SW	23	5	9	17	6.9	52
SOUTH BEND	773	987.1	1015.7	48	30	39.1	4.2	72	17	11	8	0	19	27	64	2.58	- 0.16	0.62	18	2	11.4	5	5.1	23	35	23	23	5	7	19	7.5	
IOWA																																
BURLINGTON	694			52	31	41.6	4.3	76	31	13	7	0	17	33	74	2.12	- 0.59		9	4	1.8		3.5	25	35	33	31	6	4	21	7.3	
DES MOINES	938	979.3	1014.9	52	30	41.0	7.2	78	31	8	7+	0	16	31	73	1.56	- 0.53	0.56	10	6	1.8	1	1.9	28	47	NW	23	7	8	16	7.0	62
DUBUQUE	1065			47	28	37.4	5.5	73	17	10	25	0	20			5.50	2.74	1.41	14		3.3	2						4	8	19	7.3	
SIOUX CITY	1095	973.9	1014.5	52	28	40.2	7.1	80	16	4	7	0	17	28	66	1.78	0.32	1.22	5	3	13.1	7	3.3	30	49	NW	31	8	7	16	6.4	78
WATERLOO	868	981.7	1014.1	50	28	38.7	6.7	74	17	10	7	0	21	30	76	3.40	1.35	1.93	10	4	1.7	1	1.4	26	40	33	31	5	6	20	7.2	
KANSAS																																
CONCORDIA	1470	961.4	1015.0	59	31	45.3	5.5	85	31	12	24	0	17	29	57	0.30	- 1.19	0.30	1	1	2.1	2	3.5	26	49	NW	22	11	9	11	5.2	75
DODGE CITY	2582	923.5	1014.9	63	33	48.0	6.2	85	31	13	24+	0	14	25	49	0.02	- 1.14	0.02	1	0	0.2	T	2.8	26	60	NW	22	9	9	13	5.5	84
GOODLAND	3645	886.9	1015.3	59	27	42.8	6.3	80	16	9	6	0	22	22	52	0.52	- 0.54	0.50	2	0	7.0	6	5.7	29	55	32	4	12	8	11	5.0	
TOPEKA	876	983.4	1015.6	62	32	47.0	5.3	88	31	13	7	0	17	29	53	0.10	- 1.91	0.06	3	2	T	T	4.7	26	45	S	17	10	11	10	5.5	73
WICHITA	1321	967.5	1015.9	62	36	49.1	4.6	87	31	15	24	0	13	32	55	0.26	- 1.38	0.26	1	1	T	T	3.5	23	54	NW	5	11	12	8	5.2	83
KENTUCKY																																
COVINGTON	869	985.1	1017.3	53	32	42.9	2.3	76	22	16	8+	0	16	29	60	1.22	- 2.57	0.42	12	2	1.2	1	5.1	24	32	23	23	7	7	17	7.1	
LEXINGTON	966	982.4	1018.3	56	34	44.6	1.4	79	22	17	7	0	13	30	61	0.99	- 3.76	0.41	7	2	1.2	1	5.2	23	25	29	19+	9	5	17	6.4	
LOUISVILLE	474	1000.0	1017.9	57	35	46.1	2.8	78	22	17	8	0	11	32	61	1.02	- 3.57	0.29	9	2	1.3	1	4.1	25	31	W	19	6	7	18	6.8	69
LOUISIANA																																
ALEXANDRIA	92	1015.6	1019.7	69	44	56.6	- 1.8	86	31	26	7	0	6	45	70	1.00	- 3.97	0.74	6	2	0.0	0	0.9	23	25	31	5	7	9	15	6.3	
BATON ROUGE	64	1017.3	1019.9	69	48	58.8	- 1.9	82	31	31	7	0	1	45	66	1.95	- 2.96	1.44	6	1	0.0	0	0.5	19	23	28	5	8	7	16	6.5	
LAKE CHARLES	14	1019.0	1019.9	70	50	60.0	- 1.1	83	31	33	6	0	0	48	70	0.75	- 3.49	0.29	4	0	T	0	1.4	15	25	31	5	7	10	14	6.3	
NEW ORLEANS	3	1018.6	1019.5	68	50	59.0	- 2.4	81	31	30	7	0	1	48	70	1.90	- 3.44	0.93	6	3	0.0	0	0.8	7	28	29	5	9	5	17	6.2	
SHREVEPORT	252	1009.8	1018.9	70	46	58.1	1.5	89	31	28	7	0	2	41	58	0.56	- 3.59	0.36	6	0	0.0	0	2.6	21	37	33	23	12	7	12	5.6	67
MAINE																																
CARIBOU	624			36	20	28.2	5.4	49	23	2	11+	0	26			2.61	0.23	0.73	19		10.7	22						4	7	20	7.6	
PORTLAND	61	1012.9	1015.3	40	25	32.7	1.3	49	22	12	29	0	26	23	69	3.77	- 0.57	1.60	11	1	2.8	22	2.6	29	30	W	1	9	7	15	6.2	68
MARYLAND																																
BALTIMORE	148	1012.2	1017.8	55	32	43.3	0.2	80	22	18	9	0	17	26	55	0.93	- 2.89	0.65	7	0	0.0	0	3.2	30	45	NW	1	8	13	10	5.7	68
MASSACHUSETTS																																
BLUE HILL OBS R	629			46	28	37.1	2.3	65	18	15	29+	0	22			2.04	- 2.50	0.67	10		4.8	5			64	WNW	1					57
BOSTON	15	1014.9	1016.0	47	33	39.8	2.1	66	19	22	28	0	15	25	60	1.98	- 2.24	0.55	12	0	3.3	3	4.8	29	45	W	2	9	9	13	5.9	61
NANTUCKET	43	1015.9	1016.1	44	29	36.4	0.3	51	24+	16	17	0	20	30	78	1.71	- 2.83	0.77	11	0	1.7	2	3.9	24	35	SE	25	10	9	12	5.7	62
PITTSFIELD	1170			41	22	31.8	1.1	65	18	6	9	0	26			2.90	- 0.32	1.02	14		15.2	12										
WORCESTER	986	977.7	1015.7	43	26	34.2	1.4	62	18	12	28	0	23	21	61	2.52	- 1.59	0.74	12	0	5.8	6	6.1	29	46	29	2	9	8	14	5.9	
MICHIGAN																																
ALPENA	689	988.8	1014.9	40	24	32.0	6.3	67	17	- 2	8	0	28	20	65	2.80	0.78	0.74	16	1	9.9	3	1.0	24	29	SW	18	3	6	22	8.0	41
DETROIT	619	992.9	1016.1	47	30	38.3	3.5	67	17	18	7	0	19	25	62	2.21	- 0.21	0.66	16	2	2.6	1	4.5	25	46	W	1	6	8	17	6.8	50
DETROIT M WAYNE CO	633	991.5	1016.1	47	27	37.1	2.2	68	17	14	8	0	23	27	71	2.62	0.21	1.05	16	3	2.5	1	3.7	24				5	10	16	6.9	
DETROIT WILLOW RUN	711	987.5	1016.4	47	27	36.8	1.5	68	17	15	27+	0	24	25	65	1.69	- 0.71	0.55	16	3	3.0	2	4.5	24	44	25	18	5	11	15	6.8	
FLINT	770	986.8	1015.4	45	28	36.8	6.2	68	17	10	8	0	20	25	66	2.36	0.22	0.85	14	3	3.1	2	4.7	24	30	25	23	3	11	17	7.4	
GRAND RAPIDS	784	985.4	1015.2	46	28	37.1	4.4	73	17	14	8	0	24	29	74	2.65	0.37	0.62	16	4	4.6	5	3.2	24	42	SW	18	4	8	19	7.5	50
HOUGHTON LAKE	1150	971.9	1015.1	41	23	31.9		67	17	- 3	8	0	24	24	73	2.30		0.58	14	2	9.2	4	1.8	25	23	22	23	3	4	24	8.0	
LANSING	841	983.1	1015.7	46	28	36.7	4.3	71	17	13	8	0	23	28	73	2.40	0.00	0.93	17	3	1.1	4	4.4	24	38	SW	23	5	7	19	7.4	48
MARQUETTE U	677			38	25	31.6	4.9	65	17	11	24	0	27			4.46	2.55	1.23	18		31.5	17			31	S	8	1	8	22	8.4	42
MUSKEGON	627	991.9	1015.3	45	29	36.8	3.9	70	17	11	8	0	22	28	72	3.18	1.13	0.91	17	4	17.6	4	2.4	22	32	19	23	4	9	18	7.6	
SAULT STE MARIE	721	987.5	1014.9	35	22	28.4	4.6	49	22	5	8	0	29	21	75	2.69	0.88	0.96	19	0	9.3	3	1.3	3	29	30	1	2	4	25	8.5	47
MINNESOTA																																
DULUTH	1428	962.1	1015.1	35	19	27.1	5.8	49	17	- 6	26	0	29	19	72	3.84	2.22	1.06	10	1	24.5	29	3.0	4	57	NE	3	6	5	20	7.1	50

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No of days		Average dew point	Average relative humidity	Precipitation			No of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below			Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	971.6	1016.1	36	16	25.6	6.2	50	17	-22	7	0	30	15	64	3.07	2.04	1.73	10	0	24.6	38	2.5	4	30	3	4	9	6	16	6.6	
MINNEAPOLIS	834	983.1	1014.3	45	27	35.8	8.4	71	17	6	7	0	23	27	73	2.48	0.95	1.41	9	5	14.2	14	0.2	1	40	N	23	8	4	19	6.9	47
ROCHESTER	1297	965.5	1014.4	42	26	34.0	6.1	64	17+	3	26	0	22	27	77	3.32	1.69	2.04	8	5	12.2	11	2.4	22	39	33	31	4	5	22	7.6	
ST CLOUD	1034	975.3	1014.1	42	24	32.9	7.3	65	17	0	7	0	24		72	1.53	0.25	0.92	10		4.4	2						8	4	19	7.1	
MISSISSIPPI																																
JACKSON	310	1007.8	1019.8	68	42	54.7	- 1.8	84	31+	21	7	0	8	41	66	2.05	- 3.69	1.34	7	1	0.0	0	0.9	19	45	NW	3	9	10	12	5.5	73
MERIDIAN	290	1008.8	1020.0	67	41	53.9	- 2.6	84	31	20	7	0	8	41	66	3.37	- 2.95	1.35	8	6	0.0	0	0.8	24	21	32	5	11	5	15	5.5	
VICKSBURG U	234			66	48	57.2	- 0.4	83	31	33	8+	0	0			0.62	- 5.11	0.27	8		0.0	0			29	NW	5	14	6	11	4.5	84
MISSOURI																																
COLUMBIA	778	987.1	1015.7	59	36	47.4	5.5	83	31	14	7+	0	11	31	57	0.84	- 1.81	0.24	7	2	0.8	1	4.7	23	43	SE	3	6	9	16	6.6	78
KANSAS CITY	742	988.2	1015.4	62	37	49.1	5.8	87	31	15	6	0	12	30	53	1.88	- 0.61	0.79	9	5	3.5	3	4.4	25	33	NW	23	8	12	11	6.0	62
SAINT JOSEPH	811			65	34	49.2	9.0	90	31	8	7	1	13	28	53	0.27	- 2.06	0.11	5	1	0.4	T	4.5	26	44	32	23	12	5	14	5.8	
ST LOUIS	535	996.3	1016.9	58	35	46.7	4.1	83	21	15	7+	0	11	31	59	1.09	- 1.99	0.50	5	1	0.9	1	4.7	22	35	SW	23	6	10	15	6.8	58
SPRINGFIELD	1268	971.2	1017.1	62	35	48.3	4.3	81	31	14	7	0	14	32	56	1.38	- 1.46	0.83	7	2	0.1	T	4.8	23	36	W	23	8	12	11	5.7	63
MONTANA																																
BILLINGS	3567	890.6	1017.0	48	26	37.1	3.4	76	30	- 5	5	0	21	18	52	1.58	0.53	0.89	7	0	17.3	14	4.9	27	38	NW	19	6	12	13	6.5	73
GLASGOW	2284			44	20	32.0	5.3	75	30	-11	5	0	27			0.10	- 0.46	0.09	2		2.8	7						7	11	13	6.6	
GREAT FALLS	3662	887.2	1017.1	48	25	36.4	5.7	72	29	-13	4	0	20	20	55	0.79	- 0.13	0.42	7	0	7.7	6	8.8	24	41	W	19	4	11	16	7.0	84
HAVRE	2582			46	21	33.2	6.3	75	29	-16	4	0	27			0.48	- 0.12	0.37	7		5.8	7			35	SW	30+	6	10	15	6.6	68
HELENA	3828	880.8	1018.6	50	23	36.5	5.1	74	30	- 2	4	0	27	19	54	0.28	- 0.42	0.15	6	0	2.3	1	5.0	26	34	W	19	5	7	19	6.8	68
KALISPELL	2965	912.0	1019.0	44	21	32.5	0.7	71	30	-16	4	0	30	23	72	0.79	- 0.17	0.29	9	1	1.9	14	1.9	18	29	24	19	5	8	18	7.2	
MILES CITY	2629	922.1	1017.1	47	23	35.0	4.1	77	30	- 7	5	0	25	22	64	0.77	0.12		5	0	4.0		3.1	30								
MISSOULA	3190	905.5	1020.2	47	24	35.3	1.6	70	30	4	22	0	29	23	67	0.86	0.13	0.31	10	0	9.0	4	1.6	28	38	NW	14	7	7	17	6.7	61
NEBRASKA																																
GRAND ISLAND	1841	947.9	1015.2	56	28	42.1	6.4	80	31+	9	6	0	18	27	61	0.58	- 0.69	0.38	3	0	4.1	2	4.7	30	52	35	22	10	11	10	5.4	
LINCOLN U	1150			55	32	43.2	5.1	80	31	11	7+	0	15			0.70	- 1.03	0.36	6		3.6	1			42	NW	22+	7	11	13	6.1	73
NORFOLK	1544			51	26	38.3	5.0	76	16+	2	7	0	23			1.17	- 0.42	1.09	4		11.1	10						8	11	12	5.8	
NORTH PLATTE	2775	915.7	1015.0	54	23	38.5	3.5	77	31+	0	24	0	26	24	63	1.12	0.14	1.10	2	1	9.6	9	4.5	33	52	NW	4	11	6	14	5.6	78
OMAHA	978	979.0	1014.8	57	32	44.1	7.2	82	31	7	7	0	15	29	60	0.88	- 0.57	0.78	4	1	8.3	4	3.4	30	50	N	23	6	12	13	6.4	69
SCOTTSBLUFF	3957	878.1	1015.9	56	26	40.6	5.3	77	30	10	6+	0	24	21	55	0.17	- 0.69	0.09	3	0	2.3	1	7.0	32	54	32	3	9	8	14	6.0	
VALENTINE	2587			50	23	36.8	5.5	79	16	- 3	6	0	24			0.39	- 0.62	0.18	6		2.9	3			56	N	4+	10	9	12	5.6	77
NEVADA																																
ELKO	5050	845.9	1019.2	54	22	38.0	2.4	77	31	- 2	4	0	30	21	57	0.26	- 0.57	0.17	6	0	2.6	1	1.5	29	32	24	19	13	5	13	5.2	
ELY	6253	808.7	1017.5	54	20	36.7	3.2	73	31	- 9	4	0	30	12	42	0.16	- 0.69	0.16	1	0	1.6	2	3.2	21	35	SW	16	8	5	18	6.1	75
LAS VEGAS	2162	938.7	1015.4	72	44	57.9	3.1	91	31	25	4	1	3	20	26	0.04	- 0.31	0.04	1	0	0.0	0	2.6	25	52	SW	1	7	9	15	6.5	82
RENO	4404	866.6	1017.3	63	24	43.4	1.9	83	31	12	17+	0	28	19	41	0.04	- 0.64	0.04	1	0	0.4	T	2.0	24	40	SW	19	13	8	10	4.7	90
WINNEMUCCA	4299	868.3	1018.0	57	23	40.2	2.2	79	31+	6	2	0	27	19	48	0.38	- 0.43	0.24	4	0	2.0	2	0.8	18	35	NW	16	11	4	16	5.8	62
NEW HAMPSHIRE																																
CONCORD	342	1003.1	1016.0	45	24	34.6	2.9	64	18	8	17+	0	23	24	68	2.19	- 1.07	0.68	11	0	3.7	12	3.7	30	38	W	2	9	10	12	6.0	65
MT WASHINGTON OBS	6262			22	6	14.1	2.4	41	23	-16	29+	0	31			5.19	- 0.55	1.30	17	0	29.4	12			160Y	W	2	4	9	18	7.4	32
NEW JERSEY																																
ATLANTIC CITY	64	1015.2	1017.8	53	30	41.4	0.3	64	19+	17	17+	0	17	29	66	0.70	- 3.21	0.23	9	0	T	0	3.7	27	35	29	1	9	9	13	5.7	60
ATLANTIC CITY U	11			49	37	42.6	1.5	60	19	25	28	0	9			0.68	- 3.33	0.22	8						47	WNW	1					
NEWARK	11	1016.3	1017.2	50	34	41.7	0.2	66	18	22	28	0	13	26	58	1.12	- 2.97	0.33	11	1	T	T	4.0	29	40	27	1	10	8	13	5.6	
TRENTON U	56			51	34	42.7	2.0	70	24	24	28	0	12			1.17	- 2.67	0.61	9	0	0.1	T			36	NW	1	12	7	12	5.4	69
NEW MEXICO																																
ALBUQUERQUE	5310	838.1	1016.1	62	30	45.6	- 0.2	78	31	9	5	0	20	15	32	T	- 0.48	T	0	0	0.0	0	1.9	32	45	NW	2	11	12	8	4.6	90
CLAYTON	4969			62	29	45.4	4.5	80	31	9	4	0	18			0.01	- 0.62	0.01	1		0.6	T						13	9	9	4.9	
RATON	6379			61	22	41.1	3.0	79	31	0	5	0	29			T	- 0.52	T	0		T	T						11	7	13	5.7	
ROSWELL	3617			72	31	51.6	2.1	87	31	15	5	0	16			0.25	- 0.25	0.25	1	1	T	0			48	NW	22	14	6	11	5.0	56
SILVER CITY	5373			65	33	48.8	0.5	76	31	11	4	0	10			0.02	- 0.43	0.02	1		0.2	T						15	10	6	4.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1005.8	1016.9	44	25	34.3	1.3	65	18	12	28+	0	25	22	62	3.63	0.91	0.99	12	2	9.2	7	4.7	27	41	NW	2+	3	11	17	7.5	50
BINGHAMTON	1590	956.0	1016.3	40	26	33.2	1.9	67	18	12	9+	0	25	24	73	2.86	-0.03	0.68	18	3	11.7	4	4.4	26	42	W	1	5	6	20	7.4	54
BUFFALO	705	989.8	1016.1	43	27	34.7	3.2	78	23	11	27	0	26	26	76	2.78	-0.46	0.63	17	2	11.4	3	7.1	25	43	SW	19	5	9	17	7.3	49
NEW YORK U	132	1012.9	1016.3	50	35	42.7	2.2	67	18	24	28	0	10	25	54	0.94	-3.07	0.32	10	1	T	0	2.5	29	34	NW	1	10	11	10	5.1	61
J.F. KENNEDY	15	1016.3	1017.1	50	34	41.9	3.2	57	24+	24	28	0	11	29	65	1.35	-2.80	0.62	11	1	T	0	3.2	29	41	30	1	10	9	12	5.7	
NEW YORK LA GUARDIA	11	1015.2	1017.2	48	36	42.0	1.2	61	18	26	28	0	9	28	62	0.87	-3.36	0.30	10	0	T	0	3.4	32	40	W	1	8	9	14	6.1	
ROCHESTER	547	996.3	1016.9	46	28	36.6	4.3	79	23	4	27	0	22	26	68	1.42	-1.59	0.33	13	0	6.2	2	5.8	25	40	SW	19+	6	11	14	6.9	52
SYRACUSE	410	1000.7	1016.1	43	26	34.4	1.8	72	23+	9	28	0	23	24	67	2.27	-1.33	0.61	14	0	7.8	5	4.2	29	42	W	1	4	11	16	7.2	58
NORTH CAROLINA																																
ASHEVILLE	2140	941.4	1018.6	57	30	43.5	-1.1	75	22	15	9	0	19	30	66	2.59	-2.23	1.80	9	1	0.2	T	2.4	34	32	34	1	15	6	10	4.4	79
CAPE HATTERAS R	7	1018.6	1018.9	58	41	49.4	-1.6	72	24+	29	28	0	5	39	70	2.32	-1.84	1.49	6	2	0.0	0	2.1	30	46	NE	16	13	6	12	5.2	71
CHARLOTTE	735	990.9	1018.6	63	38	50.2	0.2	82	22	21	7	0	10	31	52	2.13	-2.26	1.94	4	1	0.0	0	2.5	26	33	SW	5	16	7	8	4.0	86
GREENSBORO	897	986.5	1018.6	62	36	48.7	1.3	82	22	20	29+	0	12	31	56	1.53	-2.16	1.27	4	1	0.0	0	3.3	25	27	SW	19	13	9	9	4.8	75
RALEIGH	434	1002.4	1018.4	63	37	49.7	0.2	84	22	20	29+	0	9	30	50	1.81	-1.54	1.50	4	2	0.0	0	3.1	26	28	32	31+	16	7	8	4.2	81
WILMINGTON	28	1018.0	1019.3	65	42	53.3	-0.9	82	22	30	9	0	4	38	61	2.89	-1.14	1.57	5	2	0.0	0	2.1	26	30	SW	24	17	5	9	4.3	80
NORTH DAKOTA																																
BISMARCK	1647	955.0	1016.2	44	22	33.0	6.8	75	30	-11	6	0	28	20	62	1.85	1.07	1.26	4	0	22.7	18	5.1	35	52	NW	4	5	12	14	6.7	73
FARGO	896	981.7	1015.4	38	22	29.7	5.4	60	30	-18	7	0	26	25	82	1.92	1.17	1.01	6	0	15.4	15	4.2	1	44	N	5	6	7	18	6.9	50
WILLISTON	1899			46	20	32.8	8.5	75	30	0	5	0	27			0.01	-0.70	0.01	1		0.1	4			50	N	4	8	10	13	6.2	68
OHIO																																
AKRON	1208	971.6	1017.0	49	28	38.7	1.8	75	23	9	8	0	22	28	68	1.95	-1.37	0.42	18	2	4.0	1	4.9	23	32	23	23	3	12	16	6.9	
CINCINNATI OBS	761			55	35	44.9	2.2	78	22	18	7	0	13			1.31	-2.58	0.44	10		0.5	T			23	W	26+					51
CLEVELAND	777	986.8	1016.7	47	28	37.8	2.4	77	23	17	25+	0	22	27	68	2.26	-0.87	0.97	18	1	7.0	4	5.9	23	40	SW	23	2	12	17	7.4	36
COLUMBUS	812	987.1	1017.7	53	31	41.8	2.9	76	23	11	8	0	17	27	59	1.04	-2.12	0.20	13	3	1.2	1	5.0	24	39	SW	18	7	5	19	7.1	53
DAYTON	1002	980.4	1017.1	53	32	42.2	3.3	77	22	16	8	0	16	31	67	1.07	-2.05	0.33	14	2	2.8	1	5.5	23	34	SW	19	4	11	16	7.1	63
MANSFIELD	1295			47	28	37.5	2.3	71	23	11	8	0	21			1.44	-2.34	0.43	12	2	3.6	2						5	10	16	7.2	
TOLEDO	676	990.9	1016.8	48	28	38.1	2.9	71	17	5	8	0	21	28	68	1.82	-0.44	0.57	17	3	7.9	4	4.3	24	31	SW	23+	4	8	19	7.3	55
YOUNGSTOWN	1178	973.2	1016.8	48	28	37.6	2.3	76	23	6	8	0	23	26	67	1.75	-1.60	0.57	19	0	6.1	1	4.7	24	40	25	23	5	8	18	7.1	
OKLAHOMA																																
OKLAHOMA CITY	1280	969.9	1016.6	66	40	52.8	4.3	88	31	22	6	0	7	35	54	1.30	-0.67	1.30	2	2	0.0	0	3.2	20	42	NW	22	13	9	9	4.9	81
TULSA	650	992.6	1017.2	67	39	52.7	4.6	92	31	18	7	1	9	33	50	0.86	-1.57	0.61	3	3	T	0	4.7	21	37	SW	22	11	11	9	5.0	76
OREGON																																
ASTORIA	8	1015.6	1016.3	51	36	43.7	-0.8	69	31	27	3	0	10	38	82	8.79	-0.13	1.38	21	1	6.7	1	4.1	17	35	18	8	2	3	26	8.7	
BURNS U	4151	873.4	1018.2	52	25	38.4	1.0	75	30+	7	2	0	27	23	60	0.77	-0.20	0.17	15		5.1	1	1.5	30				10	9	12	5.8	
EUGENE	359	1004.1	1017.8	55	38	46.6	0.6	69	25	30	4	0	5	40	83	5.95	1.63	1.37	17	0	2.5	2	4.6	19	32	20	14	2	5	24	8.3	
MEACHAM	4050			43	27	34.7	1.4	66	29	12	2	0	23			2.16	-1.80	0.39	14		17.1	28						6	5	20	7.1	
MEDFORD	1298	970.2	1018.3	60	34	46.8	2.5	81	31	21	17+	0	13	35	69	1.70	-0.08	0.54	12	0	2.0	1	1.0	24	32	21	14	8	7	16	6.6	
PENDLETON	1482	963.8	1018.0	56	35	45.4	0.3	75	29	24	4+	0	10	31	61	0.96	-0.24	0.31	10	1	0.2	T	1.8	22	53	27	21	7	7	17	6.3	
PORTLAND	21	1016.3	1017.4	56	38	47.2	1.1	74	25	29	22	0	3	39	74	4.71	0.88	1.15	18	0	0.6	T	4.9	16	35	SW	15	3	5	23	8.1	49
SALEM	196	1009.8	1017.3	54	35	44.6	-0.7	71	25	25	4+	0	11	39	81	6.08	1.40	2.03	17	0	0.6	T	5.4	19	35	18	20+	3	5	23	7.9	
SEXTON SUMMIT R	3836	883.5	1017.8	47	32	39.3	0.7	74	31	19	3+	0	18			4.17	0.70	1.07	18		17.2	8			50	16	9	8	2	21	6.9	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	83.9	0.8	91	26+	74	17	12	0			2.60	0.11	0.51	16		0.0	0						3	10	18	7.6	
ENIWETOK	13	1009.8	1010.5	86	76	81.1	-0.2	87	22+	74	18+	0	0	72	75	0.63	-1.23	0.22	11		0.0	0	16.6	5								
TAGUAC GUAM R	361			84	71	77.5	-1.3	87	30+	65	18+	0	0			1.71	-0.93	0.63	11		0.0	0			24	E	10+					68
JOHNSTON	7	1013.5	1014.3	81	73	77.0	-0.2	83	18	70	1	0	0	67	74	0.36	-1.98	0.14	9	0	0.0	0	15.3	8	31	E	26	12	14	5	4.6	77
KOROR R	94	1006.1	1009.8	87	75	80.9	0.2	90	26	72	15+	1	0	74	82	10.02	2.39	3.26	24	2	0.0	0	7.3	7	20	NE	24+	0	0	31	9.9	69
KWAJALEIN	8	1008.5	1009.5	87	77	82.1	1.6	90	10	73	22	1	0	73	78	4.00	-2.46	2.40	13	0	0.0	0	17.8	6	32	6	25	0	3	28	9.5	
MAJURO	10	1008.8	1009.1	85	77	81.3	0.7	87	30	73	15	0	0	74	80	5.80	-5.92	2.66	17	0	0.0	0	13.7	7	31	E	30+	0	4	27	9.3	59
MARCUS ISLAND	20			79	67	72.6	-0.1	82	31+	60	6	0	0			1.70	0.09	0.88	6		0.0	0			26	N	21	16	9	6	4.1	79
PONAPE R	123	1003.7	1009.0	86	76	80.7	0.1	88	30+	72	14+	0	0	74	82	14.77	0.22	3.56	20	0	0.0	0	8.9	6	25	SE	8	0	2	29	9.6	53
TRUK MOEN ISLAND	5	1008.5	1008.9	85	78	81.4	0.6	88	27	72	4	0	0	74	79	7.57	-0.18	2.20	17	0	0.0	0	11.9	7	21	NE	17	0	4	27	9.0	80
WAKE	11	1014.6	1014.9	82	72	76.6	-1.2	84	31	68	7	0	0	67	74	0.64	-0.83	0.27	8	0	0.0	0	11.2	5	25	4	9	11	17	3	4.5	
YAP R	62	1008.1	1010.1	86	75	80.5	-0.5	89	30+	73	29+	0	0	74	81	2.31	-3.07	0.83	20	0	0.0	0	10.1	5	24	NE	13	0	2	29	9.5	49

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PENNSYLVANIA																																
ALLENTOWN	387	1003.1	1017.4	49	29	39.0	1.4	68	18	18	9	0	20	26	64	1.44	-2.35	0.76	8	0	0.1	T	4.1	30	40	27	1	9	8	14	6.0	
ERIE	732	989.5	1016.8	46	30	37.6	4.0	78	23	3	8	0	21	28	71	3.47	0.59	0.74	19	3	17.7	6	4.6	24	30	25	1	7	10	14	6.6	
HARRISBURG	338	1004.4	1017.5	54	34	43.8	3.5	75	18	21	9	0	14	29	61	1.88	-1.55	0.98	8	2	1.0	1	3.2	29	42	NW	1	5	11	15	6.8	71
PHILADELPHIA	5	1016.6	1017.5	52	33	42.5	1.5	70	24	20	28	0	14	28	60	0.68	-3.12	0.51	4	0	T	0	3.2	29	37	W	1	8	8	15	5.9	64
PITTSBURGH	1137	972.2	1017.0	52	30	40.9	4.1	80	23	11	8	0	18	28	63	1.88	-1.44	0.71	17	0	8.5	4	5.3	25	38	29	1	5	6	20	7.6	53
READING U	266			52	35	43.3	2.0	71	18	23	28+	0	12			1.06	-2.72	0.80	6		T	T			47	W	1	10	9	12	5.7	59
SCRANTON	930	982.1	1017.2	48	30	39.0	2.8	72	18	16	9	0	18	26	63	1.60	-1.22	0.62	12	1	3.8	3	2.4	27	34	W	1	7	7	17	6.7	57
WILLIAMSPORT	527	997.6	1017.1	50	29	39.5	2.1	71	23	16	9	0	22	26	62	1.90	-1.83	0.65	11	1	1.0	1	3.2	28	35	28	1	6	11	14	6.4	
RHODE ISLAND																																
BLOCK ISLAND	110			43	32	37.3	0.6	52	20	20	28	0	16			1.16	-2.91	0.54	7		2.0	1						14	6	11	5.1	
PROVIDENCE	51	1013.9	1016.3	48	30	38.8	1.8	67	18	18	28	0	19	26	64	2.40	-1.74	0.84	10	0	8.1	8	4.4	27	36	29	2	10	10	11	5.7	59
SOUTH CAROLINA																																
CHARLESTON	41	1018.0	1019.6	66	41	53.9	-2.8	82	22	28	10+	0	5	39	63	2.65	-1.28	1.62	6	1	0.0	0	2.2	26	42Y	W	5	17	6	8	4.1	75
CHARLESTON U	9			63	48	55.5	-2.0	79	22+	33	8+	0	0			4.07	0.45	2.27	6		0.0	0			38	NE	15					
COLUMBIA	217	1010.8	1019.2	66	38	51.8	-2.6	83	22	23	10+	0	9	35	58	2.23	-2.03	1.75	4	1	0.0	0	3.3	26	31	28	5	15	7	9	4.2	81
GNVLE-SPARTANBURG	957	983.7	1018.8	63	37	50.1	-1.3	81	22	20	7	0	9	32	54	3.26	-1.49	2.86	4	2	0.0	0	3.2	25	28	W	5	16	6	9	4.2	74
SOUTH DAKOTA																																
ABERDEEN	1296	966.8	1014.8	45	23	34.0	5.8	78	30	-9	7	0	26	24	69	2.34	1.25	1.32	6	0	18.9	18	4.9	36	52	35	4	5	8	18	6.9	
HURON	1282	966.8	1014.5	47	25	35.9	7.2	79	30	-2	7	0	26	26	74	1.35	0.24	0.89	6	1	14.4	12	3.4	33	54	NW	4	7	6	18	7.0	69
RAPID CITY	3165	902.8	1015.9	47	23	35.0	3.9	75	16	3	6	0	26	19	58	1.78	0.77	0.83	5	0	16.5	7	3.3	32	56	NW	3	9	7	15	6.0	70
SIOUX FALLS	1418	961.7	1014.1	50	26	37.7	7.6	76	16	0	7	0	23	26	66	0.70	-0.84	0.48	4	0	4.6	4	2.8	31	40	35	5	5	12	14	6.4	
TENNESSEE																																
BRISTOL	1507	963.8	1018.7	61	34	47.1	1.1	80	22	19	29+	0	16	28	51	2.05	-1.93	1.27	8	1	T	T	4.0	27	30	25	23	10	9	12	5.4	
CHATTANOOGA	670	994.2	1019.2	62	37	49.0	-2.2	81	21	22	9	0	12	34	63	2.99	-2.65	1.99	7	3	T	T	2.2	25	26	SW	23	13	4	14	5.3	62
KNOXVILLE	980	983.4	1019.2	62	39	50.4	0.8	83	22	23	8	0	10	34	57	2.72	-2.01	1.20	11	1	0.5	T	4.7	25	35	W	23	10	8	13	5.6	66
MEMPHIS	255	1008.8	1019.3	64	42	52.8	1.7	82	21	24	8+	0	8	35	55	1.50	-3.57	1.29	4	1	T	T	4.3	23	32	SW	4	16	1	14	5.0	82
NASHVILLE	590	996.6	1018.6	63	38	50.5	1.4	85	21	22	29+	0	10	35	58	1.39	-3.80	1.10	5	2	T	0	4.5	23	30	SW	19	10	6	15	5.7	68
OAK RIDGE	905			62	36	48.8	1.3	81	22	20	9+	0	12			2.29	-3.30	1.36	9		0.3	T						12	6	13	5.4	
TEXAS																																
ABILENE	1762	955.0	1016.8	70	44	56.9	1.9	87	31+	20	6	0	6	36	52	0.40	-0.64	0.30	3	2	0.0	0	5.9	19	41	NW	22	15	3	13	5.0	79
AMARILLO	3604	890.6	1014.3	66	34	50.0	2.4	84	31+	16	4	0	12	22	40	0.01	-0.81	0.01	1	0	0.1	T	4.7	24	42	N	22	16	6	9	4.4	86
AUSTIN	597	996.3	1018.5	71	49	60.1	0.4	87	31	31	6	0	1	45	63	0.50	-1.63	0.29	5	3	0.0	0	1.8	17	33	NW	22	7	4	20	6.6	52
BROWNSVILLE	16	1017.3	1017.7	74	57	65.5	-2.4	85	3	37	6	0	0	56	77	0.53	-0.51	0.41	5	0	0.0	0	7.3	12	36	SE	21	10	7	14	6.2	56
CORPUS CHRISTI	41	1016.6	1018.3	75	54	64.5	-0.7	88	3	32	5	0	1	53	73	0.69	-0.75	0.22	6	1	0.0	0	6.3	12	40	S	21	9	7	15	6.4	41
DALLAS	481	1001.0	1018.6	68	47	57.3	1.2	88	31	27	6	0	1	40	58	2.42	-0.43	1.83	5	3	0.0	0	4.2	18	40	NW	5	10	6	15	5.7	65
DEL RIO	1026	981.0	1017.2	73	51	62.3	-0.7	86	22	31	5	0	1	43	56	0.48	-0.34	0.33	4	2	0.0	0	6.3	12	28	3	22	7	7	17	6.3	
EL PASO	3918	882.2	1014.2	71	42	56.4	1.5	81	15	25	5	0	4	19	26	T	-0.35	T	0	0	T	T	2.0	30	50	SW	2	16	8	7	4.2	95
FORT WORTH	537	998.0	1018.8	67	45	56.3	0.4	88	31	28	6	0	3	40	59	1.38	-1.13	1.01	3	3	0.0	0	3.3	19	38	32	5	10	7	14	5.6	
GALVESTON U	7			65	56	60.6	-0.8	73	31	43	6	0	0			0.70	-2.16	0.21	6		0.0	0			38	NW	5					63
HOUSTON U	41			70	54	62.2	-0.2	83	31	38	6	0	0			2.61	0.21	1.99	4		0.0	0										
HOUSTON	50	1017.3	1019.3	72	51	61.5	0.2	85	31	33	6	0	0	48	69	2.20	-0.47	1.76	5	2	0.0	0	2.1	12	35	31	5	4	12	15	6.7	62
LUBBOCK	3254	903.5	1014.8	72	39	55.7	6.1	88	31	16	5	0	7	24	36	0.13	-0.60	0.12	2	1	0.0	0	5.1	22	46	27	3	10	13	8	5.2	
MIDLAND	2851	916.4	1014.7	72	42	57.2	2.0	86	21+	20	5	0	5	27	41	0.41	0.05	0.41	1	2	0.0	0	4.8	19	35	26	3	18	3	10	4.1	
PORT ARTHUR	16	1019.0	1019.7	71	49	59.8	-1.3	84	31	29	6	0	1	49	74	0.65	-2.79	0.32	8	1	0.0	0	1.9	15	40	NW	5	4	14	13	6.5	58
SAN ANGELO	1903	949.9	1016.5	73	45	59.0	2.0	89	21	21	5	0	4	37	51	0.27	-0.66	0.24	3	2	0.0	0	5.3	20	36	29	3	14	4	13	4.8	
SAN ANTONIO	788	990.2	1018.5	71	49	60.0	-1.0	82	31	24	6	0	4	47	70	1.14	-0.53	0.70	9	3	0.0	0	2.6	10	39	N	22	6	7	18	6.7	58
VICTORIA	104	1014.9	1018.9	73	53	62.8	-0.4	85	31	34	6	0	0	51	72	0.39	-1.93	0.17	6	1	0.0	0	3.2	11	37Y	N	23	6	8	17	6.9	
WACO	500	1000.3	1018.7	67	44	55.6	-2.3	87	31	24	6	0	4	42	66	0.77	-1.58	0.33	5	3	0.0	0	3.7	18	35	33	22	10	8	13	5.6	
WICHITA FALLS	994	980.0	1016.8	72	43	57.1	3.3	92	31	22	6	1	5	37	52	1.76	0.22	1.64	4	4	0.0	0	5.2	20	43	31	22	14	5	12	5.1	
UTAH																																
MILFORD	5028			56	21	38.6	0.1	75	31	-14	4	0	26			0.42	-0.61	0.41	3		6.6	6						10	4	17	5.9	
SALT LAKE CITY	4220	872.7	1018.6	56	28	41.6	1.2	75	31	2	4	0	18	25	57	1.21	-0.35	0.92	7	1	17.4	11	0.3	20	41	N	21+	10	4	17	6.0	81
WENDOVER	4237			53	31	41.8	0.3	72	31	15	4	0	19			0.18	-0.21	0.12	4		0.9	1						14	6	11	4.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
VERMONT																																
BURLINGTON	332	1002.7	1015.7	38	22	30.3	3.6	56	18	6	16	0	24	21	68	2.63	0.52	1.05	12	1	8.3	10	1.8	23	35	NW	2	5	6	20	7.4	56
VIRGINIA																																
LYNCHBURG	916			59	35	47.0	1.5	83	22	19	8	0	12			0.74	- 2.87	0.39	7	1	T	T			27	NW	1	12	10	9	4.8	76
NORFOLK	22	1017.3	1018.5	58	38	47.9	- 0.1	82	23	25	17+	0	8	34	62	1.50	- 1.95	0.79	7	2	0.0	0	3.4	22	40	W	1	13	7	11	5.1	71
RICHMOND	162	1012.2	1018.3	59	36	47.5	- 0.2	83	22	22	9	0	12	31	56	0.94	- 2.48	0.38	7	0	0.0	0	2.6	24	34	SW	19	12	9	10	4.7	74
ROANOKE	1149	974.9	1017.6	59	35	46.7	1.2	82	22	17	9	0	13	26	49	0.43	- 3.10	0.28	7	0	T	0	4.2	27	46	29	1	12	10	9	5.1	
WASHINGTON																																
OLYMPIA	195	1009.5	1016.8	53	34	43.8	- 0.4	74	29	21	21	0	13	36	76	7.28	1.88	1.58	20	0	15.5	6	4.4	19	31	16	15	3	3	25	8.3	
SEATTLE TACOMA	400	1000.0	1016.6	52	38	45.1	1.3	70	29	29	2	0	5	36	73	4.38	0.59	0.93	16	0	5.5	1	3.7	19	38	21	15	2	3	26	8.3	49
SPOKANE	2356	932.6	1017.6	48	30	38.7	0.6	70	29	16	22	0	20	29	72	2.43	0.93	0.70	15	0	7.2	5	3.2	18	26	S	19+	7	10	14	6.4	55
STAMPEDE PASS R	3958			36	26	31.0	1.0	58	29	12	2	0	23			5.80	- 4.80	0.89	20		40.7	130						3	6	22	8.0	
TATOOSH ISLAND R	101	1011.5	1014.7	48	40	43.7	- 0.5	59	31	32	1	0	1	38	81	9.09	0.75	1.42	22	2	4.5	2	8.1	13	56	SW	7	2	4	25	8.7	49
WALLA WALLA U	949			57	38	47.5	1.5	77	29	25	4+	0	7			1.85	0.26	0.59	11		4.6	5			34	NW	14	8	6	17	6.5	56
YAKIMA	1052	978.7	1017.7	56	31	43.4	1.4	76	29	21	2	0	16	30	63	0.81	0.19	0.28	10	0	1.1	1	4.0	24	31	22	15	8	8	15	6.5	
WEST INDIES																																
SAN JUAN P.R.	15	1013.5	1016.0	84	72	78.1	2.8	92	31	67	2	3	0	68	74	4.63	2.43	2.84	14	1	0.0	0	7.3	8	25	NE	19+	4	18	9	6.3	69
SWAN ISLAND	28			82	75	78.7	- 1.3	85	31+	70	13+	0	0			3.09	2.46	1.50	8	0	0.0	0						2	16	13	6.8	
WEST VIRGINIA																																
BECKLEY	2504	927.9	1018.1	54	32	42.8		77	22	15	8	0	17	26	58	1.74		0.53	13	2	5.9	2	5.6	25	35	28	1	6	8	17	6.8	
CHARLESTON	939	982.7	1017.4	60	35	47.7	3.3	85	22	17	9	0	14	29	53	1.51	- 2.83	0.66	13	0	1.7	1	4.9	24	28	24	1	7	13	11	6.1	
ELKINS	1970	945.5	1017.7	55	27	40.9	1.4	79	23	10	9	0	24	28	65	1.44	- 2.70	0.40	16	0	8.1	1	4.2	28	30	26	1	5	7	19	7.2	
HUNTINGTON	827	987.1	1017.7	58	35	46.4	1.6	84	22	15	9	0	15	29	57	1.12	- 3.08	0.32	10	1	0.5	T	4.4	24	31	25	23	7	10	14	6.5	
PARKERSBURG U	615			57	34	45.5	2.8	83	22	18	8	0	14			1.26	- 2.27	0.45	9		0.7	T			36	W	1					56
WISCONSIN																																
GREEN BAY	682	988.5	1014.8	42	25	33.6	5.4	71	17	12	25+	0	23	25	73	2.46	1.12	0.91	14	4	4.5	2	2.2	31	37	NE	23	5	6	20	7.5	41
LA CROSSE	651	990.2	1015.2	47	27	37.3	6.8	74	17	12	7	0	22	28	72	3.31	1.24	1.64	11	4	2.5	1	1.4	22	28	32	23	6	9	16	6.9	
MADISON	858	982.7	1014.7	46	25	35.4	6.3	73	17	10	26+	0	23	27	74	2.11	0.27	0.73	17	3	5.5	3	2.2	25	35	NW	31	4	8	19	7.3	54
MILWAUKEE	672	989.8	1015.6	44	27	35.4	4.4	73	17	14	25+	0	21	29	78	3.61	1.30	1.57	15	3	2.8	1	2.7	25	36	SW	18	6	8	17	6.8	63
WYOMING																																
CASPER	5338	836.1	1016.2	49	23	36.2	4.1	73	30	- 2	5	0	25	16	48	0.49	- 0.54	0.33	5	0	9.2	5	11.0	26	54	27	16	8	9	14	6.1	
CHEYENNE	6126	810.0	1015.7	52	23	37.7	5.3	70	31+	5	4	0	25	12	38	0.12	- 1.09	0.06	4	0	1.1	T	10.5	31	60	N	3	12	7	12	5.6	77
LANDER	5563	827.6	1016.9	49	22	35.0	2.8	76	30	- 7	5	0	25	14	48	0.87	- 0.28	0.62	5	0	18.7	13	3.7	25	48	W	17	8	11	12	5.6	83
SHERIDAN	3964	878.1	1017.4	51	23	36.8	5.8	74	30	1	5	0	24	19	51	1.04	- 0.38	0.42	7	0	12.9	6	5.2	31	38	NW	17	8	10	13	6.1	74

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - **Station Pressure**" table of the annual issue of this publication.

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	997.0	1019.8	18.3	4.4	11.3	-1.2	27.8	21	- 5.6	8	0	8	2.8	60	96	- 57	45	10	6	T	0	0.8	25	13.4	W	23	10	10	11	5.2	73
HUNTSVILLE	183	995.9	1019.5	17.8	5.0	11.3	0.3	28.9	21	- 5.6	8	0	9	2.2	57	55	- 87	37	6	3	T	0	0.8	24	14.3	25	23	12	8	11	5.3	
MOBILE	64	1011.9	1019.9	20.6	9.4	14.9	-0.8	28.3	31	- 1.7	7	0	1	8.3	70	82	-102	24	9	4	0	0	0.4	16	13.9	20	3	8	11	12	6.1	
MONTGOMERY	59	1012.9	1020.1	19.4	6.7	13.0	-0.3	27.2	31+	- 2.8	7	0	5	5.0	62	108	- 48	47	9	6	0	0	0.4	26	13.0	W	5	12	6	13	5.4	66
ALASKA												B																				
ANCHORAGE PRK STRIP	26			- 3.3	-12.8	- 8.0	-3.2	8.3	30	-24.4	18+	0	31			7	- 6	4	6		79	457										
ANCHORAGE	43	998.6	1003.6	- 3.3	-13.3	- 8.5		5.6	30+	-26.1	18+	0	30	-14.4	60	11		5	8	0	132	508	1.7	36	14.8	2	6	9	4	18	6.6	52
ANNETTE	34	1002.7	1006.7	6.7	1.7	4.0	0.8	12.2	15	- 7.2	2	0	11	0.0	76	435	193	102	24	0	516	127	4.3	13	17.9	14	23	1	1	29	9.3	
BARROW	7	1023.0	1023.7	-26.7	-34.4	-30.5	-4.6	-10.6	5	-44.4	15	0	31	-34.4	69	5	2	3	5	0	56	432	1.1	4	10.7	8	30	12	7	12	5.1	
BARTER ISLAND	12	1020.3	1022.5	-27.2	-33.3	-30.2	-4.2	-11.1	6	-41.1	10+	0	31	-33.3	74	5	0	3	6	0	152	787	3.6	27	19.7	28	7+	12	5	14	5.9	
BETHEL	38	1006.4	1012.5	-14.4	-24.4	-19.5	-8.2	- 2.8	6	-37.2	21	0	31	-23.9	70	3	- 23	1	4	0	58	406	4.2	35	16.1	35	6	16	5	10	4.6	
COLD BAY	29	1005.1	1009.1	- 2.8	- 9.4	- 5.9	-4.1	2.2	1	-17.8	21	0	31	- 8.3	82	36	- 9	7	19	0	356	203	5.0	34	18.8	34	2	2	5	24	8.3	
FAIRBANKS	133	994.2	1012.3	-11.7	-26.7	-19.2	-6.3	7.2	30+	-38.9	13	0	31	-22.2	76	9	- 2	3	9	0	226	914	1.0	1	9.8	2	9	8	9	14	6.2	
JUNEAU	4	1004.7	1005.5	2.8	- 4.4	- 1.0	-0.1	8.3	28	-17.8	2	0	24	- 2.2	91	162	78	35	21	0	1245	737	3.2	11	15.6	12	25	3	2	26	8.8	28
KING SALMON	13	1004.1	1006.2	-10.0	-20.0	-15.1	-8.2	1.1	28+	-33.9	17	0	31	-18.9	69	21	- 4	5	14	0	251	330	3.1	36	20.1	6	24	12	6	13	5.4	
KOTZEBUE	3	1016.9	1017.6	-20.0	-28.9	-24.4	-5.5	- 6.7	28	-41.1	17+	0	31	-28.3	71	2	- 5	1	4	0	74	813	1.0	31	19.2	30	6	15	9	7	4.3	
MC GRATH	106	998.0	1011.6	-12.2	-27.2	-19.8	-6.7	3.9	29	-46.1	17	0	31	-26.1	54	3	- 21	2	3	0	107	787	1.9	1	12.5	35	6	11	7	13	5.3	
NOME	4	1014.9	1015.8	-13.9	-25.6	-19.5	-6.1	- 3.3	7	-41.1	15	0	31	-23.3	71	8	- 14	4	4	0	81	838	2.1	3	16.5	7	1	15	7	9	4.8	54
ST. PAUL ISLAND	7	1013.2	1014.3	- 2.8	- 8.3	- 5.7	-1.3	4.4	5	-16.7	31	0	31	- 8.3	82	42	15	21	19	0	414	381	5.0	36	20.6	35	21	2	3	26	8.8	
SHEMYA	37	1010.5	1014.4	1.7	- 2.2	- 0.3	-0.5	3.9	7	- 7.2	25	0	22	- 2.8	82	17	- 49	5	12	0	66	25	2.5	10	19.7	6	19+	0	9	22	8.6	
YAKUTAT	9	1001.0	1002.0	0.6	- 9.4	- 4.4	-4.1	4.4	31	-23.3	6+	0	30	- 5.6	87	299	78	60	21	0	1118	1397	3.0	11	15.6	14	28+	3	1	27	8.6	
ARIZONA																																
FLAGSTAFF	2131	787.0	1017.7	12.2	- 6.1	2.9	0.9	22.8	31	-26.7	4	0	30	- 7.8	52	24	- 13	19	4	1	188	178	0.4	19	13.9	23	2	9	9	13	5.9	
PHOENIX	340	974.9	1014.1	25.6	6.7	16.2	1.2	33.3	31	- 3.9	4	1	3	2.2	44	9	- 8	6	2	1	0	0	0.9	12	17.9Y	W	2	11	5	15	5.5	82
TUCSON	788	925.8	1013.7	23.9	7.2	15.6	1.2	29.4	31	- 4.4	4	0	3	- 1.7	36	5	- 9	3	3	1	0	0	0.9	16	15.6	E	24+	13	5	13	5.4	94
WINSLOW	1492	852.0	1017.7	17.8	- 1.7	8.0	0.4	26.1	31	-11.1	4	0	20	- 6.7	42	7	- 3	5	3	3	33	25	1.4	23	17.9	25	2	11	7	13	5.6	
YUMA	59	1006.8	1014.1	27.2	10.0	18.6	1.3	36.7	31	1.7	4+	4	0	0.6	34	2	- 5	1	2	0	0	0	1.0	35	16.5	W	2	11	10	10	4.9	89
ARKANSAS																																
FORT SMITH	137	1001.4	1018.3	18.9	3.9	11.4	0.8	31.7	31	- 7.2	7	0	7	1.7	56	30	- 58	8	5	3	T	0	0.7	28	15.6	W	5	9	10	12	5.9	65
LITTLE ROCK	78	1009.1	1019.0	19.4	5.6	12.6	1.6	30.6	31	- 4.4	7	0	5	2.2	54	19	-104	13	6	2	0	0	1.4	24	16.1	NW	22	11	9	11	4.9	70
TEXARKANA	113	1005.8	1019.0	20.0	6.7	13.5	0.8	31.1	31	- 3.9	7	0	4	3.3	56	19	-101	9	6	1	0	0	1.1	22				12	7	12	5.1	
CALIFORNIA																																
BAKERSFIELD	151	1000.7	1018.5	21.1	7.2	14.2	0.3	30.6	31	- 0.6	3	0	2	4.4	56	7	- 20	7	2	0	0	0	0.8	1	9.8	12	22	13	8	10	4.9	
BISHOP	1252			20.6	- 0.6	9.8	1.1	30.6	31	-11.1	4	0	17			T	- 14	T	0		0	0						11	7	13	5.4	
BLUE CANYON	1609			8.9	1.1	4.9	0.7	22.2	31	-10.0	3	0	13			111	-104	31	13		292	1524			11.2	7	22	11	5	15	5.7	
BURBANK	221	990.9	1016.0	22.8	9.4	16.1	1.7	35.6	31	2.8	4	1	0	5.6	59	11	- 44	11	2	1	0	0	0.8	15	13.0	33	16	8	9	14	5.8	
EUREKA U	13			12.2	6.1	8.9	-0.4	15.6	18+	- 0.6	3	0	3			167	34	31	17		25	25			18.8	SE	4	2	5	24	8.2	36
FRESNO	100	1006.4	1018.3	21.1	5.6	13.5	0.7	31.7	31	- 3.3	3	0	3	6.1	65	T	- 50	T	1	0	0	0	1.6	32	13.0	NW	1	11	11	9	4.9	86
LONG BEACH	10	1015.6	1016.9	20.6	10.0	15.1	1.3	29.4	31	2.8	3	0	0	7.8	69	12	- 23	10	3	0	0	0	0.7	25	11.6	28	1	8	10	13	6.3	
LOS ANGELES	30	1012.9	1016.6	18.3	10.0	14.2	0.3	25.6	23	3.9	4	0	0	6.7	69	12	- 33	9	3	0	0	0	1.7	27	19.2Y	W	2+	7	8	16	6.7	
LOS ANGELES U	82			21.7	11.1	16.3	1.1	32.2	31	5.6	4	1	0			13	- 44	13	3		0	0			8.5	NW	16	14	10	7	4.9	52
MT SHASTA R	1080			12.2	- 0.6	5.7	0.6	26.7	31	- 8.9	17+	0	17			66	- 48	19	16		170	51										
OAKLAND	2	1019.3	1019.5	16.1	9.4	12.8	0.8	23.9	31	1.7	3	0	0	6.7	70	12	- 49	8	6	0	0	0	2.1	29	11.6	31	2	6	12	13	6.4	
RED BLUFF	104	1005.4	1018.3	18.3	5.6	11.7	-0.6	30.6	31	- 3.3	4	0	4	3.9	65	18	- 51	10	7	0	0	0	0.6	21	14.3	S	8	12	7	12	5.3	69
SACRAMENTO	5	1018.0	1018.8	18.9	6.1	12.4	0.5	30.0	31	- 2.2	3+	0	3	5.6	70	4	- 56	2	3	0	0	0	1.3	24	11.2	N	22+	11	9	11	5.3	83
SANDBERG R	1377			13.9	4.4	9.1	1.9	26.7	31	- 6.1	2	0	7			2	- 35	2	2		15	T			20.6	34	16	11	6	14	5.9	
SAN DIEGO	4	1015.6	1016.6	18.3	10.6	14.5	-0.5	27.8	23	5.6	3	0	0	8.3	71	4	- 36	2	3	0	0	0	1.7	30	13.0	NW	2	9	9	13	5.9	71
SAN FRANCISCO	2	1019.3	1019.8	15.0	6.7	10.9	-0.9	24.4	31	- 0.6	3	0	1	5.6	73	15	- 53	9	10	0	0	0	2.5	29	16.1	WNW	20+	7	10	14	6.3	
SAN FRANCISCO U	16			15.6	8.9	12.1	-0.5	23.9	31	3.9	1	0	0			20	- 54	8	8		0	0			11.6	W	1					64
SANTA CATALINA	478			17.8	9.4	13.6	1.1	32.2	31	4.4	2	1	0			6	- 44	4	2	0	0	0						9	8	14	5.9	
SANTA MARIA	72			18.9	5.0	12.1	0.3	29.4	31	- 2.8	3	0	2			5	- 47	5	2		0	0						14	7	10	5.1	
STOCKTON	7	1018.3	1019.4	19.4	5.6	12.3	0.2	30.6	31	- 1.7	4+	0	4	5.6	68	5	- 47	3	4	0	0	0	2.1	30	11.2	29	1	11	11	9	5.2	
COLORADO																																
ALAMOSA	2297			11.1	-10.0	0.7	0.6	21.1	31	-21.1	5	0	31			3	- 4	2	2		84	51						13	9	9	4.8	
COLORADO SPRINGS	1873	809.0	1015.6	13.3	- 3.9	4.9	2.6	24.4	31	-13.9	4	0	22	-12.2	32	T	- 15	T	1	0	T	T	1.0	1	21.5	36	22	10	8	13	6.0	
DENVER	1610	834.4	1014.1	15.0	- 3.3	5.8	3.4	24.4	31	-13.9	3	0	23	- 8.3	43	8	- 23	5	5	1	71	25	0.8	22	18.8	NE	21+	7	13	11	5.8	86
GRAND JUNCTION	1480	852.7	1016.7	16.1	0.0	7.8	2.6	24.4	31	-10.6	4	0	16	- 7.2	39	1	- 18	1	2	0	8	T	0.1	8	15.6	SW	21	11	8	12	5.6	71
PUEBLO	1428	854.0	1014.4	17.2	- 3.9	6.7	2.2	28.9	31	-16.1	5	0	24	-11.7	28	1	- 12	1	2	0	13	T	0.5	33	25.0	N	22+	10	9	12	5.7	87

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1016.6	1017.4	6.7	- 1.7	2.6	-0.5	11.7	24	- 8.3	28	0	22	- 2.8	71	41	- 67	9	13	1	13	T	2.2	31	20.1	29	1	10	8	13	5.8	
HARTFORD	52	1009.5	1016.3	8.9	- 0.6	3.9	1.7	18.3	18	- 7.8	28	0	17	- 2.8	66	80	- 17	33	9	1	269	254	1.7	32	14.3	NW	2	8	7	16	6.5	65
NEW HAVEN	2			7.8	- 0.6	3.8	1.1	12.8	24	- 7.2	28	0	18			45	- 73	12	12		74	51			15.2	W	1	11	6	14	5.8	62
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.6	1017.8	15.0	2.8	8.6	1.5	27.8	22	- 4.4	9+	0	10	- 0.6	57	21	- 82	15	5	1	T	T	1.4	28	13.4	27	1	8	10	13	6.2	
DELAWARE																																
WILMINGTON	24	1014.6	1017.7	11.7	0.6	6.1	0.9	21.1	22	- 6.1	28	0	16	- 1.7	63	37	- 45	22	7	0	T	0	1.1	29	17.0	W	1	9	10	12	5.8	62
FLORIDA																																
APALACHICOLA U	4			18.9	11.1	15.1	-1.1	25.6	31	3.9	8	0	0			34	- 81	20	5	1	0	0			11.6	W	5	12	10	9	4.8	71
DAYTONA BEACH	9	1018.6	1020.0	22.2	11.1	16.6	-1.1	30.0	4	2.2	7	0	0	9.4	66	9	- 81	4	6	1	0	0	0.8	35	13.0	26	5	13	9	9	4.7	
FORT MYERS	5	1019.0	1019.2	25.6	13.9	19.6	-0.6	30.0	3	6.1	8	0	0	13.9	74	9	- 57	5	3	0	0	0	1.5	3	12.5	23	5	13	8	10	5.2	
JACKSONVILLE	6	1019.0	1020.0	21.7	8.9	15.2	-1.6	28.3	31+	- 1.1	7	0	2	7.8	66	18	- 71	13	5	2	0	0	0.6	33	14.3	SW	5	11	11	9	5.0	82
KEY WEST	1	1017.6	1018.1	23.9	18.9	21.6	-0.9	26.7	4+	14.4	8	0	0	16.1	73	34	- 11	15	6	1	0	0	3.1	6	11.6	E	23+	8	15	8	5.6	70
LAKELAND U	65			23.3	12.8	17.8	-1.4	29.4	4	5.0	8+	0	0			46	- 62	38	5	3	0	0						12	11	8	4.6	85
MIAMI	2	1018.3	1018.5	25.0	16.1	20.7	-0.7	27.8	5+	8.3	8	0	0	14.4	70	83	25	53	8	2	0	0	1.9	7	20.6	4	29	7	14	10	6.2	
ORLANDO	33	1015.6	1019.7	23.3	12.2	18.0	-0.8	29.4	4	4.4	7	0	0	10.6	67	65	- 21	41	5	2	0	0	1.0	1	11.2	30	5	13	9	9	4.8	
PENSACOLA	34	1015.9	1020.2	19.4	9.4	14.7	-1.4	26.7	31	0.0	7	0	1	8.3	68	46	-107	27	10		0	0	0.6	16	14.3	NW	4					64
TALLAHASSEE	17	1018.0	1020.2	21.7	8.3	14.8	-1.1	29.4	31	- 2.2	7	0	2	7.8	68	82	- 49	68	6	3	0	0	0.4	33	10.3	24	5	10	11	10	5.4	
TAMPA	6	1019.3	1019.4	22.8	11.7	17.3	-1.6	27.2	22+	3.3	8	0	0	10.6	69	29	- 66	13	3	1	0	0	1.1	3	10.3	19	4	14	9	8	4.7	79
WEST PALM BEACH	5	1018.0	1018.7	25.0	15.0	20.1	-1.0	28.3	4	6.1	8	0	0	13.3	68	60	- 27	41	6	0	0	0	1.8	7	10.7	7	17+	6	13	12	6.2	
GEORGIA																																
ATHENS	244	990.5	1019.8	17.2	3.9	10.6	-0.3	26.7	22	- 4.4	8+	0	9	1.1	57	120	- 9	95	6	2	0	0	1.3	27	15.6	34	4	16	6	9	4.5	
ATLANTA	308	982.4	1019.5	16.1	3.9	10.1	-0.7	25.6	21	- 6.1	7	0	10	1.1	59	102	- 34	55	8	3	T	T	0.8	26	13.4	NE	14	14	6	11	4.6	72
AUGUSTA	44	1014.2	1019.4	19.4	3.3	11.4	-1.3	27.2	22+	- 5.0	9	0	10	1.7	58	95	- 11	74	5	2	0	0	1.2	27	11.2	29	24	15	6	10	4.6	
COLUMBUS	117			19.4	5.0	12.2	-0.7	26.1	31+	- 4.4	7	0	6	3.9	63	185	33	135	9		0	0	0.4	29	10.3	30	4	12	8	11	5.2	
MACON	108	1007.1	1020.2	18.9	5.0	11.9	-1.9	27.8	21	- 3.9	7	0	8	3.3	63	128	3	84	8	2	0	0	0.9	29	13.9	W	5	14	6	11	4.7	74
ROME	194			18.3	2.2	10.1	-0.2	28.3	21	- 6.7	9	0	14			120	- 29	95	9		0	0										
SAVANNAH	14	1018.0	1019.9	20.6	6.1	13.1	-1.5	28.9	21	- 3.3	7	0	4	5.0	64	96	- 5	57	6	2	0	0	[illegible].7	27	12.1	NW	31	15	6	10	4.7	69
HAWAII																																
HILO	9	1015.2	1016.5	26.1	17.8	22.0	0.6	28.9	28+	15.6	8+	0	0	17.2	76	142	-231	35	20	1	0	0	0.2	1	14.3	35	30	1	11	19	7.5	31
HONOLULU	2	1015.6	1016.2	28.3	19.4	24.0	1.3	30.0	19+	16.7	5	0	0	16.1	63	10	- 64	8	6	0	0	0	2.4	4	12.1	N	30	10	11	10	5.4	80
KAHULUI	15	1013.9	1016.1	26.7	17.8	22.2	-0.1	30.6	27+	13.3	5	0	0			19	- 37	10	8	0	0	0	3.3	6	13.4	NE	19	11	14	6	5.2	77
LIHUE	31	1012.2	1017.2	24.4	17.8	21.3	-0.4	27.8	9	15.0	8+	0	0	16.7	79	12	-103	8	9	0	0	0	2.5	5	11.6	NW	30	5	18	8	5.8	63
IDAHO																																
BOISE	865	917.4	1018.9	12.8	- 0.6	6.2	0.8	25.6	30	-10.0	3	0	17	- 3.3	55	15	- 18	4	8	1	5	T	1.6	14	14.3	W	21	13	5	13	5.5	76
IDAHO FALLS 42NW R	1460			8.9	- 8.9	- 0.2	1.3	22.2	30	-21.1	4	0	31			2	- 9	2	2						17.0	SW	19					
IDAHO FALLS 46W R	1503			8.9	- 7.2	0.8	1.9	21.1	31+	-22.8	4	0	29			6	- 10	4	6		30	T	1.7	24	15.6	WSW	19					
LEWISTON	431			12.8	0.6	6.5	0.6	23.3	29	- 7.2	2	0	13			25	- 5	6	9		51	25						7	8	16	6.5	
POCATELLO	1358	864.2	1019.7	10.6	- 5.0	2.8	0.7	21.7	30	-13.9	4	0	29	- 6.1	58	11	- 15	5	7	0	38	T	2.4	22	18.3	SW	19	10	7	14	5.7	70
ILLINOIS																																
CAIRO U	96			15.6	5.0	10.3	1.3	27.2	21	- 5.0	7	0	7			28	- 93	19	7		T	0			17.4	SW	21	9	8	14	5.5	66
CHICAGO O HARE	201	990.5	1015.4	9.4	- 1.1	4.2	2.7	24.4	17	- 8.9	25	0	21	- 2.2	66	67	- 1	19	14	2	18	25	1.6	24	15.6	24	23	3	10	18	7.3	
CHICAGO MIDWAY	185	992.9		9.4	0.0	4.6	2.2	22.8	17	- 7.8	25+	0	16	- 2.8	62	66	- 4	31	16	3	97	51	2.0	23	16.5	SW	23	4	9	18	7.3	53
MOLINE	177	992.9	1015.0	10.0	- 1.7	4.0	2.1	23.9	17	-10.0	7	0	20	- 2.2	67	22	- 39	10	9	3	18	T	1.7	23	21.0	NW	31	3	6	22	7.5	39
PEORIA	199	991.5	1016.1	10.6	- 1.1	4.8	1.7	23.3	21+	-10.6	7	0	18	- 1.1	68	45	- 27	22	10	1	20	25	1.9	22	20.1	W	23	4	5	22	7.5	50
ROCKFORD	221	987.1	1014.8	8.9	- 2.2	3.1	2.0	22.8	17	-10.0	25+	0	23	- 2.8	67	70	7	24	12	3	25	T	1.1	22	13.0	26	18	4	9	18	7.1	
SPRINGFIELD	179	993.6	1016.0	11.7	0.6	6.2	1.6	25.0	21	- 8.3	7	0	16	0.6	71	26	- 47	11	11	2	89	25	2.7	21	18.8	W	23	5	11	15	6.9	52
INDIANA																																
EVANSVILLE	116	1003.7	1018.1	15.0	1.1	8.1	0.7	27.8	21	- 8.3	8	0	15	1.1	64	34	- 75	17	8	0	20	25	2.1	25	13.0	S	22	8	6	17	6.4	61
FORT WAYNE	241	985.8	1016.3	9.4	- 1.1	4.1	1.7	22.2	22	- 8.3	8	0	21	- 0.6	73	47	- 23	22	13	2	33	25	2.2	24	16.1	SW	23	3	11	17	7.2	58
INDIANAPOLIS	241	987.1	1016.9	12.8	0.0	6.3	2.4	25.0	22+	- 8.9	7+	0	17	- 1.1	63	33	- 53	10	11	1	20	25	1.7	23	18.8	SW	23	5	9	17	6.9	52
SOUTH BEND	236	987.1	1015.7	8.9	- 1.1	3.9	2.3	22.2	17	-11.7	8	0	19	- 2.8	64	66	- 4	16	18	2	290	127	2.3	23	15.6	23	23	5	7	19	7.5	
IOWA																																
BURLINGTON	212			11.1	- 0.6	5.3	2.4	24.4	31	-10.6	7	0	17	0.6	74	5[illegible]	- 15		9	4	46		1.6	25	15.6	33	31	6	4	21	7.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1 6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32 2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	979.3	1014.9	11.1	- 1.1	5.0	4.0	25.6	31	-13.3	7+	0	16	- 0.6	73	40	- 13	14	10	6	46	25	0.8	28	21.0	NW	23	7	8	16	7.0	62
DUBUQUE	325			8.3	- 2.2	3.0	3.1	22.8	17	-12.2	25	0	20			140	70	36	14		84	51						4	8	19	7.3	
SIOUX CITY	334	973.9	1014.5	11.1	- 2.2	4.6	3.9	26.7	16	-15.6	7	0	17	- 2.2	66	45	8	31	5	3	333	178	1.5	30	21.9	NW	31	8	7	16	6.4	78
WATERLOO	265	981.7	1014.1	10.0	- 2.2	3.7	3.7	23.3	17	-12.2	7	0	21	- 1.1	76	86	34	49	10	4	43	25	0.6	26	17.9	33	31	5	6	20	7.2	
KANSAS																																
CONCORDIA	448	961.4	1015.0	15.0	- 0.6	7.4	3.1	29.4	31	-11.1	24	0	17	- 1.7	57	8	- 30	8	1	1	53	51	1.6	26	21.9	NW	22	11	9	11	5.2	75
DODGE CITY	787	923.5	1014.9	17.2	0.6	8.9	3.4	29.4	31	-10.6	24+	0	14	- 3.9	48	1	- 29	1	1	0	5	T	1.3	26	26.8	NW	22	9	9	13	5.5	84
GOODLAND	1111	886.9	1015.3	15.0	- 2.8	6.0	3.5	26.7	16	-12.8	6	0	22	- 5.6	52	13	- 14	13	2	0	178	152	2.5	29	24.6	32	4	12	8	11	5.0	
TOPEKA	267	983.4	1015.6	16.7	0.0	8.3	2.9	31.1	31	-10.6	7	0	17	- 1.7	53	3	- 49	2	3	2	T	T	2.1	26	20.1	S	17	10	11	10	5.5	73
WICHITA	403	967.5	1015.9	16.7	2.2	9.5	2.6	30.6	31	- 9.4	24	0	13	0.0	55	7	- 35	7	1	1	T	T	1.6	23	24.1	NW	5	11	12	8	5.2	83
KENTUCKY																																
COVINGTON	265	985.1	1017.3	11.7	0.0	6.1	1.3	24.4	22	- 8.9	8+	0	16	- 1.7	60	31	- 65	11	12	2	30	25	2.3	24	14.3	23	23	7	7	17	7.1	
LEXINGTON	294	982.4	1018.3	13.3	1.1	7.0	0.8	26.1	22	- 8.3	7	0	13	- 1.1	61	25	- 96	10	7	2	30	25	2.3	23	11.2	29	19+	9	5	17	6.4	
LOUISVILLE	144	1000.0	1017.9	13.9	1.7	7.8	1.6	25.6	22	- 8.3	8	0	11	0.0	61	26	- 91	7	9	2	33	25	1.8	25	13.9	W	19	6	7	18	6.8	69
LOUISIANA																																
ALEXANDRIA	28	1015.6	1019.7	20.6	6.7	13.7	-1.0	30.0	31	- 3.3	7	0	6	7.2	70	25	-101	19	6	2	0	0	0.4	23	11.2	31	5	7	9	15	6.3	
BATON ROUGE	20	1017.3	1019.9	20.6	8.9	14.9	-1.1	27.8	31	- 0.6	7	0	1	7.2	66	50	- 75	37	6	1	0	0	0.2	19	10.3	28	5	8	7	16	6.5	
LAKE CHARLES	4	1019.0	1019.9	21.1	10.0	15.6	-1.1	28.3	31	0.6	6	0	0	8.9	70	19	- 89	7	4	0	T	0	0.6	15	11.2	31	5	7	10	14	6.3	
NEW ORLEANS	1	1018.6	1019.5	20.0	10.0	15.0	-1.3	27.2	31	- 1.1	7	0	1	8.9	70	48	- 87	24	6	3	0	0	0.4	7	12.5	29	5	9	5	17	6.2	
SHREVEPORT	77	1009.8	1018.9	21.1	7.8	14.5	0.8	31.7	31	- 2.2	7	0	2	5.0	58	14	- 91	9	6	0	0	0	1.2	21	16.5	33	23	12	7	12	5.6	67
MAINE																																
CARIBOU	190			2.2	- 6.7	- 2.1	3.0	9.4	23	-16.7	11+	0	26			66	6	19	19		272	559						4	7	20	7.6	
PORTLAND	19	1012.9	1015.3	4.4	- 3.9	0.4	0.7	9.4	22	-11.1	29	0	26	- 5.0	69	96	- 14	41	11	1	71	559	1.2	29	13.4	W	1	9	7	15	6.2	68
MARYLAND																																
BALTIMORE	45	1012.2	1017.8	12.8	0.0	6.3	0.1	26.7	22	- 7.8	9	0	17	- 3.3	55	24	- 73	17	7	0	0	0	1.4	30	20.1	NW	1	8	13	10	5.7	68
MASSACHUSETTS																																
BLUE HILL OBS R	192			7.8	- 2.2	2.8	1.3	18.3	18	- 9.4	29+	0	22			52	- 64	17	10		122	127			28.6	WNW	1					57
BOSTON	5	1014.9	1016.0	8.3	0.6	4.3	1.2	18.9	19	- 5.6	28	0	15	- 3.9	60	50	- 57	14	12	0	84	76	2.1	29	20.1	W	2	9	9	13	5.9	61
NANTUCKET	13	1015.9	1016.1	6.7	- 1.7	2.4	0.2	10.6	24+	- 8.9	17	0	20	- 1.1	78	43	- 72	20	11	0	43	51	1.7	24	15.6	SE	25	10	9	12	5.7	62
PITTSFIELD	357			5.0	- 5.6	- 0.1	0.6	18.3	18	-14.4	9	0	26			74	- 8	26	14		386	305										
WORCESTER	301	977.7	1015.7	6.1	- 3.3	1.2	0.8	16.7	18	-11.1	28	0	23	- 6.1	61	64	- 40	19	12	0	147	152	2.7	29	20.6	29	2	9	8	14	5.9	
MICHIGAN																																
ALPENA	210	988.8	1014.9	4.4	- 4.4	0.0	3.5	19.4	17	-18.9	8	0	28	- 6.7	65	71	20	19	16	1	251	76	0.4	24	13.0	SW	18	3	6	22	8.0	41
DETROIT	189	992.9	1016.1	8.3	- 1.1	3.5	1.9	19.4	17	- 7.8	7	0	19	- 3.9	62	56	- 5	17	16	2	66	25	2.0	25	20.6	W	1	6	8	17	6.8	50
DETROIT M WAYNE CO	193	991.5	1016.1	8.3	- 2.8	2.8	1.2	20.0	17	-10.0	8	0	23	- 2.8	71	67	5	27	16	3	64	25	1.7	24				5	10	16	6.9	
DETROIT WILLOW RUN	217	987.5	1016.4	8.3	- 2.8	2.7	0.8	20.0	17	- 9.4	27+	0	24	- 3.9	65	43	- 18	14	16	3	76	51	2.0	24	19.7	25	18	5	11	15	6.8	
FLINT	235	986.8	1015.4	7.2	- 2.2	2.7	3.4	20.0	17	-12.2	8	0	20	- 3.9	66	60	6	22	14	3	79	51	2.1	24	13.4	25	23	3	11	17	7.4	
GRAND RAPIDS	239	985.4	1015.2	7.8	- 2.2	2.8	2.4	22.8	17	-10.0	8	0	24	- 1.7	74	67	9	16	16	4	117	127	1.4	24	18.8	SW	18	4	8	19	7.5	50
HOUGHTON LAKE	351	971.9	1015.1	5.0	- 5.0	- 0.1		19.4	17	-19.4	8	0	24	- 4.4	73	58		15	14	2	234	102	0.8	25	10.3	22	23	3	4	24	8.0	
LANSING	256	983.1	1015.7	7.8	- 2.2	2.6	2.4	21.7	17	-10.6	8	0	23	- 2.2	73	61	0	24	17	3	28	102	2.0	24	17.0	SW	23	5	7	19	7.4	48
MARQUETTE U	206			3.3	- 3.9	- 0.2	2.7	18.3	17	-11.7	24	0	27			113	65	31	18		800	432			13.9	S	8	1	8	22	8.4	42
MUSKEGON	191	991.9	1015.3	7.2	- 1.7	2.7	2.2	21.1	17	-11.7	8	0	22	- 2.2	72	81	29	23	17	4	447	102	1.1	22	14.3	19	23	4	9	18	7.6	
SAULT STE MARIE	220	987.5	1014.9	1.7	- 5.6	- 2.0	2.6	9.4	22	-15.0	8	0	29	- 6.1	75	68	22	24	19	0	236	76	0.6	3	13.0	30	1	2	4	25	8.5	47
MINNESOTA																																
DULUTH	435	962.1	1015.1	1.7	- 7.2	- 2.7	3.2	9.4	17	-21.1	26	0	29	- 7.2	72	98	56	27	10	1	622	737	1.3	4	25.5	NE	3	6	5	20	7.1	50
INTERNATIONAL FALLS	359	971.6	1016.1	2.2	- 8.9	- 3.6	3.4	10.0	17	-30.0	7	0	30	- 9.4	64	78	52	44	10	0	625	965	1.1	4	13.4	3	4	9	6	16	6.6	
MINNEAPOLIS	254	983.1	1014.3	7.2	- 2.8	2.1	4.7	21.7	17	-14.4	7	0	23	- 2.8	73	63	24	36	9	5	361	356	0.1	1	17.9	N	23	8	4	19	6.9	47
ROCHESTER	395	965.5	1014.4	5.6	- 3.3	1.1	3.4	17.8	17+	-16.1	26	0	22	- 2.8	77	84	43	52	8	5	310	279	1.1	22	17.4	33	31	4	5	22	7.6	
ST CLOUD	315	975.3	1014.1	5.6	- 4.4	0.5	4.1	18.3	17	-17.8	7	0	24		72	39	6	23	10		112	51						8	4	19	7.1	
MISSISSIPPI																																
JACKSON	94	1007.8	1019.8	20.0	5.6	12.6	-1.0	28.9	31+	- 6.1	7	0	8	5.0	66	52	- 94	34	7	1	0	0	0.4	19	20.1	NW	3	9	10	12	5.5	73
MERIDIAN	88	1008.8	1020.0	19.4	5.0	12.2	-1.4	28.9	31	- 6.7	7	0	8	5.0	66	86	- 75	34	8	6	0	0	0.4	24	9.4	32	5	11	5	15	5.5	
VICKSBURG U	71			18.9	8.9	14.0	-0.2	28.3	31	0.6	8+	0	0			16	-130	7	8		0	0			13.0	NW	5	14	6	11	4.5	84

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M p.s.		M.p.s							%
MISSOURI																																
COLUMBIA	237	987.1	1015.7	15.0	2.2	8.6	3.1	28.3	31	-10.0	7+	0	11	- 0.6	57	21	- 46	6	7	2	20	25	2.1	23	19.2	SE	3	6	9	16	6.6	78
KANSAS CITY	226	988.2	1015.4	16.7	2.8	9.5	3.2	30.6	31	- 9.4	6	0	12	- 1.1	53	48	- 15	20	9	5	89	76	2.0	25	14.8	NW	23	8	12	11	6.0	62
SAINT JOSEPH	247			18.3	1.1	9.6	5.0	32.2	31	-13.3	7	1	13	- 2.2	53	7	- 52	3	5	1	10	T	2.0	26	19.7	32	23	12	5	14	5.8	
ST LOUIS	163	996.3	1016.9	14.4	1.7	8.2	2.3	28.3	21	- 9.4	7+	0	11	- 0.6	59	28	- 51	13	5	1	23	25	2.1	22	15.6	SW	23	6	10	15	6.8	58
SPRINGFIELD	386	971.2	1017.1	16.7	1.7	9.1	2.4	27.2	31	-10.0	7	0	14	0.0	56	35	- 37	21	7	2	T	T	2.1	23	16.1	W	23	8	12	11	5.7	63
MONTANA																																
BILLINGS	1087	890.6	1017.0	8.9	- 3.3	2.8	1.9	24.4	30	-20.6	5	0	21	- 7.8	52	40	13	23	7	0	439	356	2.2	27	17.0	NW	19	6	12	13	6.5	73
GLASGOW	696			6.7	- 6.7	0.0	2.9	23.9	30	-23.9	5	0	27			3	- 12	2	2		71	178						7	11	13	6.6	
GREAT FALLS	1116	887.2	1017.1	8.9	- 3.9	2.4	3.2	22.2	29	-25.0	4	0	20	- 6.7	55	20	- 3	11	7	0	196	152	3.9	24	18.3	W	19	4	11	16	7.0	84
HAVRE	787			7.8	- 6.1	0.7	3.5	23.9	29	-26.7	4	0	27			12	- 3	9	7		147	178			15.6	SW	30+	6	10	15	6.6	66
HELENA	1167	880.8	1018.6	10.0	- 5.0	2.5	2.8	23.3	30	-18.9	4	0	27	- 7.2	54	7	- 11	4	6	0	58	25	2.2	26	15.2	W	19	5	7	19	6.8	68
KALISPELL	904	912.0	1019.0	6.7	- 6.1	0.3	0.4	21.7	30	-26.7	4	0	30	- 5.0	72	20	- 4	7	9	1	48	356	0.8	18	13.0	24	19	5	8	18	7.2	
MILES CITY	801	922.1	1017.1	8.3	- 5.0	1.7	2.3	25.0	30	-21.7	5	0	25	- 5.6	64	20	3		5	0	102		1.4	30								
MISSOULA	972	905.5	1020.2	8.3	- 4.4	1.8	0.9	21.1	30	-15.6	22	0	29	- 5.0	67	22	3	8	10	0	229	102	0.7	28	17.0	NW	14	7	7	17	6.7	61
NEBRASKA																																
GRAND ISLAND	561	947.9	1015.2	13.3	- 2.2	5.6	3.6	26.7	31+	-12.8	6	0	18	- 2.8	61	15	- 18	10	3	0	104	51	2.1	30	23.2	35	22	10	11	10	5.4	
LINCOLN U	351			12.8	0.0	6.2	2.8	26.7	31	-11.7	7+	0	15			18	- 26	9	6		91	25			18.8	NW	22+	7	11	13	6.1	73
NORFOLK	471			10.6	- 3.3	3.5	2.8	24.4	16+	-16.7	7	0	23			30	- 11	28	4		282	254						8	11	12	5.8	
NORTH PLATTE	846	915.7	1015.0	12.2	- 5.0	3.6	1.9	25.0	31+	-17.8	24	0	26	- 4.4	63	28	4	28	2	1	244	229	2.0	33	23.2	NW	4	11	6	14	5.6	78
OMAHA	298	979.0	1014.8	13.9	0.0	6.7	4.0	27.8	31	-13.9	7	0	15	- 1.7	60	22	- 14	20	4	1	211	102	1.5	30	22.4	N	23	6	12	13	6.4	69
SCOTTSBLUFF	1206	878.1	1015.9	13.3	- 3.3	4.8	2.9	25.0	30	-12.2	6+	0	24	- 6.1	55	4	- 18	2	3	0	58	25	3.1	32	24.1	32	3	9	8	14	6.0	
VALENTINE	789			10.0	- 5.0	2.7	3.1	26.1	16	-19.4	6	0	24			10	- 16	5	6		74	76			25.0	N	4+	10	9	12	5.6	77
NEVADA																																
ELKO	1539	845.9	1019.2	12.2	- 5.6	3.3	1.3	25.0	31	-18.9	4	0	30	- 6.1	57	7	- 14	4	6	0	66	25	0.7	29	14.3	24	19	13	5	13	5.2	
ELY	1906	808.7	1017.5	12.2	- 6.7	2.6	1.8	22.8	31	-22.8	4	0	30	-11.1	42	4	- 18	4	1	0	41	51	1.4	21	15.6	SW	16	8	5	18	6.1	75
LAS VEGAS	659	938.7	1015.4	22.2	6.7	14.4	1.7	32.8	31	- 3.9	4	1	3	- 6.7	26	1	- 8	1	1	0	0	0	1.2	25	23.2	SW	1	7	9	15	6.5	82
RENO	1342	866.6	1017.3	17.2	- 4.4	6.3	1.1	28.3	31	-11.1	17+	0	28	- 7.2	41	1	- 16	1	1	0	10	T	0.9	24	17.9	SW	19	13	8	10	4.7	90
WINNEMUCCA	1310	868.3	1018.0	13.9	- 5.0	4.6	1.2	26.1	31+	-14.4	2	0	27	- 7.2	48	10	- 11	6	4	0	51	51	0.4	18	15.6	NW	16	11	4	16	5.8	62
NEW HAMPSHIRE																																
CONCORD	104	1003.1	1016.0	7.2	- 4.4	1.4	1.6	17.8	18	-13.3	17+	0	23	- 4.4	68	56	- 27	17	11	0	94	305	1.7	30	17.0	W	2	9	10	12	6.0	65
MT WASHINGTON OBS	1909			- 5.6	-14.4	- 9.9	1.3	5.0	23	-26.7	29+	0	31			132	- 14	33	17	0	747	305			71.5Y	W	2	4	9	18	7.4	32
NEW JERSEY																																
ATLANTIC CITY	20	1015.2	1017.8	11.7	- 1.1	5.2	0.2	17.8	19+	- 8.3	17+	0	17	- 1.7	66	18	- 82	6	9	0	T	0	1.7	27	15.6	29	1	9	9	13	5.7	60
ATLANTIC CITY U	3			9.4	2.8	5.9	0.8	15.6	19	- 3.9	28	0	9			17	- 85	6	8						21.0	WNW	1					
NEWARK	3	1016.3	1017.2	10.0	1.1	5.4	0.1	18.9	18	- 5.6	28	0	13	- 3.3	58	28	- 75	8	11	1	T	T	1.8	29	17.9	27	1	10	8	13	5.6	
TRENTON U	17			10.6	1.1	5.9	1.1	21.1	24	- 4.4	28	0	12			30	- 68	15	9	0	T	T			16.1	NW	1	12	7	12	5.4	69
NEW MEXICO																																
ALBUQUERQUE	1618	838.1	1016.1	16.7	- 1.1	7.6	-0.1	25.6	31	-12.8	5	0	20	- 9.4	32	T	- 12	T	0	0	0	0	0.8	32	20.1	NW	2	11	12	8	4.6	90
CLAYTON	1515			16.7	- 1.7	7.4	2.5	26.7	31	-12.8	4	0	18			T	- 16	T	1		15	T						13	9	9	4.9	
RATON	1944			16.1	- 5.6	5.1	1.7	26.1	31	-17.8	5	0	29			T	- 13	T	0		T	T						11	7	13	5.7	
ROSWELL	1102			22.2	- 0.6	10.9	1.2	30.6	31	- 9.4	5	0	16			6	- 6	6	1	1	T	0			21.5	NW	22	14	6	11	5.0	56
SILVER CITY	1638			18.3	0.6	9.3	0.3	24.4	31	-11.7	4	0	10			1	- 11	1	1		5	T						15	10	6	4.2	
NEW YORK																																
ALBANY	84	1005.8	1016.9	6.7	- 3.9	1.3	0.7	18.3	18	-11.1	28+	0	25	- 5.6	62	92	23	25	12	2	234	178	2.1	27	18.3	NW	2+	3	11	17	7.5	50
BINGHAMTON	485	956.0	1016.3	4.4	- 3.3	0.7	1.1	19.4	18	-11.1	9+	0	25	- 4.4	73	73	- 1	17	18	3	297	102	2.0	26	18.8	W	1	5	6	20	7.4	54
BUFFALO	215	989.8	1016.1	6.1	- 2.8	1.5	1.8	25.6	23	-11.7	27	0	26	- 3.3	76	71	- 12	16	17	2	290	76	3.2	25	19.2	SW	19	5	9	17	7.3	49
NEW YORK U	40	1012.9	1016.3	10.0	1.7	5.9	1.2	19.4	18	- 4.4	28	0	10	- 3.9	54	24	- 78	8	10	1	T	0	1.1	29	15.2	NW	1	10	11	10	5.1	61
J.F. KENNEDY	5	1016.3	1017.1	10.0	1.1	5.5	1.8	13.9	24+	- 4.4	28	0	11	- 1.7	65	34	- 71	16	11	1	T	0	1.4	29	18.3	30	1	10	9	12	5.7	
NEW YORK LA GUARDIA	3	1015.2	1017.2	8.9	2.2	5.6	0.7	16.1	18	- 3.3	28	0	9	- 2.2	62	22	- 85	8	10	0	T	0	1.5	32	17.9	W	1	8	9	14	6.1	
ROCHESTER	167	996.3	1016.9	7.8	- 2.2	2.6	2.4	26.1	23	-15.6	27	0	22	- 3.3	68	36	- 40	8	13	0	157	51	2.6	25	17.9	SW	19+	6	11	14	6.9	52
SYRACUSE	125	1000.7	1016.1	6.1	- 3.3	1.3	1.0	22.2	23+	-12.8	28	0	23	- 4.4	67	58	- 34	15	14	0	198	127	1.9	29	18.8	W	1	4	11	16	7.2	58
NORTH CAROLINA																																
ASHEVILLE	652	941.4	1018.6	13.9	- 1.1	6.4	-0.6	23.9	22	- 9.4	9	0	19	- 1.1	66	66	- 57	46	9	1	5	T	1.1	34	14.3	34	1	15	6	10	4.4	79
CAPE HATTERAS R	2	1018.6	1018.9	14.4	5.0	9.7	-0.9	22.2	24+	- 1.7	28	0	5	3.9	70	59	- 47	38	6	2	0	0	0.9	30	20.6	NE	16	13	6	12	5.2	71
CHARLOTTE	224	990.9	1018.6	17.2	3.3	10.1	0.1	27.8	22	- 6.1	7	0	10	- 0.6	52	54	- 57	49	4	1	0	0	1.1	26	14.8	SW	5	16	7	8	4.0	86

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M p s		M p s							%
NORTH CAROLINA																																
GREENSBORO	273	986.5	1018.6	16.7	2.2	9.3	0.7	27.8	22	- 6.7	29+	0	12	- 0.6	56	39	- 55	32	4	1	0	0	1.5	25	12.1	SW	19	13	9	9	4.8	75
RALEIGH	132	1002.4	1018.4	17.2	2.8	9.8	0.1	28.9	22	- 6.7	29+	0	9	- 1.1	50	46	- 39	38	4	2	0	0	1.4	26	12.5	32	31+	16	7	8	4.2	81
WILMINGTON	9	1018.0	1019.3	18.3	5.6	11.8	-0.5	27.8	22	- 1.1	9	0	4	3.3	61	73	- 29	40	5	2	0	0	0.9	26	13.4	SW	24	17	5	9	4.3	80
NORTH DAKOTA																																
BISMARCK	502	955.0	1016.2	6.7	- 5.6	0.6	3.8	23.9	30	-23.9	6	0	28	- 6.7	62	47	27	32	4	0	577	457	2.3	35	23.2	NW	4	5	12	14	6.7	73
FARGO	273	981.7	1015.4	3.3	- 5.6	- 1.3	3.0	15.6	30	-27.8	7	0	26	- 3.9	82	49	30	26	6	0	391	381	1.9	1	19.7	N	5	6	7	18	6.9	50
WILLISTON	579			7.8	- 6.7	0.4	4.7	23.9	30	-17.8	5	0	27			T	- 18	T	1		T	102			22.4	N	4	8	10	13	6.2	68
OHIO																																
AKRON	368	971.6	1017.0	9.4	- 2.2	3.7	1.0	23.9	23	-12.8	8	0	22	- 2.2	68	50	- 35	11	18	2	102	25	2.2	23	14.3	23	23	3	12	16	6.9	
CINCINNATI OBS	232			12.8	1.7	7.2	1.2	25.6	22	- 7.8	7	0	13			33	- 66	11	10		13	T			10.3	W	26+					51
CLEVELAND	237	986.8	1016.7	8.3	- 2.2	3.2	1.3	25.0	23	- 8.3	25+	0	22	- 2.8	68	57	- 22	25	18	1	178	102	2.6	23	17.9	SW	23	2	12	17	7.4	36
COLUMBUS	247	987.1	1017.7	11.7	- 0.6	5.4	1.6	24.4	23	-11.7	8	0	17	- 2.8	59	26	- 54	5	13	3	30	25	2.2	24	17.4	SW	18	7	5	19	7.1	53
DAYTON	305	980.4	1017.1	11.7	0.0	5.7	1.8	25.0	22	- 8.9	8	0	16	- 0.6	67	27	- 52	8	14	2	71	25	2.5	23	15.2	SW	19	4	11	16	7.1	63
MANSFIELD	395			8.3	- 2.2	3.1	1.3	21.7	23	-11.7	8	0	21			37	- 59	11	12	2	91	51						5	10	16	7.2	
TOLEDO	206	990.9	1016.8	8.9	- 2.2	3.4	1.6	21.7	17	-15.0	8	0	21	- 2.2	68	46	- 11	14	17	3	201	102	1.9	24	13.9	SW	23+	4	8	19	7.3	55
YOUNGSTOWN	359	973.2	1016.8	8.9	- 2.2	3.1	1.3	24.4	23	-14.4	8	0	23	- 3.3	67	44	- 41	14	19	0	155	25	2.1	24	17.9	25	23	5	8	18	7.1	
OKLAHOMA																																
OKLAHOMA CITY	390	969.9	1016.6	18.9	4.4	11.6	2.4	31.1	31	- 5.6	6	0	7	1.7	54	33	- 17	33	2	2	0	0	1.4	20	18.8	NW	22	13	9	9	4.9	81
TULSA	198	992.6	1017.2	19.4	3.9	11.5	2.6	33.3	31	- 7.8	7	1	9	0.6	50	22	- 40	15	3	3	T	0	2.1	21	16.5	SW	22	11	11	9	5.0	76
OREGON																																
ASTORIA	2	1015.6	1016.3	10.6	2.2	6.5	-0.4	20.6	31	- 2.8	3	0	10	3.3	82	223	- 3	35	21	1	170	25	1.8	17	15.6	18	8	2	3	26	8.7	
BURNS U	1265	873.4	1018.2	11.1	- 3.9	3.6	0.6	23.9	30+	-13.9	2	0	27	- 5.0	60	20	- 5	4	15		130	25	0.7	30				10	9	12	5.8	
EUGENE	109	1004.1	1017.8	12.8	3.3	8.1	0.3	20.6	25	- 1.1	4	0	5	4.4	83	151	41	35	17	0	64	51	2.1	19	14.3	20	14	2	5	24	8.3	
MEACHAM	1234			6.1	- 2.8	1.5	0.8	18.9	29	-11.1	2	0	23			55	- 46	10	14		434	711						6	5	20	7.1	
MEDFORD	396	970.2	1018.3	15.6	1.1	8.2	1.4	27.2	31	- 6.1	17+	0	13	1.7	69	43	- 2	14	12	0	51	25	0.4	24	14.3	21	14	8	7	16	6.6	
PENDLETON	452	963.8	1018.0	13.3	1.7	7.4	0.2	23.9	29	- 4.4	4+	0	10	- 0.6	61	24	- 6	8	10	1	5	T	0.8	22	23.7	27	21	7	7	17	6.3	
PORTLAND	6	1016.3	1017.4	13.3	3.3	8.4	0.6	23.3	25	- 1.7	22	0	3	3.9	74	120	22	29	18	0	15	T	2.2	16	15.6	SW	15	3	5	23	8.1	49
SALEM	60	1009.8	1017.3	12.2	1.7	7.0	-0.4	21.7	25	- 3.9	4+	0	11	3.9	81	154	36	52	17	0	15	T	2.4	19	15.6	18	20+	3	5	23	7.9	
SEXTON SUMMIT R	1169	883.5	1017.8	8.3	0.0	4.1	0.4	23.3	31	- 7.2	3+	0	18			106	18	27	18		437	203			22.4	16	9	8	2	21	6.9	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.8	0.4	32.8	26+	23.3	17	12	0			66	3	13	16		0	0						3	10	18	7.6	
ENIWETOK	4	1009.8	1010.5	30.0	24.4	27.3	-0.1	30.6	22+	23.3	18+	0	0	22.2	75	16	- 31	6	11		0	0	7.4	5								
TAGUAC GUAM R	110			28.9	21.7	25.3	-0.7	30.6	30+	18.3	18+	0	0			43	- 24	16	11		0	0			10.7	E	10+					68
JOHNSTON	2	1013.5	1014.3	27.2	22.8	25.0	-0.1	28.3	18	21.1	1	0	0	19.4	74	9	- 50	4	9	0	0	0	6.8	8	13.9	E	26	12	14	5	4.6	77
KOROR R	29	1006.1	1009.8	30.6	23.9	27.2	0.1	32.2	26	22.2	15+	1	0	23.3	82	255	61	83	24	2	0	0	3.3	7	8.9	NE	24+	0	0	31	9.9	69
KWAJALEIN	2	1008.5	1009.5	30.6	25.0	27.8	0.9	32.2	10	22.8	22	1	0	22.8	78	102	- 62	61	13	0	0	0	8.0	6	14.3	6	25	0	3	28	9.5	
MAJURO	3	1008.8	1009.1	29.4	25.0	27.4	0.4	30.6	30	22.8	15	0	0	23.3	80	147	-150	68	17	0	0	0	6.1	7	13.9	E	30+	0	4	27	9.3	59
MARCUS ISLAND	6			26.1	19.4	22.6	-0.1	27.8	31+	15.6	6	0	0			43	2	22	6		0	0			11.6	N	21	16	9	6	4.1	79
PONAPE R	37	1003.7	1009.0	30.0	24.4	27.1	0.1	31.1	30+	22.2	14+	0	0	23.3	82	375	6	90	20	0	0	0	4.0	6	11.2	SE	8	0	2	29	9.6	53
TRUK MOEN ISLAND	2	1008.5	1008.9	29.4	25.6	27.4	0.3	31.1	27	22.2	4	0	0	23.3	79	192	- 5	56	17	0	0	0	5.3	7	9.4	NE	17	0	4	27	9.0	80
WAKE	3	1014.6	1014.9	27.8	22.2	24.8	-0.7	28.9	31	20.0	7	0	0	19.4	74	16	- 21	7	8	0	0	0	5.0	5	11.2	4	9	11	17	3	4.5	
YAP R	19	1008.1	1010.1	30.0	23.9	26.9	-0.3	31.7	30+	22.8	29+	0	0	23.3	81	59	- 78	21	20	0	0	0	4.5	5	10.7	NE	13	0	2	29	9.5	49
PENNSYLVANIA																																
ALLENTOWN	118	1003.1	1017.4	9.4	- 1.7	3.9	0.8	20.0	18	- 7.8	9	0	20	- 3.3	64	37	- 60	19	8	0	T	T	1.8	30	17.9	27	1	9	8	14	6.0	
ERIE	223	989.5	1016.8	7.8	- 1.1	3.1	2.2	25.6	23	-16.1	8	0	21	- 2.2	71	88	15	19	19	3	450	152	2.1	24	13.4	25	1	7	10	14	6.6	
HARRISBURG	103	1004.4	1017.5	12.2	1.1	6.6	1.9	23.9	18	- 6.1	9	0	14	- 1.7	61	48	- 39	25	8	2	25	25	1.4	29	18.8	NW	1	5	11	15	6.8	71
PHILADELPHIA	2	1016.6	1017.5	11.1	0.6	5.8	0.8	21.1	24	- 6.7	28	0	14	- 2.2	60	17	- 79	13	4	0	T	0	1.4	29	16.5	W	1	8	8	15	5.9	64
PITTSBURGH	347	972.2	1017.0	11.1	- 1.1	4.9	2.3	26.7	23	-11.7	8	0	18	- 2.2	63	48	- 37	18	17	0	216	102	2.4	25	17.0	29	1	5	6	20	7.6	53
READING U	81			11.1	1.7	6.3	1.1	21.7	18	- 5.0	28+	0	12			27	- 69	20	6		T	T			21.0	W	1	10	9	12	5.7	59
SCRANTON	283	982.1	1017.2	8.9	- 1.1	3.9	1.6	22.2	18	- 8.9	9	0	18	- 3.3	63	41	- 31	16	12	1	97	76	1.1	27	15.2	W	1	7	7	17	6.7	57
WILLIAMSPORT	161	997.6	1017.1	10.0	- 1.7	4.2	1.2	21.7	23	- 8.9	9	0	22	- 3.3	62	48	- 46	17	11	1	25	25	1.4	28	15.6	28	1	6	11	14	6.4	
RHODE ISLAND																																
BLOCK ISLAND	34			6.1	0.0	2.9	0.3	11.1	20	- 6.7	28	0	16			29	- 74	14	7		51	25						14	6	11	5.1	
PROVIDENCE	16	1013.9	1016.3	8.9	- 1.1	3.8	1.0	19.4	18	- 7.8	28	0	19	- 3.3	64	61	- 44	21	10	0	206	203	2.0	27	16.1	29	2	10	10	11	5.7	59

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

MARCH 1966

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
	Elevation (ground)	Station ◯	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm			Mm.	Mm.	M.p.s.		M.p.s							%
SOUTH CAROLINA																																
CHARLESTON	12	1018.0	1019.6	18.9	5.0	12.2	-1.6	27.8	22	- 2.2	10+	0	5	3.9	63	67	- 33	41	6	1	0	0	1.0	26	18.8Y	W	5	17	6	8	4.1	75
CHARLESTON U	3			17.2	8.9	13.1	-1.1	26.1	22+	0.6	8+	0	0			103	11	58	6		0	0			17.0	NE	15					
COLUMBIA	66	1010.8	1019.2	18.9	3.3	11.0	-1.4	28.3	22	- 5.0	10+	0	9	1.7	58	57	- 52	44	4	1	0	0	1.5	26	13.9	28	5	15	7	9	4.2	81
GNVLE SPARTANBURG	292	983.7	1018.8	17.2	2.8	10.1	-0.7	27.2	22	- 6.7	7	0	9	0.0	54	83	- 38	73	4	2	0	0	1.4	25	12.5	W	5	16	6	9	4.2	74
SOUTH DAKOTA																																
ABERDEEN	395	966.8	1014.8	7.2	- 5.0	1.1	3.2	25.6	30	-22.8	7	0	26	- 4.4	69	59	32	34	6	0	480	457	2.2	36	23.2	35	4	5	8	18	6.9	
HURON	391	966.8	1014.5	8.3	- 3.9	2.2	4.0	26.1	30	-18.9	7	0	26	- 3.3	74	34	6	23	6	1	366	305	1.5	33	24.1	NW	4	7	6	18	7.0	69
RAPID CITY	965	902.8	1015.9	8.3	- 5.0	1.7	2.2	23.9	16	-16.1	6	0	26	- 7.2	58	45	20	21	5	0	419	178	3.7	32	25.0	NW	3	9	7	15	6.0	70
SIOUX FALLS	432	961.7	1014.1	10.0	- 3.3	3.2	4.2	24.4	16	-17.8	7	0	23	- 3.3	66	18	- 21	12	4	0	117	102	1.3	31	17.9	35	5	5	12	14	6.4	
TENNESSEE																																
BRISTOL	459	963.8	1018.7	16.1	1.1	8.4	0.6	26.7	22	- 7.2	29+	0	16	- 2.2	51	52	- 49	32	8	1	T	T	1.8	27	13.4	25	23	10	9	12	5.4	
CHATTANOOGA	204	994.2	1019.2	16.7	2.8	9.4	-1.2	27.2	21	- 5.6	9	0	12	1.1	63	76	- 67	51	7	3	T	T	1.0	25	11.6	SW	23	13	4	14	5.3	62
KNOXVILLE	299	983.4	1019.2	16.7	3.9	10.2	0.4	28.3	22	- 5.0	8	0	10	1.1	57	69	- 51	30	11	1	13	T	2.1	25	15.6	W	23	10	8	13	5.6	66
MEMPHIS	78	1008.8	1019.3	17.8	5.6	11.6	0.9	27.8	21	- 4.4	8+	0	8	1.7	55	38	- 91	33	4	1	T	T	1.9	23	14.3	SW	4	16	1	14	5.0	82
NASHVILLE	180	996.6	1018.6	17.2	3.3	10.3	0.8	29.4	21	- 5.6	29+	0	10	1.7	58	35	- 97	28	5	2	T	0	2.0	23	13.4	SW	19	10	6	15	5.7	68
OAK RIDGE	276			16.7	2.2	9.3	0.7	27.2	22	- 6.7	9+	0	12			58	- 84	35	9		8	T						12	6	13	5.4	
TEXAS																																
ABILENE	537	955.0	1016.8	21.1	6.7	13.8	1.1	30.6	31+	- 6.7	6	0	6	2.2	52	10	- 16	8	3	2	0	0	2.6	19	18.3	NW	22	15	3	13	5.0	79
AMARILLO	1098	890.6	1014.3	18.9	1.1	10.0	1.3	28.9	31+	- 8.9	4	0	12	- 5.6	40	T	- 21	T	1	0	T	T	2.1	24	18.8	N	22	16	6	9	4.4	86
AUSTIN	182	996.3	1018.5	21.7	9.4	15.6	0.2	30.6	31	- 0.6	6	0	1	7.2	63	13	- 41	7	5	3	0	0	0.8	17	14.8	NW	22	7	4	20	6.6	52
BROWNSVILLE	5	1017.3	1017.7	23.3	13.9	18.6	-1.3	29.4	3	2.8	6	0	0	13.3	77	13	- 13	10	5	0	0	0	3.3	12	16.1	SE	21	10	7	14	6.2	56
CORPUS CHRISTI	12	1016.6	1018.3	23.9	12.2	18.1	-0.4	31.1	3	0.0	5	0	1	11.7	73	18	- 19	6	6	1	0	0	2.8	12	17.9	S	21	9	7	15	6.4	41
DALLAS	147	1001.0	1018.6	20.0	8.3	14.1	0.7	31.1	31	- 2.8	6	0	1	4.4	58	61	- 11	46	5	3	0	0	1.9	18	17.9	NW	5	10	6	15	5.7	65
DEL RIO	313	981.0	1017.2	22.8	10.6	16.8	-0.4	30.0	22	- 0.6	5	0	1	6.1	56	12	- 9	8	4	2	0	0	2.8	12	12.5	3	22	7	7	17	6.3	
EL PASO	1194	882.2	1014.2	21.7	5.6	13.6	0.8	27.2	15	- 3.9	5	0	4	- 7.2	26	T	- 9	T	0	0	T	T	0.9	30	22.4	SW	2	16	8	7	4.2	95
FORT WORTH	164	998.0	1018.8	19.4	7.2	13.5	0.2	31.1	31	- 2.2	6	0	3	4.4	59	35	- 29	26	3	3	0	0	1.5	19	17.0	32	5	10	7	14	5.6	
GALVESTON U	2			18.3	13.3	15.9	-0.4	22.8	31	6.1	6	0	0			18	- 55	5	6		0	0			17.0	NW	5					63
HOUSTON U	12			21.1	12.2	16.8	-0.1	28.3	31	3.3	6	0	0			66	5	51	4		0	0										
HOUSTON	15	1017.3	1019.3	22.2	10.6	16.4	0.1	29.4	31	0.6	6	0	0	8.9	69	56	- 12	45	5	2	0	0	0.9	12	15.6	31	5	4	12	15	6.7	62
LUBBOCK	992	903.5	1014.8	22.2	3.9	13.2	3.4	31.1	31	- 8.9	5	0	7	- 4.4	36	3	- 15	3	2	1	0	0	2.3	22	20.6	27	3	10	13	8	5.2	
MIDLAND	869	916.4	1014.7	22.2	5.6	14.0	1.1	30.0	21+	- 6.7	5	0	5	- 2.8	41	10	1	10	1	2	0	0	2.1	19	15.6	26	3	18	3	10	4.1	
PORT ARTHUR	5	1019.0	1019.7	21.7	9.4	15.4	-0.7	28.9	31	- 1.7	6	0	1	9.4	74	17	- 71	8	8	1	0	0	0.8	15	17.9	NW	5	4	14	13	6.5	58
SAN ANGELO	580	949.9	1016.5	22.8	7.2	15.0	1.1	31.7	21	- 6.1	5	0	4	2.8	51	7	- 17	6	3	2	0	0	2.4	20	16.1	29	3	14	4	13	4.8	
SAN ANTONIO	240	990.2	1018.5	21.7	9.4	15.6	-0.6	27.8	31	- 4.4	6	0	4	8.3	70	29	- 13	18	9	3	0	0	1.2	10	17.4	N	22	6	7	18	6.7	58
VICTORIA	32	1014.9	1018.9	22.8	11.7	17.1	-0.2	29.4	31	1.1	6	0	0	10.6	72	10	- 49	4	6	1	0	0	1.4	11	16.5Y	N	23	6	8	17	6.9	
WACO	152	1000.3	1018.7	19.4	6.7	13.1	-1.3	30.6	31	- 4.4	6	0	4	5.6	66	20	- 40	8	5	3	0	0	1.7	18	15.6	33	22	10	8	13	5.6	
WICHITA FALLS	303	980.0	1016.8	22.2	6.1	13.9	1.8	33.3	31	- 5.6	6	1	5	2.8	52	45	6	42	4	4	0	0	2.3	20	19.2	31	22	14	5	12	5.1	
UTAH																																
MILFORD	1533			13.3	- 6.1	3.7	0.1	23.9	31	-25.6	4	0	26			11	- 15	10	3		168	152						10	4	17	5.9	
SALT LAKE CITY	1286	872.7	1018.6	13.3	- 2.2	5.3	0.7	23.9	31	-16.7	4	0	18	- 3.9	57	31	- 9	23	7	1	442	279	0.1	20	18.3	N	21+	10	4	17	6.0	81
WENDOVER	1291			11.7	- 0.6	5.4	0.2	22.2	31	- 9.4	4	0	19			5	- 5	3	4		23	25						14	6	11	4.7	
VERMONT																																
BURLINGTON	101	1002.7	1015.7	3.3	- 5.6	- 0.9	2.0	13.3	18	-14.4	16	0	24	- 6.1	68	67	13	27	12	1	211	254	0.8	23	15.6	NW	2	5	6	20	7.4	56
VIRGINIA																																
LYNCHBURG	279			15.0	1.7	8.3	0.8	28.3	22	- 7.2	8	0	12			19	- 73	10	7	1	T	T			12.1	NW	1	12	10	9	4.8	76
NORFOLK	7	1017.3	1018.5	14.4	3.3	8.8	-0.1	27.8	23	- 3.9	17+	0	8	1.1	62	38	- 50	20	7	2	0	0	1.5	22	17.9	W	1	13	7	11	5.1	71
RICHMOND	49	1012.2	1018.3	15.0	2.2	8.6	-0.1	28.3	22	- 5.6	9	0	12	- 0.6	56	24	- 63	10	7	0	0	0	1.2	24	15.2	SW	19	12	9	10	4.7	74
ROANOKE	350	974.9	1017.6	15.0	1.7	8.2	0.7	27.8	22	- 8.3	9	0	13	- 3.3	49	11	- 79	7	7	0	T	0	1.9	27	20.6	29	1	12	10	9	5.1	
WASHINGTON																																
OLYMPIA	59	1009.5	1016.8	11.7	1.1	6.6	-0.2	23.3	29	- 6.1	21	0	13	2.2	76	185	48	40	20	0	394	152	2.0	19	13.9	16	15	3	3	25	8.3	
SEATTLE TACOMA	122	1000.0	1016.6	11.1	3.3	7.3	0.7	21.1	29	- 1.7	2	0	5	2.2	73	111	15	24	16	0	140	25	1.7	19	17.0	21	15	2	3	26	8.3	49
SPOKANE	718	932.6	1017.6	8.9	- 1.1	3.7	0.3	21.1	29	- 8.9	22	0	20	- 1.7	72	62	24	18	15	0	183	127	1.4	18	11.6	S	19+	7	10	14	6.4	55
STAMPEDE PASS R	1206			2.2	- 3.3	- 0.6	0.6	14.4	29	-11.1	2	0	23			147	-122	23	20		1034	3302						3	6	22	8.0	
TATOOSH ISLAND R	31	1011.5	1014.7	8.9	4.4	6.5	-0.3	15.0	31	0.0	1	0	1	3.3	81	231	19	36	22	2	114	51	3.6	13	25.0	SW	7	2	4	25	8.7	49
WALLA WALLA U	289			13.9	3.3	8.6	0.8	25.0	29	- 3.9	4+	0	7			47	7	15	11		117	127			15.2	NW	14	8	6	17	6.5	56
YAKIMA	321	978.7	1017.7	13.3	- 0.6	6.3	0.8	24.4	29	- 6.1	2	0	16	- 1.1	63	21	5	7	10	0	28	25	1.8	24	13.9	22	15	8	8	15	6.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No of days (sunrise to sunset)				
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm			Mm	Mm	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	5	1013.5	1016.0	28.9	22.2	25.6	1.6	33.3	31	19.4	2	3	0	20.0	74	118	62	72	14	1	0	0	3.3	8	11.2	NE	19+	4	18	9	6.3	69
SWAN ISLAND	9			27.8	23.9	25.9	-0.7	29.4	31+	21.1	13+	0	0			78	62	38	8	0	0	0						2	16	13	6.8	
WEST VIRGINIA																																
BECKLEY	763	927.9	1018.1	12.2	0.0	6.0		25.0	22	- 9.4	8	0	17	- 3.3	58	44		13	13	2	150	51	2.5	25	15.6	28	1	6	8	17	6.8	
CHARLESTON	286	982.7	1017.4	15.6	1.7	8.7	1.8	29.4	22	- 8.3	9	0	14	- 1.7	53	38	- 72	17	13	0	43	25	2.2	24	12.5	24	1	7	13	11	6.1	
ELKINS	600	945.5	1017.7	12.8	- 2.8	4.9	0.8	26.1	23	-12.2	9	0	24	- 2.2	65	37	- 69	10	16	0	206	25	1.9	28	13.4	26	1	5	7	19	7.2	
HUNTINGTON	252	987.1	1017.7	14.4	1.7	8.0	0.9	28.9	22	- 9.4	9	0	15	- 1.7	57	28	- 78	8	10	1	13	T	2.0	24	13.9	25	23	7	10	14	6.5	
PARKERSBURG U	187			13.9	1.1	7.5	1.6	28.3	22	- 7.8	8	0	14			32	- 58	11	9		18	T			16.1	W	1					56
WISCONSIN																																
GREEN BAY	208	988.5	1014.8	5.6	- 3.9	0.9	3.0	21.7	17	-11.1	25+	0	23	- 3.9	73	62	28	23	14	4	114	51	1.0	31	16.5	NE	23	5	6	20	7.5	41
LA CROSSE	198	990.2	1015.2	8.3	- 2.8	2.9	3.8	23.3	17	-11.1	7	0	22	- 2.2	72	84	31	42	11	4	64	25	0.6	22	12.5	32	23	6	9	16	6.9	
MADISON	262	982.7	1014.7	7.8	- 3.9	1.9	3.5	22.8	17	-12.2	26+	0	23	- 2.8	74	54	7	19	17	3	140	76	1.0	25	15.6	NW	31	4	8	19	7.3	54
MILWAUKEE	205	989.8	1015.6	6.7	- 2.8	1.9	2.4	22.8	17	-10.0	25+	0	21	- 1.7	78	92	33	40	15	3	71	25	1.2	25	16.1	SW	18	6	8	17	6.8	63
WYOMING																																
CASPER	1627	836.1	1016.2	9.4	- 5.0	2.3	2.3	22.8	30	-18.9	5	0	25	- 8.9	48	12	- 14	8	5	0	234	127	4.9	26	24.1	27	16	8	9	14	6.1	
CHEYENNE	1867	810.0	1015.7	11.1	- 5.0	3.2	2.9	21.1	31+	-15.0	4	0	25	-11.1	38	3	- 28	2	4	0	28	T	4.7	31	26.8	N	3	12	7	12	5.6	77
LANDER	1696	827.6	1016.9	9.4	- 5.6	1.7	1.6	24.4	30	-21.7	5	0	25	-10.0	48	22	- 7	16	5	0	475	330	1.7	25	21.5	W	17	8	11	12	5.6	83
SHERIDAN	1208	878.1	1017.4	10.6	- 5.0	2.7	3.2	23.3	30	-17.2	5	0	24	- 7.2	51	26	- 10	11	7	0	328	152	2.3	31	17.0	NW	17	8	10	13	6.1	74

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

MARCH 1966

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	393	2825	2434
HUNTSVILLE	394	2861	2913
MOBILE	208	1583	1518
MONTGOMERY	301	2265	2201
ALASKA			
ANCHORAGE	1493	9366	
ANNETTE	796	5707	5610
BARROW	2734	16102	15828
BARTER ISLAND	2713	16445	15642
BETHEL	2109	11237	10815
COLD BAY	1346	7546	7547
FAIRBANKS	2092	13893	12434
JUNEAU	1071	7812	7283
KING SALMON	1863	10130	9296
KOTZEBUE	2391	13199	12858
MC GRATH	2132	13489	12255
NOME	2111	11842	11354
ST. PAUL ISLAND	1334	8095	8439
SHEMYA	1033	7249	7269
YAKUTAT	1264	8696	7185
ARIZONA			
FLAGSTAFF	854	5952	5884
PHOENIX	145	1581	1690
TUCSON	166	1718	1719
WINSLOW	571	4436	4395
YUMA	71	1120	959
ARKANSAS			
FORT SMITH	384	3003	3126
LITTLE ROCK	327	2828	3084
TEXARKANA	281	2245	2428
CALIFORNIA			
BAKERSFIELD	236	2167	1998
BISHOP	468	3768	3742
BLUE CANYON	741	4569	4333
BURBANK	135	1311	1409
EUREKA U	519	3517	3548
FRESNO	271	2489	2286
LONG BEACH	182	1304	1435
LOS ANGELES	225	1356	1447
LOS ANGLES U	126	1014	1140
MT SHASTA R	696	4732	4691
OAKLAND	303	2174	2345
RED BLUFF	368	2636	2300
SACRAMENTO	326	2494	2449
SANDBERG U	512	3725	3462
SAN DIEGO	209	1261	1196
SAN FRANCISCO	407	2712	2396
SAN FRANCISCO U	336	2345	2303
SANTA CATALINA	272	1725	1506
SANTA MARIA	342	2396	2287
STOCKTON	332	2608	2456
COLORADO			
ALAMOSA	983	7280	7225
COLORADO SPRINGS	744	5311	5438
DENVER	691	5010	5371
GRAND JUNCTION	582	4590	5087
PUEBLO	641	4687	4844
CONNECTICUT			
BRIDGEPORT	872	4729	4872
HARTFORD	792	5272	5476
NEW HAVEN	806	4944	5064
DELAWARE			
WILMINGTON	676	4533	4425
DIST.OF COLUMBIA			
WASH NATL AP	535	3772	3862
FLORIDA			
APALACHICOLA U	186	1401	1275
DAYTONA BEACH	120	815	864
FORT MYERS	24	293	442
JACKSONVILLE	188	1296	1218
KEY WEST	4	58	108
LAKELAND U	80	622	661
MIAMI	16	143	214
ORLANDO	72	541	760
PENSACOLA	211	1622	1427
TALLAHASSEE	206	1526	1449
TAMPA	93	734	683
WEST PALM BEACH	26	226	253
GEORGIA			
ATHENS	429	2880	2766
ATLANTA	451	3060	2790
AUGUSTA	379	2542	2307
COLUMBUS	335	2362	2287
MACON	357	2524	2073
ROME	454	3247	3115
SAVANNAH	294	2043	1774
IDAHO			
BOISE	668	4781	5045
IDAHO FALLS 42NW R	1027	7254	7523
IDAHO FALLS 46W R	969	6981	7241
LEWISTON	653	4266	4787
POCATELLO	861	5994	6018
ILLINOIS			
CAIRO U	452	3423	3579
CHICAGO O HARE	782	5556	5773
CHICAGO MIDWAY	761	5266	5416
MOLINE	794	5641	5730
PEORIA	746	5319	5383
ROCKFORD	844	5901	6018
SPRINGFIELD	670	4771	4921
INDIANA			
EVANSVILLE	566	4206	4130
FORT WAYNE	788	5218	5506
INDIANAPOLIS	668	4795	5051
SOUTH BEND	796	5398	5615
IOWA			
BURLINGTON	716	5151	5478
DES MOINES	737	5535	6069
DUBUQUE	848	6272	6492
SIOUX CITY	761	5894	6215
WATERLOO	809	6279	6506
KANSAS			
CONCORDIA	602	4628	4940
DODGE CITY	521	4330	4499
GOODLAND	682	5331	5356
TOPEKA	552	4345	4716
WICHITA	490	3906	4257
KENTUCKY			
COVINGTON	681	4742	4702
LEXINGTON	631	4481	4253
LOUISVILLE	580	4181	4231
LOUISIANA			
ALEXANDRIA	277	2096	1852
BATON ROUGE	212	1727	1527
LAKE CHARLES	174	1436	1420
NEW ORLEANS	201	1599	1346
SHREVEPORT	238	2010	2103
MAINE			
CARIBOU	1135	8081	8258
PORTLAND	994	6358	6353
MARYLAND			
BALTIMORE	665	4481	4237
MASSACHUSETTS			
BLUE HILL OBS R	856	5494	5453
BOSTON	776	4941	4877
NANTUCKET	877	5166	4757
PITTSFIELD	1023	6536	6487
WORCESTER	948	6004	5975
MICHIGAN			
ALPENA	1015	6927	7127
DETROIT	821	5285	5448
DETROIT M WAYNE CO	860	5643	5463
DETROIT WILLOW RUN	868	5828	5465
FLINT	866	5749	6329
GRAND RAPIDS	860	5749	6025
HOUGHTON LAKE	1020	6920	
LANSING	872	6015	5988
MARQUETTE U	1026	6962	6977
MUSKEGON	868	5674	5714
SAULT STE MARIE	1127	7611	7560
MINNESOTA			
DULUTH	1166	8564	8472
INTERNATIONAL FALLS	1214	9382	9161
MINNEAPOLIS	899	7118	7392
ROCHESTER	956	7163	7271
ST CLOUD	988	7838	7782
MISSISSIPPI			
JACKSON	326	2385	2125
MERIDIAN	347	2462	2208
VICKSBURG U	257	2024	1972
MISSOURI			
COLUMBIA	548	4145	4589
KANSAS CITY	492	3864	4308
ST JOSEPH	488	4102	4988
ST LOUIS	570	4266	4452
SPRINGFIELD	517	3925	4159
MONTANA			
BILLINGS	860	6326	6092
GLASGOW	1016	8053	7863
GREAT FALLS	880	6539	6538
HAVRE	978	8007	7543
HELENA	874	6497	6902
KALISPELL	1002	6883	6948
MILES CITY	923	7284	6769
MISSOULA	914	6393	6894
NEBRASKA			
GRAND ISLAND	703	5513	5812
LINCOLN U	672	5107	5261
NORFOLK	820	6168	6200
NORTH PLATTE	815	6080	5860
OMAHA	642	5055	5619
SCOTTSBLUFF	748	5808	5761
VALENTINE	865	6534	6474
NEVADA			
ELKO	830	6374	6211
ELY	869	6523	6380
LAS VEGAS	235	2362	2592
RENO	664	4995	5276
WINNEMUCCA	759	5366	5672
NEW HAMPSHIRE			
CONCORD	935	6468	6374
MT WASHINGTON OBS	1574	11202	11024
NEW JERSEY			
ATLANTIC CITY	726	4762	4244
ATLANTIC CITY U	688	4191	4060
NEWARK	717	4482	4360
TRENTON U	685	4452	4448
NEW MEXICO			
ALBUQUERQUE	595	4211	3979
CLAYTON	603	4404	4525
RATON	734	5144	5321
ROSWELL	407	3507	3561
SILVER CITY	497	3572	3357
NEW YORK			
ALBANY	948	5921	6027
BINGHAMTON	981	6329	6229
BUFFALO	931	5819	6010
NEW YORK U	685	4121	4336
J.F. KENNEDY	707	4371	4560
NEW YORK LA GUARDIA	705	4228	4267
ROCHESTER	871	5656	5824
SYRACUSE	945	6070	5893
NORTH CAROLINA			
ASHEVILLE	660	4234	4034
CAPE HATTERAS R	478	2624	2410
CHARLOTTE	455	3225	3013
GREENSBORO	501	3553	3524
RALEIGH	473	3286	3179
WILMINGTON	360	2314	2251
NORTH DAKOTA			
BISMARCK	987	8043	7760
FARGO	1089	8629	8105
WILLISTON	992	8276	8064
OHIO			
AKRON	807	5280	5307
CINCINNATI OBS	624	4392	4343
CLEVELAND	837	5313	5473
COLUMBUS	710	4957	5036
DAYTON	701	5012	4996
MANSFIELD	845	5625	5555
TOLEDO	828	5678	5649
YOUNGSTOWN	844	5533	5569
OKLAHOMA			
OKLAHOMA CITY	388	2998	3502
TULSA	395	3085	3600
OREGON			
ASTORIA	658	3984	4112
BURNS U	817	5896	5844
EUGENE	565	3647	3886
MEACHAM	930	6060	6282
MEDFORD	557	3891	4256
PENDLETON	597	3999	4463
PORTLAND	545	3565	3889
SALEM	629	3961	3920
SEXTON SUMMIT R	792	5035	4901
PENNSYLVANIA			
ALLENTOWN	801	5213	5148
ERIE	842	5364	5518
HARRISBURG	648	4756	4719
PHILADELPHIA	693	4611	4584
PITTSBURGH	741	5213	5273
PITTSBURGH U	705	4681	4527
READING U	664	4434	4468
SCRANTON	799	5436	5528
WILLIAMSPORT	783	5300	5265
RHODE ISLAND			
BLOCK ISLAND	854	4940	4749
PROVIDENCE	806	5040	5133
SOUTH CAROLINA			
CHARLESTON	338	2210	1979
CHARLESTON U	292	1878	1752
COLUMBIA	408	2655	2403
GNVLE-SPARTANBURG	454	3129	2876
SOUTH DAKOTA			
ABERDEEN	950	7759	7482
HURON	894	7159	7248
RAPID CITY	923	6347	6278
SIOUX FALLS	838	6970	6918
TENNESSEE			
BRISTOL	547	4035	3814
CHATTANOOGA	486	3474	3079
KNOXVILLE	452	3338	3253
MEMPHIS	382	3012	3063
NASHVILLE	452	3344	3349
OAK RIDGE	496	3669	3533
TEXAS			
ABILENE	281	2254	2510
AMARILLO	456	3774	3677
AUSTIN	168	1652	1660
BROWNSVILLE	65	729	600
CORPUS CHRISTI	79	990	914
DALLAS	253	2126	2267
DEL RIO	128	1393	1486
EL PASO	264	2588	2595
FORT WORTH	274	2117	2306
GALVESTON U	138	1074	1205
HOUSTON U	131	1157	1248
HOUSTON	144	1251	1360
LUBBOCK	307	2832	3346
MIDLAND	258	2517	2501
PORT ARTHUR	180	1372	1408
SAN ANGELO	221	2142	2189
SAN ANTONIO	182	1644	1507
VICTORIA	122	1219	1152
WACO	291	2086	1964
WICHITA FALLS	275	2705	2706
UTAH			
MILFORD	811	5498	5612
SALT LAKE CITY	717	4973	5276
WENDOVER	710	5135	5142
VERMONT			
BURLINGTON	1069	6911	7112
VIRGINIA			
LYNCHBURG	554	3986	3821
NORFOLK	527	3415	3168
RICHMOND	538	3870	3593
ROANOKE	565	4030	3824
WASHINGTON			
OLYMPIA	649	4237	4302
SEATTLE TACOMA	610	3665	4217
SPOKANE	808	5474	5701
STAMPEDE PASS R	1047	6998	7291
TATOOSH ISLAND R	652	4319	4430
WALLA WALLA U	535	3733	4241
YAKIMA	662	4904	5217
WEST VIRGINIA			
BECKLEY	680	4937	
CHARLESTON	538	4289	4071
ELKINS	741	5171	4985
HUNTINGTON	583	4253	4041
PARKERSBURG U	601	4364	4294
WISCONSIN			
GREEN BAY	967	6747	6941
LA CROSSE	852	6619	6735
MADISON	911	6610	6833
MILWAUKEE	915	6126	6486
WYOMING			
CASPER	887	6176	6243
CHEYENNE	841	5737	6123
LANDER	924	6301	6682
SHERIDAN	869	6327	6525

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

MARCH 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS
Alabama	2	1	1	29	5																					0	0	4	0
Alaska *																													
Arizona *																													
Arkansas										1	1	2	0																
California *																													
Colorado										0	0	5	0																
Connecticut *																													
Delaware *																													
Florida						0	0	?	0	0	0	4	0																
Georgia										0	0	4	0													0	0	R6	5
Hawaii *																													
Idaho *																													
Illinois	1	1	0	0	4	0	0	5	0																				
Indiana						0	0	2	0																				
Iowa	1	1	0	0	3	0	0	4	0					0	1	4	0	6	0	6	0								
Kansas						0	0	5	?	0	1	5	?					0	0	5	?								
Kentucky *																													
Louisiana	1	1	0	1	3	0	0	?	0																				
Maine *																													
Maryland *																													
Massachusetts										0	0	6	0													0	0	D4	0
Michigan														0	0	4	0	0	0	?	0								
Minnesota														0	0	3	0	9	?	6	0	0	0	4	0				
Mississippi	3	2	57	504	7									1	0	4	0												
Missouri	1	1	0	0	3	0	0	4	0	0	0	4	0																
Montana *																													
Nebraska										0	0	6	?	0	0	3	0	16	?	6	0	0	0	5	0				
Nevada *																													
New Hampshire										0	0	4	0																
New Jersey *																													
New Mexico *																													
New York										1	9	4												4					
North Carolina	1	1	0	0	4	0	0	3	3																	0	0	5	4
North Dakota																		5	?	6	0								
Ohio										0	13	5	0																
Oklahoma						0	0	5	0	0	0	5	0																
Oregon										0	3-4	5	4					0	10-20	4	3					0	U	H4	4
Pacific Area *																													
Pennsylvania										1	7	5	0	0	0	4	0												
Puerto Rico *																													
Rhode Island *																													
South Carolina																										0	0	6	5
South Dakota																		4	0	7	0								
Tennessee										1	4	4	0	0	0	3	0												
Texas	1	1	0	0	4					0	1	0	0																
Utah *																													
Vermont										0	0	5	0																
U. S. Virgin Is. *																													
Virginia *																													
Washington	2	1	0	0	3																								
West Virginia *																													
Wisconsin	1	1	0	1	6									0	0	5	0	0	0	5	0								
Wyoming										0	0	°5	C																

°	Includes crop damage
C	Crop damage
D	Dust-Devils
U	Unknown
R	Rain
H	Heavy rain and floods

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

MARCH 1966

Elmer R. Nelson
Office of Hydrology

Severe flooding began in the Red River of the North Basin during March, which continued into April and May. Considerable property damage occurred along the smaller tributaries during March. The main stem of the Mississippi reached a record high stage at Fort Ripley, Minn., due to an icejam. Flooding elsewhere in the Upper Mississippi Basin was mostly minor in comparison with the spring of 1965.

In the East Gulf of Mexico Drainage, the Flint River in Georgia reached its highest stage in 18 to 36 years at various points. The Apalachicola River at Blountstown, Fla., reached its second highest stage of record.

HUDSON BAY DRAINAGE

Red River of the North Basin.--Flooding began along the main stem of the Red River of the North at Wahpeton, N. Dak., on March 14. The crest of 13.9 feet on the 16th was the seventh highest stage of record. It was 0.4 foot lower than the 14.3 feet crest reported on April 11, 1965. As the main stem was cresting at Wahpeton, it began overflowing its banks at Fargo, N. Dak. The following day on March 17, the Sheyenne River went out of its banks at West Fargo, N. Dak. Flooding along the Red River of the North extended to Halstad, Minn., on the 20th and to Grand Forks, N. Dak., by the 21st. The Sheyenne River crested at West Fargo on the 22d at a stage of 20.4 feet, (flood stage 16 feet). This was 0.35 foot lower than in April 1965. The main stem crested at Fargo on the 23d at a stage of 30.1 feet. This was 13.1 feet above flood stage and 0.45 foot lower than in April 1965. This was the seventh highest stage of record. A crest of 35.5 feet occurred at Halstad, Minn., on March 27, 1966. This was 11.5 feet above flood stage and slightly higher (0.1 foot) than in April 1965. The Red of the North began overflowing at Drayton, N. Dak., on the 29th and on the Red Lake River at Crookston, Minn., on the 31st. The Sheyenne, Red Lake, and the Red River of the North were still in flood at the end of March except the Red of the North at Wahpeton, N. Dak., where it receded within its banks on the 21st. At Pembina, N. Dak., the river had risen to within 4 feet of flood stage by midnight of March 31.

Antecedent conditions were favorable during the fall 1965 for spring flooding due to abundant precipitation. Another factor favoring severe flooding was the heavy accumulation of snow during the winter months over the central and northern parts of the basin. Heavy wet snow during the first week in March increased the flood potential. The total water equivalent of snow on the ground after this storm ranged from 2 inches over the extreme southern portion of the valley to over 6 inches over the northern portion. Above normal temperatures during the month caused an early rapid runoff and major flooding.

Damage to city property and farmlands was extensive, especially along the Sheyenne River near West Fargo and on the Red River from Fargo northward. Flooding occurred on some of the smaller tributaries with considerable damage to property.

ST. LAWRENCE DRAINAGE

Lake Ontario.--Minor flooding occurred on Black Creek at Churchville, N. Y. on the 6th. No damage was reported.

ATLANTIC SLOPE DRAINAGE

Minor flooding occurred on the James River at Richmond, Va., on the 2d. This overflow was due to heavy rain on February 28 plus snowmelt. The rainfall averaged from about 1 inch to 1.75 inches. Headwater stages reached crests well below bankfull level on March 1. Rises in the upper James reached about half bankfull. No damage was reported.

Slight overflow occurred on the Chemung River at Chemung, N. Y., on the morning of the 6th. No damage resulted.

The Neuse River at Goldsboro, N. C., went out of its banks on February 18 due to heavy rain on February 14 and snowmelt. Additional rain on February 24 and 28 caused the stream to rise above flood level from Neuse to Kinston, N. C. The crests during March were 3 to 4 feet higher than in February and ranged from 4 to more than 7 feet above bankfull level. Flooding on the Roanoke, Tar, and Cape Fear Rivers was due to the heavy rains on February 28. Additional heavy rain on March 4 created another surge at upstream locations and piled up more water at downstream points. The upper and middle Cape Fear River reached from a foot to 7 feet in flood while the lower portion crested 11 to 15 feet above flood stage. No damage resulted from the overflows.

Precipitation of 1 to 3 inches on February 28 followed by generally heavy rains during the first 5 days of March caused sharp rises and flooding along streams in South Carolina. In some cases it was the heaviest flooding in many years. Losses were heaviest along the Congaree below Columbia, S. C., on the Wateree below Camden, and along the lower Santee below Lake Marion. Lumber operations along the Congaree, the Wateree, the lower Santee, and middle Pee Dee Rivers had to be suspended for several weeks.

The Savannah and Ogeechee Rivers in Georgia were in flood in the beginning of March. Additional flooding occurred on the Savannah at Augusta on the 6th and on the Ogeechee at Midville, Ga., on the 5-10th. Flooding continued at downstream points most of the month.

The Ocmulgee River at Lumber City, Ga., went above flood stage on February 23 and continued in flood until March 17. In the upper reach, at and above Hawkinsville, Ga., the stream went out of its banks on the 5th and continued in flood at Macon, Ga., until the 7th and at Hawkinsville, Ga., until the 10th. The Oconee River in Georgia rose 4 to 6 feet above flood level between the 4th and 17th. The Altamaha River at Charlotte, Ga., was in flood from February 21 to March 22. There were two crests, the first on February 26 was 6.2 feet above flood stage. The second on March 11 was nearly 9 feet above flood stage. Minor flooding occurred upstream at Waycross, Ga., between the 6th and 12th. The initial damage from flooding on the morning of the 3d occurred along small and generally unnamed streams or dry washes. Many roads had washed out sections and some low-lying portions of Warner Robins, Ga., was flooded, necessitating the evacuation of a trailer court. More rain on the 4th and 5th caused Big Indian Creek at Perry, Ga., to overflow and pollute the city reservoir. Flooding was generally light along the Ocmulgee and Oconee Rivers except in the extreme lower portions.

EAST GULF OF MEXICO DRAINAGE

The heavy rains of early March caused the Suwannee River in Florida to exceed flood stage by 1 to 3 feet between the 17th and 25th. The Alapaha River at Statenville, Ga., exceeded flood stage by over 3 feet on the 14th. Damages from the flooding were mostly to agricultural areas, fishing camps, and sawmills. The total losses in the Suwannee system were estimated at $50,000.

Heavy rains on the last 2 days of February and again on the 3d to the 5th of March produced high flooding on the middle and lower Flint Rivers in Georgia and on the Apalachicola River in Florida. Flooding on the Chattahoochee River occurred in the lower portion from Fort Gaines, Ga., downstream. Excessively heavy rains caused overflows in parts of Columbus directly from rainfall, resulting in considerable damages and the necessity of evacuating some people out of the low-lying flooded areas. The Chattahoochee River in the Fort Gaines, Ga., and Columbia, Ala., areas, and below, rose 5 to 10 feet above flood stage. The Flint River at Albany, Ga., crested 14.4 feet above flood stage on the 7th. This was the highest water at Albany since March 1929 when it reached the same stage of 34.4 feet. At Newton, Ga., a crest of 34.9 feet (flood stage 24 feet) on the 9th inundated most of the town. In the lower part of the Flint River at Bainbridge, Ga., the crest was 31.2 feet or almost 6 feet above flood stage. This was the greatest rise at Bainbridge since April 1948. Jim Woodruff Dam, at the confluence of the Chattahoochee and Flint Rivers, had a tailwater crest of 72.4 feet, or about 6.5 feet above flood stage. This was the highest stage at this location since the dam began operation in 1958. The Apalachicola River at Blountstown, Fla., rose to a crest of 24.4 feet, or 9.4 feet above flood stage, on the 9th. This was the second highest crest of record since 1929 when it reached a record stage of 28.6 feet. The total damages along the Chattahoochee, Flint, and Apalachicola are estimated at $1.3 million.

Heavy rains falling mainly on the 3d of March resulted in moderate flooding on the Alabama River and on the upper Coosa River in Alabama. Minor flooding occurred on the Conecuh River around Brewton, Ala., and on the Choctawhatchee River at Caryville, Fla. Rainfall exceeded 3 inches except in the Cahaha Basin which averaged about 2 inches. Conditions were favorable for maximum runoff due to frequent and heavy rains the preceding month. The flooding affected farm- and pastureland, making it necessary to move livestock from lowland areas. Work in the forests and woodlands was curtailed.

At the beginning of March, the Warrior and Tombigbee Rivers were falling at all stations and were within their banks at all points except at Jackson Lock and Dam, Ala., where it fell below on the 2d. Moderate rains on the 2d and 3d caused a slight overflow on the Black Warrior at Warrior Lock and Dam, Ala., on the 6th and 7th. No damage resulted from these overflows.

Heavy rain between February 10 and 17 caused flooding along the entire length of the Pearl River in Mississippi and Louisiana. The flooding continued at and below Jackson, Miss., the entire month of March. The crests between February 17 and 19 ranged from 5.5 feet above flood stage at Bogalusa and Pearl River, La., to 13 feet above flood stage at Jackson, Miss. The flood damages along the Pearl during March totaled about $159,000.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--The severe snowstorm of March 2 - 5 deposited heavy amounts of new snow over the headwaters of the Mississippi River. The water equivalent of the new and old snow on March 8 ranged from 6 to 8 inches over an area bounded by Bemidji, Wadena, Duluth, and Hibbing, Minn. The new snow ranged in depth from near 10 to 31 inches at Park Rapids, Minn. Moderate to heavy rainfall occurred over northeastern Iowa, Wisconsin, and central and southeastern Minnesota. The last week of February was warm, thawing the ground sufficiently so that some of the rain was absorbed. Freezing temperatures followed the snow and rain and helped to check the surface runoff.

The South Branch Zumbro River at Rochester, Minn., went out of its banks on March 3. The crest on the 4th was 3.1 feet above flood stage. The main stem of the Zumbro went above flood stage on the same date at Zumbro Falls and Theilman, Minn. The Cottonwood River near New Ulm, Minn., and the Root River at Hokah, Minn., also rose above flood stage on the 4th. The crests were all affected by ice action. Minor flooding occurred on the Crow River at Delano, Minn., on the 10-14th. The spring snowmelt rise proceeded eastward and southward through the middle of March. The Redwood River near Redwood Falls, Minn., exceeded flood stage by 5.4 feet on the 15th. Other streams in southeastern Minnesota overflowed their banks, but did not reach the proportions of March 1965.

An icejam on the Mississippi at Fort Ripley, Minn., caused a record stage of 14.25 feet at this point on the 23d. Flood stage is 10 feet. The previous record stage of 13.55 feet occurred on April 16, 1965. Temporary icejams occurred at Monticello, Elk River, and just north of Minneapolis, Minn., between the 13th and 19th. Minor flooding occurred at Wabasha, Minn., on the 24th and 25th. The only other flooding along the main stem occurred at Keithsburg, Ill., on March 29 to April 8.

Flood damages were at a minimum and of no consequence.

Missouri Basin.--The snow cover on March 1 ranged from 2 to 4 inches from the Black Hills to near Mobridge, S. Dak., and was mostly in drifts from central South Dakota to northwest Iowa. The blizzard of March 2-5 left considerable snow over the Missouri and James River basins. It covered most of the Dakotas and northern Nebraska. Snow depths ranged from 1 to 3 feet with a water equivalent of 3 to 6 inches. Snow drifts ranged as high as 10 feet with considerable bare ground in between.

An unusual warm period from the 8th to the 21st resulted in rapid melting of the snow cover and caused the ice on the James River and right bank Missouri tributaries in the Dakotas to break up. The amount of overflow varied considerably along the right-bank streams. Heavy flooding developed on creeks and on the main stem of the James River from Jamestown, N. Dak., to Columbia, S. Dak., between the 15th and 25th. The James was reported 5 to 6 feet over its banks in the vicinities of Aberdeen and Stratford, S. Dak., and flooded about a mile in width over adjacent flats. At Jamestown, N. Dak., many families were evacuated for several days due to flooding. The principal damage from Jamestown, N. Dak., to Columbia, S., Dak., is believed to have been to roads, bridges, and farm levees. Minor overflow occurred on the Heart River in the lower portions of south Mandan, N. Dak., and on the Knife and Cannonball Rivers in North Dakota.

Flooding along the Big Sioux in South Dakota was confined to the area from Sioux Falls up to the source regions. Overflow from the Brookings area to near Sioux Falls ranged from around 1 1/2 to 2 1/2 feet over banks. Icejams were the main threat although they did not accentuate the flooding to any great extent. The Big Sioux remained below bankfull from a few miles below Sioux Falls to its mouth.

Some of the heaviest snow cover in South Dakota was on the middle and lower Moreau River drainage. The ice broke up on the Moreau, north of Faith, S. Dak., from the 13th to the 15th. Icejams and heavy runoff caused the stream to rise 5 to 8 feet over its banks below Thunder Butte, S. Dak., between the 15th and 25th.

The winter ice broke up on the Grand River in the Shadehill, S. Dak., area from the 13th to the 15th and continued to break up on downstream during the following week. About 6 feet of water was reported over county road crossings on the 16th and 17th. A settlement, Little Eagle, near the mouth of the Grand, was evacuated because of the threat of icejam flooding.

Overflow, resulting from icejams, occurred on the lower reaches of the Bad River from Midland to Ft. Pierre, S. Dak., from the 14th to the 19th. Stages at, and for a few miles above Ft. Pierre, were 3 to 4 1/2 feet over its natural banks. No damage was reported in this area as Ft. Pierre is protected by levees. Icejams developed on the White River on the 10th and 11th from above Interior to below Kadoka, S. Dak. Ice breakup continued through the 15th to its mouth. Overflow attending some jams was reported to be a quarter to a half-mile wide.

Strong warming developed along the Niobrara River from Valentine to Niobrara, Nebr., on the 10th and 11th. Runoff was sufficient to cause a quick ice breakup from near Norden to below Meadville, Nebr., on these dates. Large icejams formed in the vicinity of Spencer, Nebr., on the 12th. Some damage resulted to bridge approaches and to equipment inside the power house.

A second heavy snowstorm from the 21st to the 24th was more limited in scope than the earlier storm; although quite intense and destructive in northwest Iowa. This storm deposited 6 to 10 inches of snow from the Black Hills in South Dakota to near North Platte, Nebr., and 7 to 12 inches over a broad area extending from northeast Nebraska to southern Minnesota. Little or no snow occurred over central and eastern South Dakota. The 2-week warm period greatly reduced the frost in the ground, so most of the snowmelt was absorbed. Only minor rises resulted.

Ohio Basin.--South Chickamauga Creek near Chickamauga, Tenn., rose to 4.7 feet above flood stage on the 6th. It was out of its banks from the 4th to the 7th.

White Basin.--The Cache River at Patterson, Ark., went above flood stage on January 2 and was still in flood at the end of March.

The lower White River at Clarendon, Ark., was in flood from February 16 to March 10. At St. Charles, Ark., the river was out of its banks from February 27 to March 9. The flooding was minor and no damages were reported during March.

Lower Mississippi Basin.--The Big Black River in Mississippi went out of its banks at Bovina, Miss., on February 21. It receded within its banks on March 1.

PACIFIC SLOPE DRAINAGE

Coquille Basin.--The only serious flood conditions that developed during March occurred along the western slopes of the coast range. Small streams responded to the periodically heavy rain during the first 10 days and flowed bankfull or over during this period. The heavier rain on the 8th and 9th caused the South Fork Coquille to rise 3.1 feet above flood stage on the 9th. It receded within its banks on the 10th. Minor flooding occurred on the Coquille at Coquille, Oreg., on the 10th. One bridge approach was washed out in the Powers, Oreg., area. Minor stream bank erosion resulted in some low level pasture flooding.

Columbia Basin.--Heavy rain beginning late on the night of the 7th and continuing for 36 hours caused flooding along some tributary streams in the Willamette Basin between the 9th and 14th. Freezing levels during this period were 5,000 feet. The Coast Range tributaries rose to bankfull stage early on the 9th and crested on the same date. The South Yamhill at Whiteson, Oreg., exceeded flood stage by 4.2 feet. The Pudding and Tualatin reached crests above flood stage on the 10th and 12th. The main stem of the Willamette rose 8 to 10 feet with crests generally 6 to 7 feet below flood stage. At Portland, Oreg., the Willamette rose from 5 feet to near 10 feet on the 10th and 11th, or 8 feet below flood level.

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.	
Red River of the North Basin					
Sheyenne: West Fargo, N. Dak.	16	17	Apr. 12	(21.04 (20.4	22 Apr. 3
Red Lake: Crookston, Minn.	15	31	Apr. 18	24.3	Apr. 3
Red River of the North:					
Wahpeton, N. Dak.	10	14	21	13.9	16
Fargo, N. Dak.	17	16	May 6	30.1	23
Halstad, Minn.	24	20	May 9	35.5	27
Grand Forks, N. Dak.	28	21	Apr. 20	45.6	Apr. 4
Drayton, N. Dak.	32	29	May 10	42.15	Apr. 8
Pembina, N. Dak.	42	Apr. 2	Apr. 30	51.3	Apr.11-12
ST. LAWRENCE DRAINAGE					
Lake Ontario					
Black Creek: Churchville, N. Y.	5	6	6	5.1	6
ATLANTIC SLOPE DRAINAGE					
James: Richmond (Westham), Va.	12	2	2	12.2	2
Chemung: Chemung, N. Y.	12	6	6	13.35	6
Dan: Danville, Va.	11	1	1	11.9	1
Roanoke: Randolph, Va.	21	1	1	E21.5	1
Tar: Rocky Mount, N. C.	9	4	5	9.45	4
Tarboro, N. C.	19	4	10	22.7	7
Greenville, N. C.	13	1	12	16.1	8
Neuse: Neuse, N. C.	14	1	8	#17.8	5
Smithfield, N. C.	13	Feb. 25	10	(16.3 (19.85	Feb. 26 6
Goldsboro, N. C.	14	Feb. 18	15	(#17.1 (21.35	Feb. 23 10
Kinston, N. C.	14	Feb. 21	18	(15.3 (18.7	Feb. 26 12
Cape Fear: Moncure, N. C.	20	1 4	1 5	22.4 20.5	1 5
Fayetteville, N. C.	35	1	7	(42.6 (42.2	2 6
William O. Huske Lock & Dam #3	42	1	10	56.7	6
Lock No. 2, Elizabethtown, N.C.	20	Feb. 25	11	23.8 30.7 31.3	Feb. 27 4 6-7
Rocky: Norwood, N. C.	15	Feb. 28 4	1 6	20.7 23.8	1 4
Lynches: Effingham, S. C.	14	7	8	#14.0	7-8
Lumber: Lumberton, N. C.	8	Feb. 22	20	9.3	7-8
Waccamaw: Conway, S. C.	7	10	23	# 8.0	17-19
Pee Dee: Cheraw, S. C.	30	1 4	3 7	#35.6 #38.6	2 6
Peedee, S. C.	19	Feb. 17	17	(22.3 (25.4	Feb. 23 10
Black: Kingstree, S. C.	12	5	12	#13.0	8-9
Saluda: Pelzer, S. C.	9	4	5	10.3	4
Chappells, S. C.	14	4	7	21.4	5
Broad: Gaffney, S. C.	10	4	6	11.6	4
Blair, S. C.	14	1	8	25.0	5
Congaree: Columbia, S. C.	19	5	6	21.7	6
Santee: Jamestown, S. C.	10	10	18	16.6	13
North Fork Edisto: Orangeburg,S.C.	8	1	11	# 9.8	6
Edisto: Givhans, S. C.	10	2	19	#13.6	11
Savannah: Augusta (nr. Butler Creek),Ga.	21	6	6	21.45	6
Milhaven (nr.), Ga.	15	Feb. 27	28	18.1	9
Clyo, Ga.	11	Feb. 20	31	17.1	11,12
Ogeechee: Midville, Ga.	6	5	10	8.0	6
Dover, Ga.	7	Feb. 22	18	11.1	8
Eden, Ga.	9	Feb. 24	26	14.0	11

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
ATLANTIC SLOPE DRAINAGE	Ft.			Ft.	
Ocmulgee: Macon, Ga.	18	5	7	21.1	5
Hawkinsville, Ga.	25	5	10	27.3	8
Lumber City, Ga.	15	Feb. 23	17	(17.2 (19.4	Feb. 25 10
Oconee: Milledgeville, Ga.	20	4	8	26.1	5
Dublin, Ga.	21	5	12	26.25	8
Mt. Vernon, Ga.	16	4	17	20.3	7
Altamaha: Charlotte, Ga.	15	Feb. 21	22	(21.2 (23.8	Feb. 26 11
Doctortown, Ga.	10	7	18	10.8	11-14
Satilla: Waycross, Ga.	16	6	12	17.15	9
Atkinson, Ga.	13	Feb. 24	31	17.5	11
EAST GULF OF MEXICO DRAINAGE					
Alapaha: Statenville, Ga.	24			27.1	14
Suwannee: White Springs, Fla.	30			E31.0	22
Ellaville, Fla.	27			28.6	17
Branford, Fla.	24			27.0	21
Wilcox, Fla.	14			14.2	25
Chattahoochee: Fort Gaines Dam, Ga.	134	4	7	143.8	6
Flint: Montezuma, Ga.	20	6	7	20.3	7
Albany, Ga.	20	3	12	34.4	7
Newton, Ga.	24	6	13	34.9	9
Bainbridge, Ga.	25	4	14	31.2	10
Apalachicola: Jim Woodruff Dam, Fla.	66	4	12	72.4	8
Blountstown, Fla.	15	Feb. 14 29	25 1/	24.4 16.5	9 31
Choctawhatchee: Newton, Ala.	19	5	6	20.4	6
Caryville, Fla.	12	2	12	13.6	4
Conecuh: Brewton, Ala.	17	8	9	17.2	9
Oostanaula: Resaca, Ga.	22	5	8	26.9	6
Rome, Ga.	25	4	5	26.5	5
Etowah: Canton, Ga.	17	4	5	22.7	4
Coosa: Gadsden, Ala.	20	5	10	23.6	6
Alabama: Montgomery, Ala.	35	6	8	38.2	7
Millers Ferry, Ala.	40	4	13	45.8	9
Claiborne, Ala.	40	Feb. 17	16	43.1	11
Black Warrior: Warrior Lock & Dam, Ala.	30	6	7	31.3	7
Tombigbee: Jackson L & D, Ala.	43	Feb. 14	2	54.2	Feb.21,22
Pearl: Jackson, Miss.	18	Feb. 11	Apr. 11	(31.0 (21.6	Feb. 18 9
Monticello, Miss.	19	Feb. 11	Apr. 4	26.4	Feb. 17
Columbia, Miss.	17	Feb. 13	Apr. 4	22.85	Feb. 18
Bogalusa, La.	15	Jan. 15	Apr. 17	(20.5 (19.8	Feb. 18 1
Pearl River, La.	12	Feb. 13	Apr. 19	(17.4 (16.0	Feb. 19 2
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Crow: Delano, Minn.	8	10	14	8.5	11
Rum: St. Francis (nr.), Minn.	8	20	23	8.3	22
Yellow Medicine: Granite Falls (nr.), Minn.	6	16	16	J 6.8	16
Redwood: Redwood Falls (nr.), Minn.	6	15	16	J11.4	15
Cottonwood: New Ulm (nr.), Minn.	11	4	5	J12.4	5
Minnesota: Montevideo, Minn.	14	18	27	(14.7 (14.7	22 25
Savage (nr.), Minn.	698	17	Apr. 14	700.3	24
South Branch Zumbro: Rochester, Minn.	12	3	4	J15.1	4
Zumbro: Zumbro Falls, Minn.	18	4	5	J20.7	4
Theilman, Minn.	38	4	5	J39.4	4

FLOOD STAGE DATA

(All dates in March unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Black: Galesville, Wis.	12	20	20	J12.0	20
Root: Hokah, Minn.	47	4	5	J48.0	5
Kickapoo: Steuben, Wis.	8	(20 (24	21 27	8.2 8.9	21 26
Mississippi: Fort Ripley, Minn.	10	18	28	J14.3	23
Wabasha, Minn.	12	24	25	12.2	24
Keithsburg, Ill.	12	29	Apr. 8	12.9	Apr. 3
Missouri Basin					
James: Huron, S. Dak.	11	20	25	E12.2	22
Big Sioux: Flandreau, S. Dak.	6	15	16	6.2	15
Dell Rapids, S. Dak.	11	16	18	12.6	16
Ohio Basin					
South Chickamauga Creek: Chickamauga (nr.), Tenn.	10	4	7	14.7	6
White Basin					
Cache: Patterson, Ark.	7	Jan. 2 19	15 25	(11.1 (9.1 (8.1 (7.7	Jan. 14 Feb.16-18 4,5 21
White: Clarendon, Ark.	26	Feb. 16	10	27.2	Feb. 24-Mar. 1
St. Charles, Ark.	25	Feb. 27	9	25.4	Feb. 27-Mar. 4

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Lower Mississippi Basin					
Big Black: Bovina, Miss.	28	Feb. 10	1	38.5	Feb.17-19
PACIFIC SLOPE DRAINAGE					
Coquille Basin					
South Fork Coquille: Myrtle Point, Oreg.	35	9	10	38.1	9
Coquille: Coquille, Oreg.	21	10	10	21.3	10
Columbia Basin					
Mary's: Philomath, Oreg.	20	9	9	20.4	9
South Yamhill: Whiteson, Oreg.	38	9	11	42.2	9
Pudding: Aurora, Oreg.	20	10	12	22.7	10
Tualatin: Farmington, Oreg.	29	11	14	29.75	12
Johnson Creek: Sycamore, Oreg.	8	9	9	8.9	9
Chehalis Basin					
Chehalis: Chehalis, Wash.	63	10	10	63.15	10

* Provisional
# Highest Stage Observed
1/ Continued at end of month
J Ice effect
E Estimated

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	86	- 2.0	77	276	2.9
1000	31	139			276	1.9
950	31	550	- 1.8	68	276	7.2
900	31	977	- 2.7	71	285	11.7
850	31	1,429	- 4.2	70	289	17.5
800	31	1,906	- 6.0	67	284	19.4
750	31	2,409	- 8.0	66	276	21.4
700	31	2,944	-10.5	60	271	25.1
650	31	3,508	-13.5	52	270	27.4
600	31	4,118	-16.6	45	270	30.7
550	31	4,761	-20.3	44	264	31.5
500	31	5,467	-25.1	41	263	34.8
450	31	6,221	-30.3	41	263	37.9
400	31	7,052	-36.5	39	262	41.2
350	31	7,965	-43.0	38	267	46.4
300	31	8,989	-49.7		271	48.0
250	31	10,169	-54.3		275	49.5
200	30	11,599	-56.1		271	46.0
175	30	12,450	-54.5		271	43.7
150	30	13,438	-54.2		273	41.4
125	30	14,607	-54.7		272	35.7
100	29	16,030	-56.0		265	32.6
80	29	17,447	-57.0		265	24.9
70	28	18,288	-57.9		268	25.4
60	26	19,257	-57.0		270	23.7
50	26	20,411	-56.8		269	22.1
40	25	21,831	-55.8		268	20.4
30	24	23,666	-54.7		267	20.4
25	24	24,830	-54.4		266	23.3
20	23	26,263	-53.5		264	25.3
15	16	28,131	-51.0		268	35.0
10	5	30,740	-48.1			
7						
5						

ALBUQUERQUE, N. MEX.
838 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,619	1.5	47	342	1.9
1000	31	169				
950	31	591				
900	31	1,035				
850	31	1,503				
800	31	1,997	5.1	31	275	2.7
750	31	2,517	2.1	34	283	7.4
700	31	3,075	- 1.0	36	285	11.8
650	31	3,657	- 4.9	38	280	14.2
600	31	4,286	- 9.3	38	281	16.1
550	31	4,943	-13.8	35	278	19.2
500	31	5,671	-18.6	31	279	20.8
450	31	6,437	-24.0	31	280	25.3
400	31	7,297	-30.3	30	279	26.2
350	31	8,232	-37.7	32	278	28.4
300	31	9,276	-46.0		278	30.7
250	31	10,465	-54.7		278	32.1
200	31	11,868	-60.8		276	38.7
175	31	12,701	-59.7		277	41.6
150	31	13,667	-58.7		278	40.0
125	31	14,809	-60.1		275	39.6
100	31	16,194	-62.3		277	33.8
80	29	17,565	-62.9		279	31.5
70	29	18,387	-62.6		279	24.5
60	28	19,340	-61.7		279	20.4
50	27	20,472	-60.8		277	18.5
40	26	21,865	-58.3		270	18.8
30	24	23,684	-56.3		272	19.4
25	22	24,847	-55.2		269	21.0
20	20	26,270	-54.1		272	26.0
15	10	28,126	-52.4			
10						
7						
5						

AMARILLO, TEXAS
891 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,095	3.7	59	225	6.4
1000	31	144				
950	31	572				
900	31	1,015				
850	31	1,480	7.9	37	250	15.2
800	31	1,979	6.2	33	273	17.5
750	31	2,501	3.0	34	281	17.9
700	31	3,060	- .7	34	281	17.3
650	31	3,646	- 4.8	38	276	17.7
600	31	4,273	- 9.2	35	277	20.0
550	31	4,938	-13.6	34	278	24.3
500	31	5,659	-18.3	30	282	26.4
450	31	6,430	-24.2	31	282	28.7
400	31	7,285	-30.7	32	283	30.3
350	31	8,218	-38.3	35	280	34.8
300	31	9,261	-46.0		280	41.4
250	31	10,451	-54.4		279	41.4
200	31	11,855	-60.7		273	47.4
175	31	12,687	-59.8		272	52.1
150	29	13,647	-58.5		271	51.3
125	29	14,790	-59.9		271	48.8
100	29	16,176	-61.9		270	42.0
80	28	17,556	-62.1		273	33.0
70	28	18,380	-62.2		272	25.1
60	28	19,333	-61.3		269	21.4
50	27	20,470	-59.7		267	21.0
40	27	21,869	-58.2		263	19.8
30	25	23,689	-56.1		266	24.5
25	25	24,851	-54.8		267	25.8
20	24	26,279	-53.9		267	29.5
15	18	28,141	-51.9		270	36.7
10	9	30,782	-47.0			
7	6	33,136	-43.0			
5	6	35,439	-36.1			

ANCHORAGE, ALASKA
999 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	29	- 9.9	64	355	4.1
1000	31	32			357	7.2
950	31	430	- 9.0	59	17	8.9
900	31	847	-10.1	62	35	8.5
850	31	1,286	-11.8	66	59	6.8
800	31	1,749	-14.0	69	112	9.1
750	31	2,237	-16.8	68	133	12.6
700	31	2,751	-20.0	66	140	12.2
650	31	3,298	-23.2	59	154	11.7
600	31	3,878	-26.9	60	164	9.7
550	31	4,497	-30.9	56	182	9.7
500	31	5,171	-35.4	56	196	9.3
450	31	5,893	-40.0	56	204	10.1
400	31	6,693	-44.8		209	12.6
350	31	7,577	-49.8		213	12.8
300	31	8,576	-53.4		216	12.0
250	31	9,750	-52.7		233	8.9
200	30	11,199	-51.0		254	8.2
175	30	12,067	-50.9		240	8.2
150	30	13,071	-50.8		245	10.7
125	30	14,256	-51.4		255	10.3
100	30	15,703	-52.1		261	10.7
80	30	17,145	-52.9		261	9.7
70	29	18,002	-53.3		267	10.1
60	29	18,994	-53.5		257	10.3
50	29	20,165	-53.9		272	8.4
40	29	21,596	-54.5		267	7.2
30	28	23,433	-54.9		297	5.6
25	23	24,601	-55.3		308	5.6
20	21	26,019	-55.9		337	7.6
15	14	27,818	-56.2		349	8.0
10						
7						
5						

* ANNETTE, ALASKA
1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	37	3.1	78	129	8.9
1000	31	57			130	11.1
950	31	474	.7	78	148	19.8
900	31	904	- 2.4	86	160	23.9
850	31	1,356	- 5.2	86	171	23.3
800	31	1,831	- 8.1	84	180	22.5
750	31	2,329	-11.3	80	186	22.5
700	31	2,856	-14.4	71	192	21.2
650	31	3,414	-17.6	70	197	22.1
600	31	4,011	-21.5	70	196	23.1
550	31	4,645	-26.0	65	197	21.8
500	31	5,331	-31.2	64	207	20.2
450	31	6,067	-36.6	60	214	22.7
400	31	6,877	-42.6	67	218	25.1
350	31	7,767	-48.4		227	25.8
300	31	8,769	-53.9		229	28.2
250	30	9,921	-56.4		229	26.4
200	29	11,328	-54.9		229	24.9
175	28	12,175	-53.6		233	23.3
150	27	13,159	-53.3		233	21.0
125	27	14,332	-53.6		235	20.0
100	26	15,759	-54.4		243	20.8
80	26	17,187	-55.1		244	19.6
70	26	18,038	-55.5		249	17.5
60	26	19,021	-55.7		242	15.7
50	26	20,181	-56.3		250	14.0
40	26	21,598	-56.5		257	12.0
30	25	23,423	-57.0		258	11.1
25	23	24,582	-57.4		256	8.9
20	22	25,980	-57.8		287	7.4
15	15	27,806	-57.2		334	3.3
10	12	30,394	-55.9		323	6.8
7	[illegible]	32,680	-54.7			
5						

ATHENS, GA.
991 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	246	5.2	73	302	2.7
1000	31	170				
950	31	590	7.3	54	275	6.8
900	31	1,035	5.0	53	282	8.7
850	31	1,500	3.1	52	281	13.4
800	31	1,990	1.5	47	277	17.3
750	31	2,510	- .6	45	278	20.6
700	31	3,058	- 3.2	44	276	23.7
650	31	3,640	- 6.1	48	276	26.6
600	31	4,265	- 9.3	39	275	30.5
550	31	4,929	-13.7	40	275	33.4
500	31	5,651	-18.7	37	273	37.3
450	31	6,423	-24.5	36	270	42.0
400	31	7,276	-30.8	34	267	45.3
350	31	8,209	-38.1	41	266	49.3
300	31	9,252	-46.1		268	55.2
250	31	10,443	-53.7		271	63.5
200	31	11,860	-57.6		272	74.8
175	31	12,704	-56.8		272	72.5
150	31	13,679	-57.4		269	71.5
125	31	14,826	-59.3		271	61.2
100	30	16,210	-61.8		269	51.3
80	30	17,590	-61.8		269	41.4
70	29	18,420	-60.7		269	33.8
60	28	19,379	-59.8		271	27.2
50	28	20,524	-57.8		270	21.8
40	28	21,936	-56.6		272	14.4
30	25	23,775	-53.7		281	13.8
25	23	24,943	-53.1		287	13.4
20	20	26,374	-52.6		282	14.6
15	11	28,244	-48.6			
10						
7						

* BARROW, ALASKA
1023 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	8	-31.7	70	27	2.1
1000	31	169	-28.2	77	28	4.1
950	31	545	-24.5	80	43	7.0
900	31	936	-22.4	79	45	8.4
850	31	1,356	-21.5	71	44	7.4
800	31	1,803	-21.8	70	49	7.0
750	31	2,278	-23.3	69	44	6.4
700	31	2,780	-25.2	64	44	5.8
650	31	3,316	-28.0	64	37	5.6
600	31	3,887	-31.3	64	22	5.2
550	31	4,496	-35.1	64	15	4.3
500	31	5,158	-39.3	65	354	4.9
450	31	5,876	-43.6		344	5.6
400	31	6,658	-48.0		336	7.8
350	31	7,532	-51.9		338	10.7
300	31	8,523	-54.7		325	12.8
250	31	9,691	-53.6		320	9.1
200	30	11,135	-52.3		294	7.2
175	30	11,999	-52.1		293	7.2
150	30	12,998	-52.1		279	8.9
125	30	14,177	-52.3		282	9.7
100	29	15,619	-52.3		290	10.3
80	29	17,061	-52.5		285	11.8
70	29	17,924	-52.3		286	12.2
60	29	18,919	-52.5		290	13.0
50	28	20,093	-52.7		287	13.2
40	28	21,530	-53.3		289	14.2
30	28	23,379	-54.0		289	14.0
25	28	24,546	-55.1		296	13.8
20	28	25,967	-55.8		303	15.0
15	27	27,800	-56.3		304	15.5
10	24	30,384	-55.7		312	19.8
7	11	32,638	-55.0			

BARTER IS., ALASKA
1020 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	15	-31.3	75	264	5.6
1000	28	156	-28.9	74	272	7.0
950	28	528	-26.6	84	283	6.6
900	28	918	-22.8	87	357	.8
850	28	1,341	-18.7	86	116	2.3
800	28	1,793	-18.8	83	121	2.7
750	28	2,270	-20.0	76	142	3.1
700	28	2,783	-22.2	71	199	3.3
650	28	3,319	-25.2	65	194	6.8
600	28	3,902	-28.4	65	191	8.4
550	28	4,516	-32.3	65	203	12.0
500	28	5,188	-36.9	63	203	15.9
450	28	5,902	-42.1	60	202	17.7
400	28	6,698	-47.5		205	22.0
350	28	7,569	-52.9		204	22.3
300	28	8,553	-56.7		205	23.5
250	28	9,710	-55.2		215	16.3
200	28	11,146	-52.3		230	12.8
175	28	12,010	-52.0		242	12.4
150	28	13,008	-52.0		249	12.4
125	28	14,189	-52.2		249	14.0
100	28	15,630	-52.6		261	15.9
80	28	17,070	-53.1		266	16.3
70	28	17,929	-53.1		271	15.9
60	28	18,921	-53.4		274	14.6
50	28	20,093	-53.9		286	14.2
40	28	21,524	-54.6		272	13.0
30	28	23,361	-59.7		284	15.7
25	28	24,520	-56.4		291	15.2
20	27	25,934	-57.2		292	17.1
15	22	27,763	-57.7		298	16.1
10	7	30,367	-58.1			
7						

BETHEL, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	39	-20.7	69	347	8.5
1000	31	91			9	12.2
950	31	478	-15.7	62	23	14.2
900	31	885	-14.6	61	23	12.6
850	31	1,318	-15.1	60	14	12.6
800	31	1,776	-16.6	63	7	13.4
750	31	2,256	-18.6	62	360	13.8
700	31	2,772	-20.7	59	352	13.0
650	31	3,315	-23.4	60	349	15.0
600	31	3,899	-26.6	58	347	15.7
550	31	4,518	-30.6	55	343	16.1
500	31	5,194	-35.1	55	344	17.3
450	31	5,918	-40.1	51	350	14.8
400	31	6,716	-45.4		350	14.8
350	31	7,598	-50.0		339	12.2
300	31	8,598	-53.1		333	12.8
250	31	9,772	-53.0		328	8.9
200	31	11,716	-51.8		316	7.8
175	31	12,084	-51.1		301	8.2
150	31	13,087	-51.0		300	8.5
125	31	14,273	-51.5		288	9.9
100	31	15,720	-52.3		284	9.1
80	31	17,162	-53.0		277	10.5
70	31	18,021	-53.4		288	10.9
60	31	19,012	-53.9		295	10.3
50	31	20,182	-54.2		289	8.9
40	31	21,612	-54.6		295	8.5
30	29	23,447	-54.7		295	7.2
25	29	24,512	-55.5		307	6.8
20	26	26,044	-55.4		329	7.4
15	17	27,907	-55.8		33	8.0
10	5	30,636	-54.2			
7						

BISMARCK, N. DAK.
955 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	505	- 3.5	71	345	5.6
1000	31	136				
950	31	545			352	4.3
900	31	974	- .6	58	330	13.0
850	31	1,430	- 1.7	48	328	14.0
800	31	1,911	- 3.8	46	323	16.5
750	31	2,416	- 6.3	46	313	17.3
700	31	2,956	- 9.2	47	308	21.0
650	31	3,521	-12.2	46	306	22.5
600	31	4,134	-15.5	49	304	25.1
550	31	4,780	-19.7	49	299	27.6
500	31	5,487	-24.6	49	297	29.9
450	31	6,236	-30.4	47	296	33.2
400	31	7,074	-36.3	45	294	38.7
350	31	7,986	-43.2		295	38.9
300	31	9,007	-50.8		290	40.2
250	31	10,176	-57.1		286	43.9
200	31	11,578	-58.5		292	38.1
175	31	12,421	-56.6		288	34.2
150	31	13,399	-55.7		290	31.3
125	31	14,559	-56.2		283	31.5
100	31	15,975	-56.7		282	26.8
80	31	17,386	-57.6		288	24.9
70	31	18,227	-57.9		285	22.1
60	31	19,198	-58.5		283	19.8
50	30	20,344	-58.9		288	17.5
40	28	21,745	-58.6		287	13.6
30	28	23,554	-57.9		282	17.9
25	28	24,703	-58.0		278	17.7
20	27	26,115	-57.6		269	21.8
15	22	27,941	-56.0		279	24.3
10	16	30,529	-53.0		278	34.6
7	6	32,808	-49.9			

BOISE, IDAHO
917 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	868	2.0	73	145	5.4
1000	31	164				
950	31	581				
900	31	1,022	4.9	54	136	4.9
850	31	1,487	3.4	48	212	2.9
800	31	1,976	.2	50	255	6.8
750	31	2,493	- 3.1	55	264	10.9
700	31	3,034	- 6.5	55	262	15.3
650	31	3,607	-10.3	54	259	17.1
600	31	4,222	-13.8	49	257	19.4
550	31	4,872	-18.2	48	264	23.7
500	31	5,584	-23.1	48	265	27.6
450	31	6,345	-28.7	43	265	32.6
400	31	7,182	-34.6	41	265	35.7
350	31	8,102	-41.1	37	266	38.7
300	31	9,133	-48.6		268	42.9
250	31	10,312	-56.1		271	42.5
200	31	11,710	-61.1		276	38.5
175	31	12,540	-60.2		281	35.7
150	30	13,512	-58.1		278	35.0
125	30	14,660	-58.6		277	34.0
100	30	16,059	-59.6		279	29.1
80	30	17,455	-59.2		276	28.4
70	30	18,290	-59.5		277	25.8
60	29	19,254	-59.7		277	23.7
50	27	20,399	-59.7		281	17.7
40	27	21,793	-59.4		282	20.0
30	25	23,592	-58.8		277	18.6
25	21	24,739	-58.5		276	20.4
20	15	26,158	-57.8		268	25.4
15	8	27,985	-56.2			
10						
7						

* BOOTHVILLE, LA.
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1	13.2	85	21	2.1
1000	31	160	13.9	77	45	2.5
950	31	596	12.0	66	177	1.0
900	31	1,043	10.3	55	239	3.7
850	31	1,517	8.8	49	262	6.8
800	31	2,018	6.8	47	262	10.1
750	31	2,543	4.5	41	275	14.0
700	31	3,105	1.7	39	279	18.5
650	31	3,694	- 1.8	37	276	22.7
600	31	4,331	- 6.0	39	275	27.2
550	31	4,999	-10.6	38	275	28.2
500	31	5,732	-15.5	35	273	31.9
450	31	6,513	-21.1	31	272	37.1
400	31	7,377	-27.7	29	273	42.3
350	31	8,322	-35.1	32	269	50.1
300	31	9,379	-42.9	37	269	60.4
250	30	10,582	-51.3		268	68.0
200	30	12,007	-57.3		268	73.4
175	30	12,848	-58.6		268	73.4
150	30	13,814	-60.0		270	70.1
125	30	14,942	-63.6		266	60.8
100	30	16,301	-66.3		267	51.1
80	30	17,652	-65.7		266	38.9
70	30	18,463	-65.1		264	32.1
60	30	19,406	-63.1		270	24.7
50	28	20,536	-60.4		273	18.1
40	27	21,933	-57.7		276	12.8
30	27	23,763	-54.7		316	4.3
25	27	24,932	-53.4		356	3.7
20	27	26,378	-50.4		9	5.2
15	22	28,261	-46.4		255	6.6
10	14	30,979	-40.3		253	22.9
7						

* BROWNSVILLE, TEXAS
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	7	15.2	90	113	3.3
1000	31	145	16.3	82	130	7.2
950	31	582	14.4	73	152	12.6
900	31	1,037	12.8	60	169	10.7
850	31	1,517	11.5	53	195	9.3
800	31	2,022	9.6	51	224	7.2
750	31	2,556	7.8	41	255	6.4
700	31	3,122	4.6	42	267	9.7
650	31	3,720	.7	40	267	14.0
600	31	4,360	- 3.7	38	268	18.3
550	31	5,036	- 8.7	38	267	21.0
500	31	5,773	-14.1	34	270	24.9
450	31	6,560	-19.8	34	271	31.9
400	31	7,430	-26.0	31	269	39.6
350	31	8,383	-32.9	32	266	47.4
300	31	9,449	-41.0	24	264	56.3
250	31	10,666	-49.3		264	69.3
200	31	12,103	-56.5		264	82.4
175	31	12,943	-59.9		264	81.2
150	31	13,899	-62.8		264	68.2
125	31	15,013	-66.2		263	57.7
100	30	16,349	-69.8		261	44.9
80	29	17,671	-70.2		262	32.4
70	29	18,467	-68.8		262	23.1
60	29	19,394	-66.5		261	16.1
50	28	20,508	-62.9		264	12.0
40	28	21,893	-59.3		264	7.0
30	28	23,705	-56.8		295	1.2
25	27	24,868	-54.2		61	5.4
20	26	26,315	-51.3		71	12.0
15	26	28,204	-46.6		80	6.6
10	21	30,909	-40.5		242	9.1
7	13	33,320	-35.1			

BUFFALO, N. Y.
990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	218	- 1.5	83	235	5.2
1000	31	137				
950	31	547	- .8	72	245	10.1
900	31	977	- 2.6	70	260	15.0
850	31	1,429	- 4.2	70	273	17.9
800	31	1,905	- 6.4	68	275	20.4
750	31	2,409	- 8.9	65	276	21.2
700	31	2,940	-11.1	62	275	24.7
650	31	3,507	-13.4	61	273	27.0
600	31	4,113	-16.7	59	273	28.7
550	31	4,759	-20.5	50	273	30.5
500	31	5,462	-25.0	49	270	32.4
450	31	6,717	-30.5	48	269	34.2
400	31	7,046	-36.6	45	271	36.1
350	31	7,958	-43.3	41	270	36.3
300	31	8,981	-49.4		270	39.6
250	31	10,161	-54.3		269	43.3
200	31	11,583	-55.4		268	41.8
175	31	12,438	-53.8		272	41.6
150	31	13,429	-53.4		274	37.3
125	31	14,599	-54.6		269	31.1
100	31	16,022	-55.7		269	29.1
80	31	17,441	-56.4		267	27.8
70	31	18,287	-56.9		268	25.1
60	30	19,258	-57.0		271	23.3
50	30	20,413	-56.9		268	21.8
40	30	21,827	-56.2		264	24.3
30	29	23,659	-55.3		266	25.3
25	29	24,824	-54.6		268	26.8
20	27	26,256	-53.5		267	29.1
15	24	28,118	-52.2		261	35.0
10	11	30,751	-48.9			
7						

*CANTON IS., PACIFIC AREA
+ 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	30.6	70	75	8.9
1000	30	67	29.2	69	74	9.1
950	30	513	23.4	70	76	12.2
900	30	991	21.0	63	81	13.6
850	30	1,484	19.7	57	84	14.2
800	30	2,003	16.5	52	81	14.4
750	30	2,545	13.9	47	82	14.0
700	30	3,129	10.8	41	85	13.0
650	30	3,736	7.3	41	83	11.5
600	30	4,398	3.9	37	78	10.5
550	30	5,094	- .1	34	77	9.7
500	30	5,857	- 4.2	28	84	7.8
450	30	6,676	- 9.2	26	92	5.2
400	30	7,583	-14.9	24	160	3.3
350	30	8,580	-21.6	23	153	3.7
300	30	9,697	-29.7	22	187	4.3
250	30	10,969	-40.3	18	229	6.6
200	29	12,450	-52.9		228	6.2
175	29	13,297	-60.1		259	7.6
150	28	14,242	-67.6		272	11.8
125	28	15,318	-75.5		279	16.1
100	27	16,587	-82.2		262	9.3
80	27	17,828	-82.7		79	4.1
70	27	18,580	-78.7		83	14.6
60	27	19,470	-72.8		86	32.2
50	26	20,551	-68.3		91	47.0
40	26	21,910	-62.0		90	50.5
30	26	23,729	-54.1		98	14.6
25	26	24,905	-51.7		238	2.3
20	25	26,367	-47.2		285	15.9
15	22	28,282	-44.0		274	20.2
10	18	31,023	-40.7		279	13.4
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C.
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	4	7.2	80	338	2.9
1000	30	151	9.3	64	320	3.9
950	30	574	7.6	59	273	8.2
900	30	1,020	5.1	55	266	11.5
850	30	1,484	2.6	49	270	13.2
800	30	1,973	.3	41	264	15.2
750	30	2,486	- 1.7	40	267	21.0
700	30	3,036	- 4.2	42	262	24.3
650	30	3,610	- 7.6	41	264	28.4
600	30	4,234	-11.5	43	262	30.9
550	30	4,891	-15.8	40	263	34.4
500	30	5,608	-20.5	36	263	39.2
450	30	6,380	-25.7	33	267	41.8
400	30	7,228	-31.5	33	266	45.8
350	30	8,161	-38.2	35	265	53.6
300	30	9,204	-45.7		267	58.9
250	30	10,398	-53.2		270	62.7
200	30	11,822	-56.5		269	64.5
175	30	12,668	-56.9		271	67.8
150	30	13,645	-56.7		267	65.9
125	30	14,797	-58.3		270	55.9
100	30	16,193	-60.7		270	47.2
80	30	17,580	-60.8		268	39.6
70	30	18,411	-60.4		268	34.4
60	30	19,373	-59.2		272	27.4
50	30	20,520	-57.5		275	19.4
40	30	21,932	-56.4		279	17.3
30	30	23,768	-54.6		281	16.9
25	28	24,940	-53.4		286	14.6
20	28	26,383	-51.6		273	14.8
15	28	28,261	-48.6		265	21.0
10	26	30,963	-42.4		262	35.2
7	13	33,459	-37.1			

* CARIBOU, ME.
991 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	191	- 5.3	86	285	4.1
1000	31	120				
950	31	526	- 5.1	83	279	4.7
900	31	948	- 5.8	79	261	7.2
850	31	1,396	- 6.6	80	254	9.9
800	31	1,868	- 8.2	73	254	10.1
750	31	2,368	-10.4	70	249	10.1
700	30	2,896	-13.1	58	246	11.7
650	30	3,456	-16.1	52	250	11.8
600	30	4,056	-19.7	43	254	15.0
550	30	4,697	-23.5	42	252	18.8
500	30	5,388	-27.8	40	256	20.8
450	30	6,136	-32.6	39	256	25.4
400	30	6,960	-38.2	35	265	27.0
350	30	7,867	-44.0	32	263	27.2
300	30	8,888	-49.4		260	30.3
250	30	10,072	-53.2		257	35.9
200	29	11,507	-53.6		259	34.0
175	29	12,365	-53.6		263	33.2
150	29	13,358	-52.8		262	33.6
125	29	14,534	-53.1		263	29.7
100	29	15,969	-53.9		266	28.0
80	29	17,393	-56.0		264	22.1
70	29	18,241	-56.3		259	22.9
60	28	19,224	-56.4		261	23.3
50	28	20,379	-56.6		266	22.7
40	28	21,794	-56.3		263	22.0
30	26	23,618	-56.2		263	21.8
25	26	24,776	-55.7		265	24.5
20	24	26,210	-54.0		263	26.6
15	19	28,087	-53.2		260	32.1
10	[illegible]	30,666	-49.6			
7						

CHARLESTON, S. C.
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	13	7.1	80	284	2.9
1000	31	160	10.6	64	281	3.5
950	31	585	9.3	52	279	7.0
900	31	1,034	6.9	54	277	10.3
850	31	1,502	4.4	52	272	14.6
800	31	1,994	2.4	46	275	17.1
750	31	2,516	.3	39	277	20.0
700	31	3,065	- 2.2	39	277	22.5
650	31	3,648	- 5.0	35	274	26.4
600	31	4,277	- 8.6	34	273	30.9
550	31	4,942	-13.0	35	270	34.8
500	31	5,668	-18.1	34	273	36.9
450	31	6,441	-23.8	33	270	41.2
400	31	7,298	-30.1	32	271	46.4
350	31	8,234	-37.4	34	272	50.3
300	31	9,281	-45.3		270	57.1
250	31	10,476	-53.1		271	67.4
200	31	11,899	-56.4		270	77.9
175	31	12,744	-56.7		270	75.6
150	31	13,721	-58.1		268	72.8
125	31	14,863	-60.5		268	62.9
100	31	16,246	-62.4		267	52.4
80	31	17,620	-62.9		268	40.8
70	31	18,444	-61.7		268	33.0
60	31	19,401	-60.0		270	28.6
50	31	20,541	-58.9		279	17.7
40	31	21,945	-57.1		286	11.5
30	31	23,778	-54.1		299	10.1
25	31	24,950	-52.8		300	10.5
20	30	26,399	-50.2		297	9.1
15	23	28,297	-47.5		257	17.5
10	6	30,984	-41.9			
7						

CHIHUAHUA, ME[illegible]
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,428	8.[illegible]	35	277	1.[illegible]
1000	31	129				
950	31	557				
900	31	1,015				
850	31	1,495	9.4	35	313	[illegible]
800	31	2,000	10.0	33	[illegible]	[illegible]
750	31	2,526	7.3	34	231	4.[illegible]
700	31	3,027	3.9	36	240	6.0
650	31	3,689	- .1	35	241	11.1
600	31	4,329	- 4.8	35	241	17.3
550	31	5,001	- 9.4	31	250	19.8
500	31	5,736	-14.7	32	266	20.2
450	31	6,515	-20.6	33	268	25.[illegible]
400	31	7,385	-27.4	35	270	29.5
350	31	8,331	-34.8	[illegible]	268	31.7
300	30	9,390	-43.1		265	[illegible]
250	30	10,594	-51.1		268	42.[illegible]
200	29	12,025	-56.9		272	49.0
175	29	12,847	-[illegible]		[illegible]	49.9
150	28	13,831	-60.7		278	50.1
125	27	14,956	-63.1			[illegible]
100	27	16,318	-66.6		274	[illegible]
80	27	17,667	-66.9		272	[illegible]
70	27	18,473	-66.0		272	26.0
60	27	19,418	-63.9		273	21.4
50	25	20,541	-61.7		276	15.2
40	22	21,931	-58.2		280	11.1
30	21	23,755	-55.7		278	7.2
25	20	24,919	-55.2		277	[illegible]
20	17	26,342	-53.4		295	5.6
15	10	28,195	-50.1			
10						
7						

* COLD BAY, ALASKA
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	- 6.3	81	[illegible]	[illegible]
1000	[illegible]	[illegible]				12.0
950	[illegible]	[illegible]				
900						
850	[illegible]	1,331	[illegible]			[illegible]
800	[illegible]	1,[illegible]	-13.7	61	332	19.8
750	31	2,[illegible]	-15.3	51	334	22.3
700	31	[illegible],801	-18.[illegible]	48	[illegible]	22.0
650	[illegible]	[illegible],349	-[illegible]	43	[illegible]	21.8
600	[illegible]	[illegible],938	-[illegible]	41		[illegible]
550	[illegible]	[illegible],561	-28.9	41		[illegible]
500	31	[illegible]	-33.5	39	[illegible]	21.8
450	31	[illegible],970	-38.4	42	311	23.3
400	31	[illegible],774	-43.5	38	[illegible]	26.6
350	31	[illegible],661	-4[illegible]		[illegible]	
300	31	[illegible],667	-51.7			
250	[illegible]	[illegible],845	-53.3		291	
200	31	[illegible],283	-52.4			
175	[illegible]	12,148	-51.6			22.0
150	[illegible]	[illegible]				[illegible]
125						
100			[illegible]			
80						
70	[illegible]	18,[illegible]	-53.3		[illegible]	
60	[illegible]	19,072	-54.2			
50	[illegible]	20,[illegible]	-55.3		[illegible]	
40	[illegible]	21,657	-55.6			
30	[illegible]	[illegible]	-56.0			
25	[illegible]	[illegible],634	[illegible]		311	
20	[illegible]	[illegible],046	-56.6		[illegible]	
15	[illegible]	27,872	-56.6		329	[illegible]
10	[illegible]	30,4[illegible]	-54.4		319	
7	13	32,[illegible]	[illegible]			

COLUMBIA, MO.
987 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	238	3.8	70	208	4.3
1000	31	132				
950	31	548	4.9	60	233	12.4
900	31	991	3.3	58	258	18.1
850	31	1,453	1.4	60	271	19.2
800	31	1,939	- 1.1	57	278	20.0
750	31	2,448	- 3.2	48	282	22.1
700	31	2,996	- 6.0	45	283	23.3
650	31	3,564	- 9.1	41	284	26.2
600	31	4,188	-12.8	44	282	30.3
550	31	4,840	-17.2	43	282	32.1
500	31	5,554	-22.0	36	281	34.4
450	31	6,315	-27.4	33	282	37.5
400	31	7,159	-33.7	35	282	39.8
350	31	8,083	-40.3	38	278	42.3
300	31	9,118	-47.5		278	47.8
250	31	10,303	-55.0		277	49.3
200	31	11,713	-58.7		281	50.5
175	31	12,553	-57.7		279	49.9
150	31	13,529	-56.6		277	47.0
125	31	14,682	-57.6		276	42.3
100	31	16,086	-59.1		278	36.7
80	31	17,481	-60.1		277	29.7
70	29	18,318	-60.3		274	26.4
60	29	19,278	-59.9		273	24.9
50	27	20,420	-58.5		269	23.5
40	27	21,826	-57.7		271	23.5
30	25	23,646	-56.1		272	27.6
25	23	24,811	-55.1		271	27.8
20	21	26,247	-53.9		274	29.7
15	14	28,112	-51.9		265	36.5
10	5	30,779	-47.3			
7						

CORPUS CHRISTI, TEXAS
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	6	16.3	85	103	2.3
1000	26	149	15.5	83	121	3.1
950	26	587	13.1	81	146	4.7
900	26	1,037	11.7	68	166	4.5
850	26	1,515	10.6	61	183	6.0
800	26	2,019	8.6	64	214	6.6
750	26	2,553	6.4	59	237	8.5
700	26	3,116	3.5	59	250	8.9
650	26	3,708	- .4	54	263	10.3
600	26	4,348	- 4.7	52	263	15.0
550	26	[illegible],018	- 9.6	51	261	19.8
500	26	5,757	-14.8	52	266	22.7
450	26	6,537	-20.7	51	269	25.8
400	26	7,607	-27.3	50	267	31.1
350	26	[illegible],355	-34.2	48	268	35.2
300	26	9,415	-42.5	59	268	43.1
250	26	10,623	-50.8		265	51.5
200	26	12,053	-56.7		264	57.3
175	26	12,895	-59.2		262	53.4
150	26	13,857	-61.4		266	50.7
125	25	14,977	-65.0		266	45.5
100	24	16,326	-67.6		266	40.4
80	23	17,673	-67.6		265	32.2
70	22	18,477	-66.5		269	24.5
60	21	19,414	-64.7		266	18.6
50	21	20,535	-61.9		262	14.2
40	20	21,929	-59.0		266	9.7
30	20	23,748	-55.7		270	8.2
25	19	24,914	-53.9		282	5.6
20	18	26,352	-51.0		304	6.0
15	17	28,246	-46.6		271	6.0
10	16	30,984	-38.3		241	12.0
7	5	33,340	-34.9			

DAYTON, OHIO
981 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	297	2.4	74	231	2.3
1000	31	144				
950	31	560	3.1	65	230	10.7
900	31	996	1.0	63	256	16.3
850	31	1,454	- 1.3	61	266	18.8
800	31	1,936	- 3.2	54	272	19.2
750	31	2,444	- 5.9	49	274	21.6
700	31	2,983	- 8.6	46	273	22.9
650	31	3,554	-11.7	46	274	25.1
600	31	4,165	-15.2	43	273	28.9
550	31	4,816	-19.0	40	275	30.9
500	31	5,522	-23.7	R37	276	34.4
450	31	6,279	-29.1	R34	276	35.7
400	31	7,116	-35.1	R33	281	39.4
350	31	8,034	-41.7	R33	281	42.2
300	31	9,063	-48.8		281	46.6
250	31	10,244	-54.6		282	47.2
200	31	11,662	-56.8		281	48.6
175	31	12,510	-55.9		278	48.6
150	31	13,492	-55.8		274	45.8
125	31	14,650	-56.7		274	38.7
100	31	16,061	-57.8		272	37.1
80	31	17,465	-58.6		271	31.1
70	31	18,304	-58.5		271	26.6
60	31	19,272	-58.4		266	24.5
50	31	20,420	-57.7		268	23.3
40	31	21,831	-56.4		269	25.4
30	29	23,662	-55.1		268	25.8
25	29	24,827	-54.6		273	26.4
20	27	26,257	-53.6		271	32.1
15	24	28,096	-52.2		270	38.7
10	10	30,743	-46.9			
7						

DEL RIO, TEXAS
981 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	314	12.3	70	106	5.4
1000	31	150				
950	31	584	12.7	65	132	1[illegible].3
900	31	1,035	11.0	64	167	1[illegible].0
850	31	1,511	9.5	49	187	[illegible]
800	31	2,013	7.9	39	229	[illegible]
750	31	2,539	6.3	35	263	[illegible]
700	31	3,106	2.8	37	277	11.7
650	31	3,697	- 1.1	32	278	13.8
600	31	4,335	- 5.8	36	275	18.6
550	31	5,002	-10.0	38	270	22.0
500	31	5,737	-16.1	37	258	24.1
450	31	6,511	-21.7	31	270	28.6
400	31	7,380	-28.5	32	270	34.8
350	31	8,323	-35.6	32	271	38.5
300	31	9,377	-43.6		269	47.4
250	31	10,580	-51.9		270	54.6
200	30	12,004	-57.9		268	62.7
175	30	12,843	-59.1		269	64.7
150	30	13,805	-60.8		268	62.4
125	30	14,933	-63.4		269	51.9
100	29	16,295	-66.0		[illegible]	41.2
80	29	17,640	-67.2		271	31.1
70	29	18,447	-65.7		[illegible]	27.0
60	26	19,384	-64.4		271	21.4
50	26	20,504	-62.3		272	15.9
40	26	21,891	-59.3		272	10.1
30	25	23,709	-56.0		[illegible]	7.6
25	25	24,835	-54.8		273	6.0
20	25	26,311	-52.5		[illegible]	4.1
15	25	28,190	-48.3		264	6.8
10	14	30,900	-42.2			
7						

[illegible]
836 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,611	- 1.3	[illegible]	[illegible]	
1000	31	[illegible]				
950	31	575				
900	31	1,017				
850	[illegible]	1,476				
800	31	[illegible]	3.4			
750	[illegible]	2,[illegible]	.7	37		
700	31	[illegible]	- 2.9	[illegible]	301	
650	[illegible]	3,615	- 7.4	40	304	
600	[illegible]	4,238	-11.4	42	[illegible]	
550	31	4,[illegible]	-15.4	38	[illegible]	
500	31	[illegible]	-20.1	37	[illegible]	
450	[illegible]	6,381	-2[illegible]	37	[illegible]	[illegible]
400	31	7,226	-32.8	[illegible]	288	
350	31	8,15[illegible]	-40.2	[illegible]	289	
300	31	9,1[illegible]	-47.6		[illegible]	
250	[illegible]	10,[illegible]	-55.4		[illegible]	36.[illegible]
200	31	11,768	-61.4		[illegible]	[illegible]
175	[illegible]	12,597	-60.5		[illegible]	
150	[illegible]	13,5[illegible]	-5[illegible]		[illegible]	41.0
125	31	14,709	-58.2		[illegible]	[illegible]
100	[illegible]	16,10[illegible]	-60.0		279	31.7
80	[illegible]	17,[illegible]	-59.9		277	[illegible]
70	[illegible]	18,333	-60.5		276	[illegible]
60	30	19,293	-60.4			
50	30	20,431	-59.8			
40	29	21,83[illegible]	-58.4			20.4
30	[illegible]	23,643	-57.1		[illegible]	
25	[illegible]	24,800	-56.4			
20	[illegible]	26,[illegible]	-55.8			
15	13	28,064	-54.7		268	32.[illegible]
10						
7						

DODGE CITY, KANS.
923 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	792	2.3	67	245	5.6
1000	31	136				
950	31	554				
900	31	996	5.3	50	245	9.9
850	31	1,464	6.3	36	280	15.0
800	31	1,960	4.7	28	302	16.5
750	31	2,481	1.3	29	301	17.9
700	31	3,034	- 2.4	31	294	18.8
650	31	3,616	- 6.4	34	290	19.2
600	31	4,239	-10.8	36	286	23.5
550	31	4,898	-15.1	37	287	27.2
500	31	5,616	-20.1	35	284	29.1
450	31	6,381	-25.8	33	285	32.1
400	31	7,231	-32.3	32	287	35.5
350	31	8,158	-39.6	35	287	36.5
300	31	9,194	-47.5		287	40.2
250	31	10,377	-55.3		282	46.8
200	31	11,776	-61.3		279	51.9
175	31	12,605	-59.8		279	50.9
150	31	13,571	-58.9		278	48.8
125	31	14,713	-59.6		274	45.5
100	31	16,103	-61.0		275	36.7
80	30	17,487	-60.8		278	29.9
70	29	18,315	-61.3		278	24.9
60	29	19,270	-61.3		272	22.3
50	29	20,404	-59.7		267	21.2
40	28	21,801	-58.7		269	21.8
30	27	23,615	-57.1		267	26.4
25	25	24,772	-55.5		268	31.9
20	18	26,193	-54.9		272	36.9
15	16	28,031	-53.9		262	41.8
10	10	30,658	-49.7			
7						
5						

EL PASO, TEXAS
883 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,193	8.1	30	312	2.5
1000	31	148				
950	31	581				
900	31	1,038				
850	31	1,510	10.6	31	308	4.7
800	31	2,012	8.0	34	280	7.8
750	31	2,538	4.8	33	267	10.5
700	31	3,101	1.4	38	265	14.6
650	31	3,689	- 2.5	39	260	15.0
600	31	4,324	- 7.1	38	259	18.1
550	31	4,989	-11.9	38	266	22.0
500	31	5,720	-16.9	38	268	23.7
450	31	6,491	-22.8	37	270	24.7
400	31	7,356	-29.6	36	271	26.8
350	31	8,294	-37.1	35	269	28.6
300	31	9,342	-45.4		271	34.8
250	31	10,536	-53.9		272	41.0
200	31	11,949	-58.5		272	53.0
175	31	12,788	-59.3		272	59.4
150	31	13,751	-60.0		272	57.9
125	31	14,884	-62.0		273	51.9
100	31	16,256	-64.6		274	44.9
80	31	17,616	-65.1		277	32.4
70	29	18,431	-64.4		276	27.8
60	29	19,375	-62.8		278	23.5
50	29	20,501	-61.7		280	17.3
40	29	21,890	-58.5		269	13.2
30	28	23,710	-56.0		266	10.9
25	26	24,872	-55.2		268	13.4
20	23	26,306	-52.5		271	15.3
15	13	28,166	-50.8		257	18.3
10						
7						
5						

ELY, NEV.
808 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,909	- 3.7	53	195	5.8
1000	31	191				
950	31	609				
900	31	1,046				
850	31	1,507				
800	31	1,990	- .3	48	186	5.1
750	31	2,508	- .6	40	247	2.9
700	31	3,056	- 3.6	38	267	7.6
650	31	3,638	- 7.1	37	273	13.4
600	31	4,258	-10.6	41	274	18.3
550	31	4,917	-15.3	43	281	20.6
500	31	5,634	-20.5	43	279	22.7
450	31	6,400	-26.1	38	277	25.4
400	31	7,246	-32.7	39	277	28.7
350	31	8,173	-39.7	R37	280	32.6
300	31	9,209	-47.7		282	34.0
250	31	10,388	-56.6		284	37.1
200	31	11,775	-63.8		275	42.7
175	31	12,597	-61.8		277	42.0
150	31	13,558	-59.7		278	40.2
125	30	14,694	-60.4		279	40.4
100	29	16,080	-60.3		277	32.1
80	29	17,465	-61.9		[illegible]	28.6
70	28	18,292	-61.3		275	26.0
60	28	19,247	-61.8		278	21.4
50	27	20,381	-60.4		280	17.7
40	25	21,782	-59.7		277	18.3
30	24	23,585	-58.4		268	18.6
25	23	24,735	-57.6		268	22.0
20	23	26,146	-56.7		270	27.4
15	19	27,987	-54.6		267	27.4
10	13	30,598	-50.3			
7	6	32,998	-42.0			
5	5	35,301	-38.0			

EMPALME, M[illegible]
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	12.5	[illegible]	329	3.9
1000	31	116	17.5	41	328	4.9
950	31	553	19.2	[illegible]	346	6.8
900	31	1,019	16.9	29	336	4.5
850	31	1,502	13.8	29	240	1.9
800	31	2,[illegible]	10.7	28	211	4.9
750	31	[illegible]	7.5	[illegible]	229	7.0
700	31	3,1[illegible]	4.0	[illegible]	[illegible]	9.5
650	31	3,703	.1	23	254	12.4
600	31	4,[illegible]	- 4.3	[illegible]	258	16.3
550	31	5,015	- 9.2	26	265	19.2
500	31	5,[illegible]	-14.7	27	[illegible]	22.5
450	31	6,532	-20.9	32	267	28.0
400	31	7,400	-27.5	34	264	32.4
350	31	8,346	-35.2	[illegible]	266	36.3
300	31	9,401	-43.6		266	4[illegible]
250	[illegible]	10,604	-51.4		[illegible]	56.3
200	31	12,0[illegible]	-56.2		269	[illegible]
175	[illegible]	[illegible]	-58.0		272	68.4
150	[illegible]	13,846	-60.6		273	65.3
125	30	14,970	-64.5		272	56.3
100	28	16,323	-68.0		274	42.3
80	[illegible]	17,657	-69.0		272	29.3
70	28	18,457	-67.4		274	24.9
60	28	19,303	-64.7		283	17.[illegible]
50	27	20,511	-62.5		286	12.4
40	23	21,901	-59.9		289	7.2
30	22	23,720	-56.0		262	2.9
25	19	24,877	-54.8		276	3.9
20	11	26,331	-51.4			
15	5	[illegible]	-48.6			
10						
7						
5						

* [illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE						
1000						
950	[illegible]		-16.3	[illegible]		
900	[illegible]	892	-16.9		96	6.2
850	[illegible]	1,[illegible]	-17.5	66	116	
800	[illegible]	[illegible]	-17.0	60	131	
750	[illegible]	2,[illegible]	-18.7	63		
700			-21.7	61		
650			-24.9	59	[illegible]	
600						
550			-32.6	4[illegible]		[illegible]
500		5,172	-37.[illegible]			
450			-42.[illegible]			
400			-46.[illegible]			
350		7,[illegible]	-51.9		194	
300		8,547	-55.1			
250	[illegible]	[illegible],712	-54.2			
200		11,155	-51.6		255	
175		12,021	-51.6		[illegible]	
150	30	13,021	-51.7			[illegible]
125	[illegible]	14,203	-51.9			
100	30	15,647	-52.3			10.9
80	[illegible]	17,086	-52.9			11.3
70		17,[illegible]	-53.1		267	10.7
60		[illegible]	-53.5			10.[illegible]
50	[illegible]	20,[illegible]	-54.0			
40	2[illegible]	21,532	-54.7			
30	[illegible]	[illegible]	-55.5		283	
25		24,540	-56.3			7.2
20	[illegible]	25,949	[illegible]		297	
15	[illegible]	27,755	-57.7			
10		30,293	-57.4			
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MARCH 1966

FLINT, MICH.
987 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	234	.1	71	218	4.1
1000	31	127				
950	31	537	.0	63	237	8.2
900	31	971	-1.1	58	258	11.8
850	31	1,426	-3.1	55	269	14.8
800	31	1,904	-5.4	58	273	16.9
750	31	2,406	-7.3	56	275	18.8
700	31	2,945	-9.9	56	280	19.6
650	31	3,509	-13.1	55	285	21.8
600	31	4,119	-16.6	48	283	24.5
550	31	4,763	-20.7	41	283	28.2
500	31	5,468	-25.2	38	285	31.5
450	31	6,219	-30.4	R33	284	35.0
400	31	7,054	-36.3	36	282	36.9
350	31	7,967	-42.9	35	282	40.0
300	31	8,992	-49.3		283	42.7
250	31	10,172	-54.6		286	43.7
200	31	11,591	-56.4		279	43.9
175	31	12,442	-54.7		278	43.5
150	31	13,430	-54.2		279	40.0
125	30	14,597	-54.3		278	36.7
100	30	16,025	-55.2		275	28.0
80	30	17,445	-56.5		270	25.1
70	30	18,289	-57.3		272	24.3
60	30	19,264	-57.3		274	23.5
50	30	20,418	-56.7		275	21.6
40	29	21,834	-55.8		270	23.1
30	28	23,667	-54.9		270	24.1
25	28	24,835	-54.0		268	25.8
20	25	26,266	-53.0		266	28.9
15	20	28,130	-51.1		263	33.4
10	9	30,813	-47.7			

FORT WORTH, TEXAS
998 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	180	9.9	71	265	.8
1000	31	160			335	4.7
950	31	590	10.1	62	220	5.2
900	31	1,036	8.2	61	240	8.0
850	31	1,507	6.6	54	255	10.7
800	31	2,004	5.6	41	274	11.3
750	31	2,530	3.2	41	279	14.2
700	31	3,086	-.2	38	285	16.7
650	31	3,673	-4.1	40	279	20.2
600	31	4,301	-8.3	40	275	23.1
550	31	4,968	-12.9	40	273	24.7
500	31	5,691	-17.9	39	273	28.2
450	31	6,466	-23.8	36	274	31.5
400	31	7,320	-30.3	35	272	35.9
350	31	8,256	-37.8	34	273	40.4
300	31	9,301	-45.8		273	43.5
250	31	10,493	-53.9		276	50.3
200	31	11,903	-59.9		272	55.9
175	30	12,736	-59.3		271	60.8
150	29	13,703	-59.3		271	57.5
125	28	14,842	-61.8		272	50.9
100	28	16,215	-64.4		271	47.0
80	27	17,577	-64.3		273	34.4
70	26	18,395	-64.1		273	28.9
60	26	19,341	-62.4		269	24.7
50	26	20,470	-61.0		267	20.2
40	26	21,864	-58.3		262	16.9
30	25	23,687	-55.9		268	13.6
25	24	24,848	-54.7		276	15.5
20	24	26,281	-52.7		272	16.9
15	18	28,145	-50.0		269	19.6
10	5	30,814	-44.9			

GLASGOW, MONT.
934 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	696	-4.3	76	51	1.6
1000	31	150				
950	31	556				
900	31	988	.0	57	303	6.6
850	31	1,446	-.5	51	301	13.4
800	31	1,929	-3.1	49	303	17.1
750	31	2,433	-6.4	51	302	18.3
700	31	2,973	-9.6	50	303	20.4
650	31	3,536	-13.1	52	301	24.1
600	31	4,146	-17.0	53	300	23.9
550	31	4,786	-21.2	51	295	26.2
500	31	5,491	-25.9	47	295	30.9
450	31	6,236	-30.9	46	296	36.1
400	31	7,071	-37.0	43	294	39.2
350	31	7,980	-44.2	37	290	42.3
300	30	9,005	-51.1		293	47.0
250	30	10,173	-57.2		296	46.4
200	30	11,573	-60.0		294	41.8
175	30	12,410	-58.2		291	35.9
150	30	13,385	-56.4		287	30.9
125	30	14,542	-56.6		287	28.9
100	30	15,955	-57.5		283	28.2
80	30	17,363	-58.0		285	22.1
70	30	18,203	-58.5		282	20.4
60	30	19,170	-58.7		282	18.1
50	30	20,315	-59.1		282	16.9
40	30	21,713	-59.0		283	14.4
30	29	23,517	-58.9		281	17.1
25	29	24,662	-58.7		279	17.5
20	22	26,075	-58.0		278	17.3
15	17	27,904	-57.2		274	20.2
10	9	30,517	-53.3			

* GRAND JUNCTION, COLO.
853 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,474	2.3	52	118	4.1
1000	31	164				
950	31	585				
900	31	1,028				
850	31	1,498			121	4.5
800	31	1,990	3.0	38	149	5.1
750	31	2,505	.1	36	212	3.7
700	31	3,060	-3.8	40	268	9.9
650	31	3,636	-7.5	40	275	14.0
600	31	4,261	-11.3	36	282	17.7
550	31	4,916	-15.9	39	281	20.4
500	31	5,635	-20.9	40	281	23.1
450	31	6,397	-26.7	39	282	24.9
400	31	7,246	-32.8	41	283	27.8
350	31	8,172	-39.9	39	283	30.5
300	31	9,208	-47.5		284	33.8
250	31	10,390	-55.5		288	38.9
200	31	11,787	-62.1		287	40.0
175	31	12,614	-60.5		286	39.8
150	31	13,579	-58.7		285	36.1
125	31	14,722	-59.8		280	35.2
100	31	16,112	-61.0		281	31.7
80	30	17,497	-61.1		280	27.4
70	29	18,326	-61.3		280	22.7
60	27	19,287	-60.6		283	20.6
50	27	20,423	-60.1		281	17.7
40	25	21,821	-59.6		274	18.6
30	23	23,630	-57.2		274	19.8
25	21	24,782	-57.1		269	24.1
20	16	26,204	-55.3		266	30.5
15	12	28,039	-54.1		268	30.1
10	8	30,711	-48.9			

* GREAT FALLS, MONT.
886 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,123	-1.6	64	226	8.9
1000	31	146				
950	31	562				
900	31	997				
850	31	1,455	.7	42	242	16.9
800	31	1,939	-2.2	45	263	16.5
750	31	2,444	-5.3	49	269	17.3
700	31	2,988	-8.4	51	272	18.3
650	31	3,555	-12.1	53	273	20.4
600	31	4,167	-16.1	50	275	23.1
550	31	4,813	-20.0	49	276	25.3
500	31	5,519	-24.7	48	274	28.4
450	31	6,269	-30.3	45	276	30.7
400	31	7,105	-36.5	45	275	36.7
350	31	8,017	-43.4	43	275	42.3
300	31	9,038	-50.5		276	44.9
250	31	10,207	-57.1		279	44.5
200	30	11,617	-61.3		282	38.1
175	30	12,448	-59.6		279	36.5
150	30	13,419	-56.8		275	34.4
125	29	14,573	-57.0		279	31.1
100	28	15,982	-57.5		269	28.6
80	26	17,386	-58.3		269	24.3
70	25	18,225	-58.3		271	22.9
60	23	19,192	-58.4		278	20.8
50	22	20,340	-59.0		281	16.5
40	22	21,736	-59.6		281	15.2
30	18	23,554	-58.1		279	16.1
25	17	24,704	-58.2		281	14.6
20	14	26,102	-58.2		275	14.8
15	9	27,920	-56.5			
10	6	30,535	-52.3			

GREEN BAY, WIS.
988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	210	-1.9	81	335	3.5
1000	31	115				
950	31	525	-1.2	70	306	3.9
900	31	954	-2.3	66	294	5.2
850	31	1,406	-4.0	66	279	7.0
800	31	1,883	-5.6	63	268	10.1
750	31	2,388	-7.7	58	272	14.6
700	31	2,922	-10.3	58	275	16.1
650	31	3,485	-13.3	59	281	17.5
600	31	4,095	-16.6	53	287	19.0
550	31	4,741	-20.7	54	292	22.0
500	31	5,442	-25.4	50	287	24.3
450	31	6,193	-30.5	49	287	29.5
400	31	7,025	-36.3	45	287	33.6
350	31	7,938	-43.0	44	285	37.7
300	30	8,970	-49.8		284	40.0
250	29	10,142	-55.6		280	42.2
200	29	11,554	-57.4		285	45.1
175	29	12,402	-55.4		283	39.0
150	29	13,388	-54.5		284	36.9
125	29	14,553	-55.5		286	33.4
100	29	15,974	-55.8		282	28.2
80	29	17,390	-56.6		279	25.6
70	29	18,234	-57.4		278	23.5
60	28	19,209	-57.8		280	21.6
50	28	20,359	-57.6		284	19.4
40	28	21,769	-57.2		281	20.6
30	28	23,591	-56.5		278	24.1
25	28	24,751	-55.4		277	25.1
20	26	26,182	-54.2		269	26.6
15	24	28,022	-53.0		270	34.6
10	17	30,648	-50.0			
7						

GREENSBORO, N. C.
986 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	273	3.8	77	255	2.5
1000	31	160				
950	31	581	6.0	54	270	9.9
900	31	1,022	4.1	51	281	13.6
850	31	1,485	1.8	53	281	15.2
800	31	1,973	-.1	45	285	17.5
750	31	2,489	-2.5	40	282	18.6
700	31	3,033	-5.0	39	278	21.0
650	31	3,612	-8.0	40	272	24.5
600	31	4,231	-12.0	42	272	25.8
550	31	4,889	-16.6	41	274	29.9
500	31	5,603	-21.4	37	277	35.4
450	31	6,368	-26.6	38	275	38.7
400	31	7,214	-32.5	38	275	46.6
350	31	8,142	-39.3	43	274	52.6
300	31	9,182	-46.7		272	56.3
250	31	10,372	-53.5		271	56.1
200	31	11,793	-56.6		274	64.5
175	31	12,640	-57.1		273	61.4
150	31	13,617	-56.6		272	57.5
125	31	14,770	-58.0		272	53.0
100	31	16,168	-60.0		273	44.1
80	31	17,556	-60.9		270	38.9
70	31	18,387	-60.0		271	32.6
60	31	19,352	-59.2		274	27.2
50	31	20,499	-57.8		271	23.3
40	31	21,909	-56.7		278	21.0
30	31	23,742	-54.5		280	20.4
25	31	24,910	-54.1		284	21.8
20	30	26,345	-52.7		281	26.2
15	25	28,209	-50.1		269	30.9
10	15	30,863	-46.5			

GUAM, MARIANA IS.
1000 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	111	24.0	85	83	8.2
1000	31	109			78	7.8
950	31	557	21.2	87	81	19.0
900	31	1,024	18.4	81	85	19.4
850	31	1,514	16.5	63	85	16.5
800	31	2,029	15.1	46	82	12.8
750	31	2,570	12.9	35	82	12.2
700	31	3,150	10.1	30	78	10.1
650	31	3,761	7.2	26	73	8.2
600	31	4,417	3.5	24	71	7.4
550	31	5,118	-.5	23	64	7.0
500	31	5,874	-4.7	20	64	8.2
450	31	6,692	-9.7	18	50	8.7
400	31	7,596	-15.2	18	30	6.6
350	31	8,592	-22.0	19	353	5.6
300	31	9,705	-30.8	21	331	5.2
250	31	10,971	-41.2	28	295	6.2
200	31	12,447	-53.2		249	7.6
175	31	13,293	-60.0		227	8.2
150	31	14,238	-67.6		220	8.0
125	31	15,313	-75.5		186	5.4
100	28	16,582	-81.7		106	7.8
80	28	17,829	-82.0		92	12.0
70	28	18,582	-78.0		92	12.4
60	28	19,479	-72.0		89	15.3
50	28	20,569	-66.7		96	22.5
40	28	21,935	-62.4		99	29.5
30	28	23,733	-57.1		92	26.8
25	28	24,899	-53.0		85	23.1
20	28	26,352	-48.6		76	14.8
15	26	28,261	-44.6		48	9.5
10	12	30,965	-41.9			

HILO, HAWAII
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	11	19.7	84	251	4.1
1000	31	144	20.4	80	263	2.9
950	31	587	17.4	84	92	2.9
900	31	1,047	14.2	87	91	4.7
850	31	1,528	11.2	92	107	3.3
800	31	2,034	9.1	76	125	5.2
750	31	2,576	8.8	42	166	3.7
700	31	3,138	7.1	32	241	4.1
650	31	3,744	4.4	28	253	6.2
600	31	4,392	.7	25	262	10.1
550	31	5,082	-3.6	24	264	13.2
500	31	5,832	-8.7	24	268	15.2
450	31	6,639	-14.4	24	263	19.8
400	31	7,523	-20.9	25	269	25.1
350	31	8,495	-28.9	27	271	31.5
300	31	9,584	-35.9	26	268	43.5
250	31	10,827	-44.5		270	58.3
200	31	12,290	-54.3		270	63.7
175	31	13,136	-59.8		273	62.9
150	31	14,086	-65.6		276	55.9
125	30	15,181	-71.6		274	49.0
100	30	16,483	-75.6		272	36.3
80	30	17,772	-75.8		277	22.0
70	29	18,548	-72.9		281	10.5
60	29	19,461	-68.7		110	1.4
50	28	20,566	-64.6		110	9.5
40	28	21,944	-60.4		90	11.8
30	28	23,747	-58.0		87	16.1
25	26	24,905	-54.9		85	15.9
20	25	26,346	-50.9		80	16.5
15	17	28,237	-45.8		72	11.7
10	9	30,939	-43.3			

HUNTINGTON W. VA.
989 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	246	3.0	73	214	3.5
1000	31	152				
950	31	569	4.6	62	235	11.5
900	31	1,010	2.3	64	256	17.3
850	31	1,469	-.5	66	270	19.0
800	31	1,952	-2.7	57	275	21.0
750	31	2,459	-5.2	52	276	22.1
700	31	3,001	-8.0	50	274	23.5
650	31	3,572	-10.9	45	275	25.4
600	31	4,186	-14.3	42	277	28.6
550	31	4,835	-18.2	43	277	31.1
500	31	5,547	-23.1	41	276	35.0
450	31	6,306	-28.3	39	276	36.7
400	31	7,145	-34.3	37	276	40.4
350	31	8,067	-40.8	36	281	44.5
300	31	9,100	-47.8		280	48.2
250	30	10,284	-54.0		274	52.1
200	30	11,705	-56.5		273	53.4
175	30	12,552	-56.0		273	53.8
150	30	13,533	-56.0		274	50.9
125	27	14,696	-57.6		275	47.6
100	27	16,101	-58.6		271	40.6
80	27	17,500	-59.2		270	36.1
70	27	18,336	-59.2		270	31.1
60	27	19,304	-58.5		267	26.4
50	27	20,454	-56.8		269	26.6
40	27	21,870	-55.8		270	26.6
30	27	23,703	-55.0		271	27.4
25	26	24,871	-54.2		275	25.6
20	26	26,303	-53.6		273	30.1
15	25	28,164	-50.8		269	36.5
10	15	30,821	-46.2		263	44.3
7	5	33,221	-43.1			

* INTERNAT. FALLS, MINN.
971 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	360	-6.2	63	61	3.3
1000	31	130				
950	31	534	-4.2	61	67	3.1
900	31	959	-4.9	66	342	.8
850	31	1,408	-5.5	61	320	3.7
800	31	1,882	-6.8	55	307	4.5
750	31	2,383	-8.6	53	298	8.5
700	31	2,917	-11.2	53	298	10.9
650	31	3,479	-14.3	56	304	12.4
600	31	4,086	-18.0	60	306	15.7
550	31	4,723	-22.0	56	302	18.6
500	31	5,426	-26.8	52	297	22.0
450	31	6,168	-32.3	51	292	24.9
400	31	7,000	-38.3	57	293	28.7
350	31	7,906	-44.9		289	31.9
300	31	8,920	-51.8		287	33.6
250	31	10,086	-57.2		288	34.8
200	31	11,496	-57.0		290	33.0
175	31	12,345	-54.9		291	32.4
150	31	13,331	-54.5		290	31.9
125	31	14,496	-55.2		287	26.8
100	31	15,917	-56.0		286	27.0
80	30	17,333	-57.0		284	24.1
70	30	18,176	-57.7		286	24.3
60	29	19,150	-58.2		287	20.8
50	29	20,295	-58.9		290	19.6
40	29	21,696	-58.6		292	18.6
30	26	23,506	-58.0		277	15.7
25	25	24,659	-57.5		276	18.6
20	18	26,052	-56.9		275	22.9
15	16	27,878	-55.4		277	25.4
10	13	30,464	-52.6		273	30.1
7						

JACKSON, MISS.
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	94	8.8	80	190	.4
1000	31	163	9.5	71	128	1.0
950	31	587	9.1	58	245	3.7
900	31	1,036	7.3	53	256	8.5
850	31	1,505	5.8	49	264	10.9
800	31	2,000	3.6	47	276	14.0
750	31	2,521	1.5	45	280	17.5
700	31	3,075	-1.1	43	282	20.8
650	31	3,658	-4.3	43	282	23.3
600	31	4,289	-8.4	42	280	26.0
550	31	4,953	-12.9	41	278	29.5
500	31	5,679	-18.3	37	277	32.4
450	31	6,449	-24.0	37	275	35.2
400	31	7,307	-30.3	39	275	40.0
350	31	8,243	-37.4	37	276	44.1
300	31	9,289	-45.2		275	49.3
250	31	10,485	-53.1		277	57.1
200	30	11,905	-58.9		276	65.3
175	29	12,737	-58.4		274	66.2
150	29	13,705	-59.3		271	64.5
125	29	14,842	-61.4		270	56.1
100	29	16,216	-63.9		272	47.8
80	29	17,582	-64.0		270	36.3
70	29	18,401	-63.2		269	30.9
60	29	19,353	-61.6		269	26.2
50	29	20,486	-59.8		273	20.4
40	29	21,888	-57.6		277	13.2
30	29	23,713	-55.1		268	14.2
25	27	24,878	-54.4		280	13.2
20	26	26,314	-52.3		279	10.1
15	24	28,183	-49.6		267	15.2
10	15	30,858	-44.4		260	26.6
7	6	33,287	-38.7			

* JACKSONVILLE, FLA.
1020 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	10.3	87	324	3.5
1000	31	173	12.7	67	327	3.3
950	31	603	11.1	60	296	3.1
900	31	1,052	8.7	61	276	6.8
850	31	1,524	6.7	59	276	9.9
800	31	2,020	4.5	54	271	12.6
750	31	2,548	2.9	44	272	16.9
700	31	3,100	.2	39	271	19.8
650	31	3,687	-3.1	36	271	22.7
600	31	4,319	-7.1	36	270	27.2
550	31	4,984	-11.4	33	269	30.9
500	31	5,716	-16.2	29	269	35.4
450	31	6,493	-21.8	30	269	42.0
400	31	7,357	-28.4	31	270	47.0
350	31	8,300	-35.5	30	269	53.2
300	31	9,356	-43.2		270	59.6
250	31	10,562	-51.0		271	75.8
200	31	11,991	-57.2		271	79.6
175	31	12,834	-57.8		270	76.5
150	31	13,803	-59.4		268	72.5
125	31	14,935	-62.8		269	65.5
100	31	16,300	-65.6		269	51.9
80	31	17,656	-65.0		270	35.4
70	31	18,470	-64.4		272	29.1
60	30	19,418	-62.4		271	20.4
50	30	20,549	-60.4		279	16.9
40	30	21,946	-58.0		291	7.4
30	30	23,769	-55.0		343	5.2
25	30	24,937	-53.5		5	6.2
20	28	26,379	-50.7		359	5.6
15	27	28,264	-47.0		288	5.2
10	21	30,980	-40.0		255	18.8

JOHN F. KENNEDY INT. ARPT.NY
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	2.7	64	307	5.6
1000	31	143	2.2	62	309	6.8
950	31	558	1.5	62	299	9.9
900	31	992	.1	57	291	13.2
850	31	1,449	-1.3	50	281	15.7
800	31	1,930	-3.6	51	273	18.8
750	31	2,439	-6.1	54	274	22.0
700	31	2,976	-8.3	54	275	24.5
650	31	3,548	-11.2	48	273	28.0
600	31	4,159	-14.9	44	273	30.7
550	31	4,811	-18.6	39	269	32.8
500	31	5,517	-23.3	37	266	35.5
450	31	6,275	-28.9	38	264	37.7
400	31	7,111	-35.2	38	264	39.6
350	31	8,028	-42.4	36	265	42.9
300	31	9,056	-49.0		261	49.3
250	31	10,237	-54.5		264	53.2
200	31	11,655	-56.3		267	52.3
175	30	12,505	-55.1		267	50.5
150	30	13,492	-54.4		267	45.8
125	30	14,657	-55.1		265	41.2
100	30	16,077	-56.6		265	35.2
80	30	17,489	-57.4		267	29.9
70	30	18,332	-57.3		268	27.0
60	30	19,308	-57.0		269	24.1
50	30	20,463	-56.6		273	22.1
40	29	21,880	-55.9		275	22.5
30	29	23,716	-54.6		278	24.1
25	29	24,884	-54.1		276	24.9
20	29	26,320	-52.3		274	28.7
15	23	28,179	-49.5		271	34.0
10	5	30,841	-44.3			

JOHNSTON IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	3	24.0	75	76	13.4
1000	31	132	22.9	79	73	14.6
950	31	579	19.1	87	77	16.5
900	31	1,042	15.9	84	82	15.3
850	31	1,526	13.5	71	83	12.8
800	31	2,036	13.0	39	74	9.1
750	31	2,577	11.6	27	64	6.8
700	31	3,151	8.7	22	53	3.5
650	31	3,759	5.5	21	332	1.4
600	31	4,411	1.9	20	288	3.5
550	31	5,103	-2.5	19	284	5.1
500	31	5,857	-7.2	18	272	8.5
450	31	6,667	-12.8	20	268	10.7
400	31	7,560	-19.4	23	263	18.1
350	31	8,539	-26.2	25	265	26.4
300	31	9,636	-33.8	25	265	36.3
250	31	10,892	-42.7		265	46.6
200	31	12,362	-53.6		262	52.6
175	31	13,209	-59.9		265	49.5
150	31	14,157	-66.3		268	44.9
125	30	15,241	-72.7		265	37.7
100	30	16,533	-77.8		265	29.7
80	26	17,806	-77.6		272	13.8
70	26	18,573	-75.6		268	4.7
60	26	19,475	-70.2		96	5.2
50	26	20,573	-65.3		95	10.7
40	25	21,947	-61.7		85	17.9
30	25	23,749	-57.5		83	22.0
25	24	24,911	-55.0		85	22.1
20	24	26,350	-51.0		86	15.0
15	22	28,238	-45.7		73	11.1
10	7	30,964	-40.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KEY WEST, FLORIDA
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	3	20.4	80	55	5.1
1000	30	152	19.2	78	48	6.2
950	30	588	15.8	75	70	5.4
900	30	1,049	13.2	70	77	2.7
850	30	1,528	10.7	66	243	2.1
800	30	2,032	9.7	45	280	5.1
750	30	2,568	7.8	31	279	7.6
700	30	3,133	5.0	29	269	11.3
650	30	3,727	1.4	29	271	15.5
600	30	4,375	- 2.5	27	267	22.0
550	30	5,049	- 7.0	32	266	27.0
500	30	5,798	-11.9	32	266	30.7
450	30	6,592	-17.3	26	266	35.9
400	30	7,471	-23.4	29	264	40.8
350	30	8,433	-30.7	29	264	50.9
300	30	9,510	-38.7	30	265	61.4
250	30	10,738	-47.4		263	70.1
200	29	12,180	-56.4		261	75.8
175	29	13,020	-60.4		261	75.6
150	29	13,971	-64.5		262	69.3
125	29	15,076	-68.1		263	62.7
100	29	16,404	-71.7		264	52.8
80	29	17,718	-71.8		265	43.7
70	29	18,509	-69.8		264	34.2
60	29	19,432	-66.8		264	22.5
50	29	20,545	-63.1		277	8.7
40	29	21,930	-59.7		329	4.3
30	29	23,743	-56.5		48	10.9
25	28	24,903	-54.3		68	14.8
20	28	26,346	-50.8		83	13.8
15	28	28,243	-45.2		106	7.2
10	24	30,972	-38.4		225	6.6
7	11	33,412	-33.4			

KING SALMON, ALASKA
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	15	-15.5	70	1	6.0
1000	31	47			353	11.3
950	31	437	-14.0	67	7	16.5
900	31	847	-14.0	65	2	15.5
850	31	1,280	-14.3	65	351	15.5
800	31	1,739	-15.5	64	341	14.2
750	31	2,225	-17.3	64	340	15.5
700	31	2,739	-19.9	60	342	16.1
650	31	3,286	-23.1	59	339	18.6
600	31	3,968	-26.4	59	335	19.8
550	31	4,493	-30.3	55	332	20.6
500	31	5,164	-34.8	51	330	22.0
450	31	5,992	-39.7	49	322	17.7
400	31	6,691	-44.6	35	318	14.4
350	31	7,575	-48.9		318	14.6
300	31	8,581	-51.6		318	15.5
250	31	9,762	-52.0		320	15.5
200	31	11,210	-51.1		320	14.6
175	31	12,079	-50.4		304	14.4
150	31	13,084	-50.8		310	13.8
125	31	14,269	-51.4		306	12.4
100	31	15,715	-51.5		297	13.2
80	31	17,159	-52.8		301	13.2
70	30	18,026	-53.3		298	13.6
60	30	19,017	-53.8		301	12.2
50	30	20,187	-54.3		295	9.1
40	30	21,614	-55.0		311	9.3
30	29	23,448	-55.4		316	7.4
25	28	24,605	-55.7		347	8.0
20	23	26,036	-56.2		2	8.5
15	16	27,854	-56.5			
10						
7						

KOROR, CAROLINE IS.
+ 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	27.4	79	60	7.4
1000	31	94	26.6	77	64	8.9
950	31	540	22.5	77	72	15.0
900	31	1,015	19.6	71	77	16.5
850	31	1,506	17.2	61	82	15.0
800	31	2,022	15.1	53	84	10.9
750	31	2,566	12.7	45	86	11.1
700	31	3,144	10.1	37	87	12.2
650	31	3,756	7.1	33	83	11.5
600	31	4,412	3.3	35	89	12.4
550	31	5,111	- .6	33	91	13.0
500	31	5,869	- 4.7	28	89	13.4
450	31	6,589	- 9.7	27	95	13.8
400	31	7,592	-14.9	20	98	14.0
350	31	8,588	-22.1	20	88	15.0
300	31	9,703	-30.6	20	93	13.6
250	31	10,969	-41.2	20	111	16.1
200	30	12,444	-53.5		117	21.2
175	30	13,289	-60.4		116	21.6
150	30	14,233	-67.6		111	17.9
125	30	15,310	-75.0		107	15.5
100	30	16,594	-81.2		87	11.8
80	30	17,830	-82.4		72	12.4
70	30	18,585	-77.2		81	16.9
60	30	19,481	-71.7		89	24.9
50	30	20,571	-66.8		93	37.5
40	28	21,937	-61.2		91	46.8
30	28	23,754	-54.1		91	26.0
25	25	24,931	-50.5		85	13.0
20	23	26,393	-48.0		138	4.9
15	16	28,309	-45.3		264	7.0
10	12	31,044	-40.7			
7						

KOTZEBUE, ALASKA
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	-26.1	72	325	2.3
1000	31	129			344	3.7
950	31	511	-19.9	66	8	5.6
900	31	910	-19.3	63	16	7.0
850	31	1,335	-19.2	63	18	8.9
800	31	1,785	-20.3	61	20	10.1
750	31	2,264	-21.8	60	11	12.2
700	31	2,768	-23.9	57	15	11.7
650	31	3,307	-26.4	53	17	11.7
600	31	3,881	-29.8	54	12	12.4
550	31	4,498	-33.5	54	360	13.6
500	31	5,160	-37.6	57	350	10.1
450	31	5,883	-41.9	62	350	6.8
400	31	6,672	-46.2		326	5.1
350	31	7,550	-50.9		331	7.4
300	31	8,544	-54.6		294	6.4
250	31	9,708	-55.1		303	5.6
200	31	11,140	-53.1		289	5.8
175	31	12,002	-52.7		267	5.8
150	31	12,997	-52.7		275	7.0
125	31	14,174	-52.5		272	7.4
100	31	15,615	-52.6		276	6.8
80	31	17,054	-53.3		277	7.6
70	31	17,912	-53.5		276	7.2
60	31	18,904	-53.7		295	10.5
50	31	20,076	-53.9		291	9.3
40	31	21,507	-54.3		291	9.7
30	30	23,349	-54.6		299	10.7
25	28	24,521	-55.0		298	9.9
20	22	25,942	-54.8		310	15.5
15	12	27,735	-57.6			
10						
7						

KWAJALEIN, MARSHALL IS.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	26.4	81	61	15.5
1000	31	96	25.6	80	63	16.9
950	31	546	22.3	87	68	20.2
900	31	1,015	19.3	[illegible]	76	19.6
850	31	1,506	17.1	75	83	16.5
800	31	2,022	15.9	55	88	13.0
750	31	2,567	13.1	49	89	12.0
700	31	3,146	9.9	44	89	11.1
650	31	3,755	6.6	36	87	9.5
600	31	4,407	2.4	35	82	8.0
550	31	5,105	- 1.4	35	70	4.9
500	31	5,862	- 5.1	28	36	4.9
450	31	6,678	-10.2	28	37	3.7
400	31	7,582	-15.6	33	341	2.5
350	31	8,572	-22.1	26	277	8.0
300	31	9,692	-30.5	28	259	11.5
250	31	10,960	-41.1	36	235	14.0
200	31	12,435	-53.6		234	15.7
175	31	13,274	-60.6		244	15.3
150	31	14,220	-68.6		269	13.4
125	31	15,285	-76.5		291	9.7
100	30	16,550	-83.5		342	2.3
80	27	17,788	-81.8		84	8.5
70	26	18,543	-77.8		86	13.2
60	24	19,441	-72.2		89	20.0
50	23	20,531	-67.8		89	33.6
40	22	21,884	-62.8		90	46.4
30	19	23,685	-57.1		87	25.1
25	19	24,843	-52.9		80	14.2
20	19	26,304	-48.1		246	.8
15	16	28,217	-44.6		292	3.7
10	15	30,955	-40.4		215	6.6
7	10	33,398	-37.5			

LAKE CHARLES, LA.
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	11.4	82	54	1.6
1000	31	162	12.5	74	85	1.0
950	31	593	11.1	66	220	3.9
900	31	1,043	9.8	51	250	5.4
850	31	1,517	8.0	47	268	7.8
800	31	2,016	5.9	44	277	10.3
750	31	2,542	3.6	45	276	13.6
700	31	3,100	.7	44	275	16.7
650	31	3,691	- 2.7	42	274	18.8
600	31	4,322	- 7.1	43	274	23.7
550	31	4,990	-11.5	39	274	27.4
500	31	5,719	-16.3	37	273	28.0
450	31	6,496	-22.0	34	272	31.1
400	31	7,359	-28.7	31	270	36.5
350	31	8,301	-36.0	31	267	43.5
300	31	9,354	-43.7		268	52.8
250	31	10,558	-51.7		265	65.1
200	31	11,981	-57.8		266	73.6
175	31	12,822	-58.5		266	73.6
150	31	13,788	-60.2		267	70.5
125	30	14,918	-63.1		265	57.5
100	30	16,281	-65.4		264	47.0
80	30	17,635	-65.8		265	35.9
70	30	18,447	-64.7		264	27.0
60	30	19,392	-62.8		266	22.9
50	30	20,520	-60.6		265	15.3
40	30	21,917	-57.7		267	9.5
30	29	23,743	-54.9		282	8.0
25	29	24,909	-54.2		309	5.1
20	27	26,349	-51.3		286	7.0
15	24	28,233	-47.6		266	10.3
10	17	30,947	-42.4		253	24.3
7						
5						

LANDER, WYO.
827 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,696	- 2.5	55	251	2.5
1000	31	165				
950	31	580				
900	31	1,019				
850	31	1,480				
800	31	1,964	.6	40	260	3.5
750	31	2,479	- 1.8	37	295	7.6
700	31	3,027	- 5.0	36	289	12.6
650	31	3,599	- 9.1	39	290	17.3
600	31	4,721	-12.7	40	289	22.9
550	31	4,876	-16.6	38	290	25.3
500	31	5,591	-21.7	38	291	26.2
450	31	6,352	-27.5	38	291	29.7
400	31	7,197	-34.0	34	290	32.1
350	31	8,118	-41.1	35	288	33.6
300	31	9,149	-48.8		286	38.5
250	31	10,325	-56.5		286	42.2
200	31	11,721	-61.8		284	42.2
175	31	12,550	-59.9		281	38.1
150	31	13,517	-58.4		282	37.7
125	29	14,664	-57.4		281	35.2
100	29	16,069	-59.0		277	29.3
80	29	17,467	-59.7		281	25.4
70	29	18,300	-60.1		280	22.9
60	29	19,264	-59.3		280	21.4
50	28	20,403	-59.8		275	17.3
40	26	21,803	-59.1		276	15.5
30	24	23,605	-58.1		280	17.9
25	22	24,754	-57.6		275	20.4
20	18	26,170	-56.6		271	25.6
15	14	27,994	-55.5		275	32.4
10						
7						
5						

LAS VEGAS, NEV.
939 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	660	10.1	32	267	4.5
1000	31	129				
950	31	565				
900	31	1,013	12.2	27	326	3.3
850	31	1,489	9.5	28	323	4.3
800	31	1,989	6.2	30	314	5.1
750	31	2,509	2.9	33	286	5.6
700	31	3,070	- .4	37	269	8.2
650	31	3,650	- 4.2	38	274	9.5
600	31	4,284	- 8.7	39	281	10.7
550	31	4,945	-13.2	38	283	13.0
500	31	5,671	-18.3	38	286	16.7
450	31	6,442	-24.0	37	282	21.8
400	31	7,297	-30.6	38	279	24.1
350	31	8,231	-37.9	36	279	24.5
300	31	9,273	-46.3		284	27.0
250	31	10,461	-54.8		281	30.5
200	31	11,861	-61.2		281	41.2
175	31	12,691	-60.1		281	46.0
150	31	13,656	-59.1		283	42.9
125	31	14,798	-59.9		282	40.4
100	31	16,183	-62.6		276	36.5
80	31	17,557	-62.6		274	29.5
70	31	18,381	-62.0		275	25.6
60	30	19,336	-61.3		277	22.5
50	30	20,468	-60.9		281	18.3
40	29	21,865	-59.5		277	16.1
30	28	23,676	-56.8		273	19.2
25	25	24,945	-55.3		273	20.8
20	23	26,271	-54.6		270	25.8
15	17	28,113	-52.6		267	31.3
10						
7						
5						

* LIHUE, HAWAII
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	36	19.3	85	34	3.5
1000	31	150	20.5	77	35	5.2
950	31	588	16.9	82	56	7.4
900	31	1,051	13.8	81	53	4.7
850	31	1,531	10.9	79	39	1.6
800	31	2,036	10.0	49	254	2.5
750	31	2,572	9.1	31	271	5.2
700	31	3,141	6.6	23	275	8.4
650	31	3,739	3.8	22	272	10.5
600	31	4,392	.0	23	268	12.6
550	31	5,075	- 4.3	18	264	15.7
500	31	5,828	- 9.1	19	270	19.0
450	31	6,627	-15.1	21	273	25.6
400	31	7,513	-21.9	24	271	30.1
350	31	8,481	-29.4	24	272	36.7
300	31	9,562	-37.7	26	271	44.7
250	31	10,797	-45.9		270	54.2
200	31	12,254	-54.2		271	64.3
175	31	13,101	-59.1		272	64.7
150	31	14,055	-64.2		271	58.9
125	31	15,154	-69.9		271	50.5
100	31	16,465	-74.4		270	44.9
80	31	17,763	-73.7		268	30.5
70	30	18,546	-70.8		267	17.7
60	28	19,466	-67.4		255	8.2
50	28	20,575	-63.5		204	4.1
40	27	21,954	-60.5		97	4.7
30	25	23,754	-57.6		95	9.5
25	25	24,911	-55.2		95	10.5
20	24	26,350	-51.3		88	10.3
15	24	28,242	-46.2		96	8.0
10	24	30,967	-41.4		155	3.3
7	16	33,422	-37.0		147	7.8
5	8	35,787	-31.7			

LITTLE ROCK, ARK.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	7.5	70	252	3.7
1000	31	157	8.6	56	250	4.5
950	31	580	8.1	55	258	9.9
900	31	1,027	6.1	52	274	13.0
850	31	1,494	4.5	46	276	15.0
800	31	1,987	2.6	48	277	17.9
750	31	2,505	- .1	47	278	20.2
700	31	3,057	- 2.7	43	278	23.1
650	31	3,636	- 5.6	38	282	26.8
600	31	4,266	- 9.3	40	282	28.7
550	31	4,929	-13.9	41	279	31.5
500	31	5,651	-18.9	38	277	35.4
450	31	6,421	-24.4	34	281	37.7
400	31	7,276	-30.9	33	283	38.5
350	31	8,209	-38.2	34	285	43.5
300	31	9,251	-46.4		284	47.8
250	31	10,440	-54.0		281	53.0
200	31	11,853	-59.2		278	58.1
175	31	12,690	-58.7		275	62.5
150	31	13,660	-58.0		274	57.9
125	31	14,804	-59.6		274	52.1
100	30	16,191	-61.8		274	43.9
80	29	17,571	-62.3		273	34.8
70	29	18,396	-61.8		273	30.3
60	27	19,349	-60.4		273	26.4
50	27	20,490	-58.6		272	24.7
40	27	21,897	-57.2		272	19.2
30	27	23,728	-54.6		268	18.5
25	26	24,897	-53.1		269	19.4
20	25	26,339	-51.4		268	22.1
15	22	28,228	-49.0		266	25.8
10	11	30,938	-44.2			
7						
5						

MCGRATH, ALASKA
999 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	103	-22.2	60	352	2.7
1000	31	88			357	4.3
950	31	471	-16.9	65	24	9.3
900	31	878	-17.2	68	50	10.1
850	31	1,307	-17.1	64	64	10.9
800	31	1,761	-17.7	59	61	10.3
750	31	2,238	-19.4	56	50	8.7
700	31	2,754	-21.7	56	47	5.4
650	31	3,290	-24.8	54	45	3.5
600	31	3,875	-28.4	53	28	4.9
550	31	4,489	-31.9	50	29	3.5
500	31	5,162	-36.2	49	10	3.5
450	31	5,883	-40.7	47	322	3.5
400	31	6,682	-45.2		304	3.3
350	31	7,565	-49.5		281	3.5
300	31	8,568	-52.4		297	5.2
250	31	9,748	-51.7		287	8.0
200	31	11,197	-51.0		296	7.0
175	31	12,065	-51.1		281	8.7
150	31	13,070	-50.8		284	9.1
125	31	14,255	-51.5		274	10.7
100	31	15,703	-52.0		282	11.3
80	31	17,143	-52.8		273	10.9
70	31	18,004	-53.2		272	11.1
60	31	18,995	-53.1		277	10.1
50	31	20,168	-53.5		281	9.1
40	31	21,601	-54.0		285	7.2
30	31	23,445	-54.3		299	6.4
25	31	24,612	-54.7		302	5.6
20	29	26,043	-55.0		324	7.6
15	23	27,889	-54.8		342	7.4
10	7	30,534	-54.5			

MAJURO, MARSHALL IS.
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	28.2	78	62	12.2
1000	31	90	27.0	73	62	14.4
950	31	537	22.8	73	64	21.2
900	31	1,011	20.0	70	71	21.0
850	31	1,504	17.5	68	82	19.6
800	31	2,021	15.5	58	88	17.7
750	31	2,565	13.3	50	92	15.5
700	31	3,145	10.2	49	93	13.4
650	31	3,756	7.0	45	92	10.5
600	31	4,412	3.3	40	97	8.5
550	30	5,111	- .6	38	103	7.4
500	30	5,870	- 4.5	32	118	3.7
450	30	6,694	- 9.1	29	173	1.2
400	30	7,598	-14.4	27	297	2.3
350	30	8,598	-20.7	23	275	5.2
300	30	9,719	-29.2	24	244	9.3
250	30	10,995	-39.5	23	221	13.4
200	29	12,482	-52.1		224	15.7
175	28	13,333	-59.2		241	15.3
150	28	14,281	-67.0		272	13.8
125	28	15,360	-74.7		295	10.3
100	28	16,634	-81.0		16	3.5
80	27	17,985	-81.8		89	9.3
70	27	18,640	-76.7		90	16.5
60	26	19,540	-71.0		90	25.3
50	25	20,632	-66.0		89	35.9
40	22	22,004	-60.0		91	44.7
30	17	23,831	-53.5		92	26.0
25	9	25,024	-50.2			
20						
15						
10						

MARCUS IS., N. PACIFIC
+ 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	9	23.5	73	129	2.5
1000	31	141	21.6	67	146	3.1
950	31	584	17.6	63	164	2.9
900	31	1,044	14.5	60	184	2.5
850	31	1,525	12.4	49	236	2.3
800	31	2,032	10.7	40	253	4.5
750	31	2,569	8.9	32	268	6.2
700	31	3,137	6.3	30	268	9.9
650	31	3,740	2.9	28	271	12.4
600	31	4,386	- .4	28	271	16.5
550	31	5,074	- 4.1	25	273	20.2
500	31	5,824	- 8.5	24	272	24.5
450	31	6,630	-13.6	23	271	30.1
400	31	7,521	-19.5	22	273	37.1
350	31	8,499	-25.5	22	273	41.8
300	31	9,596	-34.2	22	277	49.5
250	31	10,848	-43.2		275	55.6
200	31	12,318	-53.4		274	57.9
175	31	13,167	-59.1		269	56.5
150	31	14,120	-65.0		269	53.0
125	31	15,215	-70.9		265	42.5
100	29	16,522	-74.7		265	33.0
80	29	17,813	-75.5		260	22.1
70	29	18,589	-73.3		266	11.7
60	29	19,501	-67.9		304	4.1
50	29	20,614	-62.6		60	4.3
40	29	22,003	-59.2		78	6.8
30	28	23,824	-55.4		77	5.8
25	25	24,093	-53.5		120	3.3
20	19	26,451	-50.5			
15	10	28,345	-47.7			
10						

* MEDFORD, OREG.
970 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	401	3.3	85	223	1.0
1000	31	155				
950	31	573	4.9	74	214	1.4
900	31	1,015	4.4	64	185	7.2
850	31	1,479	2.4	62	201	9.3
800	31	1,967	.0	63	219	13.4
750	31	2,480	- 3.0	63	232	19.2
700	31	3,025	- 6.0	59	244	22.0
650	31	3,597	- 9.9	58	251	24.3
600	31	4,213	-13.8	48	255	27.4
550	31	4,864	-17.9	42	257	31.7
500	31	5,575	-22.7	39	259	34.4
450	31	6,332	-28.2	37	257	37.7
400	31	7,174	-34.1	35	259	42.0
350	31	8,095	-40.9	34	260	47.8
300	31	9,127	-48.3		262	48.8
250	31	10,306	-56.0		265	47.8
200	31	11,705	-60.9		271	41.4
175	31	12,536	-59.9		270	43.1
150	31	13,505	-57.8		271	39.0
125	31	14,553	-58.6		269	37.3
100	31	16,052	-59.0		268	34.4
80	29	17,455	-59.5		266	28.0
70	29	18,290	-59.3		271	23.7
60	29	19,254	-59.8		267	20.6
50	29	20,393	-59.9		270	22.5
40	27	21,791	-59.2		271	17.9
30	23	23,591	-58.6		268	17.9
25	22	24,736	-58.1		271	20.4
20	18	26,132	-57.0		265	23.3
15	16	27,957	-56.1		272	23.1
10	9	30,559	-52.1			

MERIDA, MEXICO
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	18.5	92	73	5.2
1000	31	155	20.3	83	81	9.9
950	31	596	18.2	79	100	12.2
900	31	1,060	16.1	71	110	10.3
850	31	1,545	14.0	66	118	5.4
800	31	2,054	12.0	55	236	1.6
750	31	2,590	9.7	45	271	4.5
700	31	3,164	6.6	38	258	5.2
650	31	3,766	3.1	34	275	7.4
600	31	4,412	- .8	32	273	11.1
550	31	5,096	- 5.2	32	270	16.1
500	31	5,843	- 9.9	31	269	20.0
450	31	6,646	-15.0	31	265	28.4
400	31	7,531	-21.5	34	264	35.7
350	31	8,501	-28.4	37	263	43.7
300	31	9,587	-36.5	35	263	51.7
250	31	10,826	-45.1		259	64.5
200	31	12,283	-54.9		260	64.9
175	31	13,125	-60.2		269	61.6
150	31	14,074	-64.9			
125	30	15,171	-69.2			
100	29	16,489	-73.8			
80	29	17,790	-73.4			
70	29	18,572	-71.8			
60	29	19,490	-67.7			
50	29	20,599	-63.2			
40	29	21,987	-59.4			
30	28	23,800	-55.9			
25	28	24,967	-52.6			
20	26	26,419	-49.1			
15	19	28,312	-45.0			
10	5	31,075	-39.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MARCH 1966

Standard pressure surface (mb.)	* MIAMI, FLA. 1018 MB						* MIDLAND, TEXAS 916 MB						MONTGOMERY, ALA. 1013 MB						* NANTUCKET, MASS. 1015 MB						* NASHVILLE, TENN. 998 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	31	4	17.5	84	16	1.6	31	874	7.3	62	190	4.3	30	61	7.9	79	348	1.0	31	14	1.2	85	241	2.7	31	177	5.5	74	201	2.5
1000	31	156	18.5	73	39	3.7	31	145					30	171	9.3	69	53	1.4	31	130	1.6	72	239	5.4	31	160			174	3.7
950	31	594	15.6	76	74	4.1	31	576					30	598	9.1	56	306	2.1	31	544	1.5	68	256	11.7	31	581	5.8	59	223	8.0
900	31	1,052	12.7	75	62	.6	31	1,023	9.3	52	189	6.8	30	1,043	6.7	57	285	7.4	31	978	- .4	63	266	13.6	31	1,021	3.6	58	251	13.2
850	31	1,530	10.2	64	267	3.5	31	1,497	9.9	40	230	10.3	30	1,510	4.7	59	284	10.5	31	1,434	- 1.9	53	268	17.7	31	1,483	1.7	53	265	15.2
800	31	2,034	9.0	48	274	7.4	31	2,000	8.3	31	268	12.0	30	2,003	3.6	51	280	13.4	31	1,914	- 4.1	54	270	20.6	31	1,970	- .7	51	272	17.9
750	31	2,569	7.2	38	272	11.1	31	2,526	4.9	32	276	13.6	30	2,525	1.4	43	280	16.7	31	2,419	- 5.9	48	273	21.4	31	2,484	- 3.3	47	275	18.6
700	31	3,131	4.2	35	272	15.3	31	3,089	1.1	34	278	14.8	30	3,079	- 1.1	45	279	20.6	31	2,960	- 8.5	49	272	23.3	31	3,027	- 5.8	46	274	23.3
650	31	3,726	.6	35	271	18.8	31	3,675	- 2.7	34	276	17.5	30	3,661	- 4.5	43	277	24.3	31	3,529	-11.7	46	271	24.1	31	3,604	- 8.7	44	273	26.2
600	31	4,369	- 3.5	35	273	25.3	31	4,311	- 7.2	39	274	21.2	30	4,292	- 8.2	34	275	26.2	31	4,141	-15.0	41	268	28.9	31	4,221	-12.0	36	275	29.7
550	31	5,047	- 7.7	33	266	29.3	31	4,976	-12.1	37	274	24.5	30	4,955	-12.5	33	271	30.3	31	4,790	-19.1	40	267	32.6	31	4,880	-16.2	34	277	34.0
500	31	5,788	-12.5	32	267	32.8	31	5,705	-17.0	31	272	22.5	30	5,684	-17.6	34	271	34.8	31	5,497	-23.6	36	264	37.3	31	5,594	-21.1	37	276	36.9
450	31	6,580	-18.1	34	269	38.9	31	6,479	-22.9	33	273	26.0	30	6,457	-23.1	32	270	37.7	31	6,256	-29.0	33	264	41.2	31	6,359	-26.6	36	274	37.7
400	31	7,455	-24.3	33	269	45.6	31	7,339	-29.6	35	274	29.7	30	7,316	-29.6	35	269	42.7	31	7,092	-35.0	31	264	45.6	31	7,204	-32.7	38	276	40.4
350	31	8,416	-31.2	31	267	55.8	31	8,276	-37.1	36	271	34.4	30	8,254	-36.9	32	272	44.7	31	8,009	-41.7	27	269	49.3	31	8,130	-39.7	43	275	42.9
300	31	9,490	-39.6	34	268	63.9	31	9,323	-45.4		270	38.5	30	9,303	-44.9		269	49.7	31	9,038	-48.9		264	50.1	31	9,167	-47.5		274	48.4
250	31	10,714	-48.0		269	77.1	31	10,517	-53.7		269	47.2	30	10,500	-52.7		268	59.1	31	10,216	-55.3		264	49.5	31	10,352	-54.3		274	54.6
200	31	12,158	-55.2		269	89.6	31	11,928	-59.2		272	54.8	28	11,920	-57.0		268	70.9	31	11,630	-56.6		264	48.6	30	11,768	-57.2		274	56.1
175	30	12,998	-59.7		269	85.9	31	12,765	-58.9		270	56.9	28	12,765	-57.1		269	69.2	31	12,480	-55.1		265	46.6	30	12,612	-57.1		272	57.1
150	28	13,954	-63.5		269	78.9	29	13,731	-59.7		270	57.5	28	13,739	-57.8		268	66.4	31	13,465	-54.5		262	42.5	30	13,588	-56.8		272	54.2
125	28	15,063	-67.6		268	66.8	29	14,867	-61.9		271	50.7	28	14,882	-60.6		268	58.7	31	14,631	-55.4		263	39.4	30	14,740	-58.6		271	49.7
100	27	16,391	-70.5		267	54.4	29	16,237	-64.4		273	39.6	27	16,264	-63.1		267	48.0	31	16,048	-56.8		266	35.7	30	16,136	-60.6		271	44.9
80	27	17,710	-70.9		268	37.3	29	17,598	-65.1		270	31.9	27	17,633	-63.3		269	38.9	31	17,459	-57.3		265	30.5	30	17,523	-60.8		269	34.6
70	27	18,503	-68.9		267	25.6	29	18,411	-64.8		271	27.0	27	18,455	-62.3		268	30.3	31	18,301	-57.7		267	28.9	30	18,355	-60.2		268	30.3
60	25	19,435	-66.6		274	18.6	29	19,357	-63.3		275	23.3	27	19,412	-60.4		269	26.6	30	19,272	-57.7		267	26.2	30	19,318	-59.2		268	26.6
50	24	20,545	-63.3		275	11.5	28	20,484	-61.1		275	18.1	27	20,554	-58.6		272	21.0	30	20,423	-57.2		266	25.4	28	20,466	-58.0		268	24.9
40	23	21,929	-59.2		311	5.1	28	21,878	-58.4		266	15.0	27	21,964	-56.3		274	14.2	29	21,842	-55.6		267	22.0	28	21,877	-56.3		268	21.8
30	21	23,746	-55.6		23	6.0	27	23,699	-56.2		262	13.2	27	23,801	-54.1		276	11.3	29	23,676	-55.5		267	23.3	28	23,707	-55.4		271	21.2
25	21	24,911	-54.3		57	9.7	26	24,857	-55.3		266	12.8	26	24,974	-52.4		287	10.7	28	24,842	-54.7		267	22.9	28	24,873	-54.1		275	23.1
20	20	26,355	-50.6		90	8.9	25	26,288	-53.1		270	11.5	26	26,424	-50.1		279	8.7	28	26,274	-53.1		264	26.4	27	26,303	-52.6		272	24.7
15	17	28,251	-45.9		127	5.8	22	28,163	-50.2		266	16.7	26	28,313	-47.5		259	11.8	27	28,139	-50.8		259	31.7	27	28,172	-49.7		266	25.1
10	8	30,999	-39.6				18	30,848	-44.3		253	33.0	25	31,038	-40.4		261	32.4	20	30,812	-45.8		264	39.4	20	30,877	-44.6		253	36.9
7							10	33,297	-36.3				24	33,503	-34.0		260	41.4	5	33,212	-40.6				9	33,342	-39.4			
5													19	35,867	-29.2															

Standard pressure surface (mb.)	NOME, ALASKA 1016 MB						* NORTH PLATTE, NEBR. 915 MB						* OAKLAND, CALIF. 1019 MB						OKLAHOMA CITY, OKLA. 970 MB						OMAHA, NEBR. 966 MB					
SURFACE	31	7	-20.9	75	16	4.9	30	848	- 2.4	82	326	4.9	31	6	10.9	74	311	2.3	31	392	6.7	68	225	2.5	31	403	1.2	78	255	3.7
1000	31	120			24	5.4	30	136					31	159	9.5	72	297	2.5	31	139					31	121				
950	31	506	-17.0	59	34	6.6	30	551					31	583	7.7	70	294	3.5	31	566	8.4	59	199	7.4	31	534	2.4	72	244	5.2
900	31	910	-17.3	60	26	7.4	30	982	2.3	57	308	7.0	31	1,029	7.5	51	273	4.3	31	1,010	7.3	55	233	16.1	31	974	2.7	63	274	12.6
850	31	1,338	-17.3	59	20	8.9	30	1,446	4.0	44	310	15.2	31	1,499	6.0	45	267	6.8	31	1,479	5.7	48	259	17.3	31	1,436	1.7	58	293	15.2
800	31	1,792	-18.0	57	9	10.5	30	1,937	1.9	41	310	17.5	31	1,994	3.8	42	267	8.4	31	1,974	4.1	38	279	16.5	31	1,924	.1	51	297	16.9
750	31	2,273	-19.2	54	8	14.4	30	2,454	- 1.1	40	309	19.6	31	2,513	1.2	33	265	11.5	31	2,493	1.5	34	285	16.3	31	2,433	- 2.4	48	298	19.6
700	31	2,785	-21.4	53	5	16.5	30	3,002	- 4.5	43	305	21.8	31	3,069	- 1.6	33	266	14.4	31	3,049	- 1.6	34	290	19.8	31	2,983	- 5.6	46	300	20.6
650	31	3,325	-24.0	52	355	18.8	30	3,578	- 8.1	46	302	24.7	31	3,648	- 5.3	34	269	17.5	31	3,629	- 5.3	35	287	22.3	31	3,554	- 9.4	47	299	22.9
600	31	3,909	-27.6	48	356	16.5	30	4,199	-11.9	43	297	25.3	31	4,280	- 9.4	33	270	20.4	31	4,258	- 9.8	36	284	24.9	31	4,175	-13.5	48	302	26.4
550	31	4,524	-31.3	48	351	16.9	30	4,857	-16.4	43	296	26.2	31	4,939	-13.9	38	270	21.8	31	4,919	-14.3	37	282	28.7	31	4,825	-17.6	51	299	28.9
500	31	5,199	-35.7	48	347	18.3	30	5,570	-21.3	40	298	28.4	31	5,665	-19.0	37	269	25.8	31	5,640	-19.3	35	281	30.5	31	5,539	-22.4	49	297	30.9
450	31	5,920	-40.4	47	352	15.7	30	6,336	-27.3	42	296	31.1	31	6,437	-24.9	40	268	28.2	31	6,408	-25.1	35	281	31.9	31	6,295	-28.2	41	294	31.7
400	31	6,720	-45.3		345	16.9	30	7,176	-33.5	39	296	33.4	31	7,288	-31.0	40	270	31.5	31	7,259	-31.4	37	279	35.9	31	7,139	-34.7	39	294	34.6
350	31	7,601	-50.0		345	17.9	30	8,098	-40.7	37	295	36.3	31	8,221	-38.3	38	270	36.5	31	8,191	-38.7	38	277	40.2	31	8,058	-41.2	37	294	39.8
300	31	8,600	-53.6		343	16.3	30	9,130	-48.4		295	38.7	31	9,263	-46.5		271	39.2	31	9,232	-46.8		275	44.5	31	9,089	-48.2		295	42.7
250	31	9,768	-54.2		337	15.2	30	10,308	-56.2		293	43.9	31	10,449	-55.5		279	41.2	31	10,418	-55.0		274	51.3	31	10,272	-54.8		292	45.3
200	31	11,205	-52.3		321	12.8	30	11,704	-61.4		284	44.5	30	11,841	-62.7		283	42.7	31	11,822	-60.4		275	59.8	31	11,681	-58.8		288	45.5
175	31	12,068	-52.4		315	11.5	30	12,535	-59.2		284	45.1	30	12,669	-60.8		280	46.6	31	12,654	-59.6		274	57.1	31	12,521	-57.4		284	44.5
150	31	13,067	-51.6		307	11.8	30	13,504	-57.7		285	42.5	30	13,632	-58.8		275	47.4	31	13,621	-58.9		274	55.0	31	13,498	-56.3		281	40.8
125	31	14,250	-51.7		304	11.8	30	14,653	-58.2		282	38.3	30	14,776	-59.6		278	42.2	31	14,760	-60.9		272	48.8	31	14,655	-57.0		282	35.7
100	31	15,696	-52.3		304	12.4	30	16,055	-59.2		278	30.5	29	16,163	-61.2		276	35.5	30	16,142	-62.6		272	42.9	31	16,064	-57.9		279	30.7
80	31	17,138	-52.8		306	13.8	30	17,451	-60.0		275	27.0	28	17,544	-62.1		275	28.0	30	17,516	-62.8		274	34.2	31	17,466	-59.3		282	25.6
70	31	17,998	-52.9		304	13.2	30	18,283	-60.4		277	24.1	28	18,368	-62.2		276	25.4	29	18,340	-62.6		274	29.7	30	18,299	-59.6		278	22.5
60	31	18,994	-53.1		299	12.6	30	19,244	-59.9		281	21.6	25	19,326	-60.8		279	22.7	29	19,292	-61.9		268	25.1	30	19,263	-59.5		279	21.4
50	31	20,168	-53.5		295	10.3	29	20,382	-59.8		275	19.4	24	20,462	-60.4		279	19.8	29	20,424	-60.3		267	22.7	30	20,406	-58.6		278	20.0
40	31	21,601	-54.2		298	8.7	28	21,783	-58.5		280	19.2	24	21,855	-59.5		279	17.5	29	21,822	-58.4		267	23.1	30	21,810	-58.1		276	21.8
30	29	23,444	-54.4		296	7.4	27	23,600	-57.3		269	20.8	23	23,661	-57.7		278	16.7	29	23,643	-56.1		266	24.1	28	23,629	-55.4		270	24.3
25	26	24,619	-54.4		300	9.7	25	24,753	-56.6		269	25.3	22	24,809	-57.0		270	20.8	27	24,801	-54.8		265	25.3	27	24,788	-55.5		272	26.6
20	23	26,054	-54.8		297	8.5	22	26,174	-55.5		270	25.8	20	26,720	-56.2		269	21.6	26	26,234	-53.8		271	30.3	26	26,214	-54.5		271	30.5
15	15	27,924	-55.3		354	1.9	15	28,005	-53.7		262	32.8	18	28,056	-54.0		269	27.8	22	28,095	-51.3		267	33.8	22	28,067	-53.3		270	37.5
10							8	30,689	-48.7				12	30,683	-47.6				7	30,741	-48.1				15	30,732	-47.8		265	44.7
7																									5	33,121	-46.0			

Standard pressure surface (mb.)	* PEORIA, ILL. 992 MB						* PITTSBURGH, PA. 974 MB						+ PONAPE, CAROLINE IS. 1005 MB						PORTLAND, ME. 1014 MB						RAPID CITY, S. DAK. 903 MB					
SURFACE	31	200	.9	78	227	3.3	31	353	.5	75	227	2.9	31	39	27.9	78	61	8.7	31	20	- 1.8	76	299	1.7	29	966	- 1.0	65	318	4.5
1000	31	132					31	146					31	82	27.5	77	64	10.9	31	130			315	3.1	29	143				
950	31	548	2.6	65	244	10.5	31	563	1.5	68	251	7.2	31	527	23.3	77	66	18.1	31	542	- 1.3	59	286	6.0	29	557				
900	31	983	1.2	59	265	15.2	31	994	- .2	61	270	13.2	31	1,005	19.9	76	76	18.6	31	970	- 2.5	58	261	9.3	29	992			322	6.0
850	31	1,441	- .4	55	269	16.7	31	1,450	- 2.3	60	276	15.9	31	1,497	17.4	66	83	17.5	31	1,422	- 4.6	58	261	11.7	29	1,455	2.7	43	317	10.7
800	31	1,925	- 2.4	53	274	18.8	31	1,930	- 4.8	60	280	18.3	31	2,014	15.7	52	87	14.4	31	1,898	- 6.5	59	276	15.2	29	1,943	.2	43	320	15.3
750	31	2,432	- 4.3	49	272	20.4	31	2,434	- 7.5	65	278	19.4	31	2,558	13.7	46	91	10.9	31	2,399	- 8.1	56	281	20.0	29	2,454	- 2.8	45	318	19.6
700	31	2,977	- 7.0	48	274	22.3	31	2,971	- 9.6	55	274	24.3	31	3,139	10.4	45	88	9.1	31	2,936	-10.1	50	279	24.9	29	3,001	- 6.1	48	308	21.8
650	31	3,549	-10.0	44	277	23.5	31	3,536	-12.4	56	275	25.3	31	3,750	6.8	44	97	9.3	31	3,500	-13.1	45	279	27.2	29	3,572	- 9.5	45	304	22.3
600	31	4,164	-13.9	45	279	26.8	31	4,148	-15.6	51	276	27.8	31	4,407	3.5	41	95	9.5	31	4,111	-16.6	42	276	29.5	29	4,191	-13.5	47	298	24.7
550	31	4,815	-18.2	42	279	30.7	31	4,796	-19.6	51	280	30.3	31	5,104	.0	36	86	10.7	31	4,754	-20.8	40	273	31.5	29	4,841	-17.6	39	295	28.6
500	31	5,525	-22.9	43	280	32.4	31	5,502	-24.2	49	278	33.2	31	5,867	- 4.0	34	88	10.1	31	5,459	-25.5	40	272	32.6	29	5,555	-22.5	41	291	32.4
450	31	6,283	-28.2	39	286	34.8	31	6,257	-29.6	41	273	35.9	31	6,688	- 8.7	31	86	10.5	31	6,209	-30.8	39	267	36.3	29	6,311	-28.4	43	291	35.0
400	31	7,123	-34.1	41	283	38.5	31	7,092	-35.8	39	275	40.4	31	7,596	-14.4	28	82	8.5	31	7,043	-36.7	38	271	42.0	29	7,154	-34.6	46	298	36.5
350	31	8,045	-40.8	43	285	41.8	31	8,008	-42.3	39	279	42.0	31	8,596	-21.0	25	68	6.8	31	7,956	-42.8	40	270	43.5	29	8,072	-41.8	42	290	37.9
300	31	9,078	-48.0		286	43.3	31	9,036	-48.6		281	43.3	31	9,716	-29.4	24	82	3.3	31	8,982	-49.2		267	50.1	29	9,098	-49.7		289	42.9
250	31	10,262	-54.2		284	50.1	31	10,219	-54.0		275	45.5	31	10,989	-39.8	24	156	8.2	31	10,163	-54.4		271	50.3	29	10,269	-57.3		292	45.6
200	31	11,680	-57.1		283	50.1	31	11,641	-56.3		271	48.8	31	12,474	-52.3		161	11.8	31	11,586	-55.2		268	44.5	29	11,659	-61.5		293	46.4
175	31	12,527	-55.6		282	47.0	31	12,491	-55.1		271	48.4	31	13,323	-59.6		156	9.1	31	12,441	-54.2		271	42.9	29	12,489	-59.8		290	41.4
150	31	13,510	-55.1		280	44.7	31	13,477	-54.7		273	46.4	31	14,269	-67.2		138	5.1	31	13,432	-53.3		267	38.7	28	13,460	-58.3		287	36.7
125	31	14,674	-55.6		280	39.6	31	14,642	-55.1		273	39.8	31	15,746	-75.3		78	6.2	30	14,600	-54.1		264	35.4	28	14,606	-58.4		287	35.0
100	31	16,090	-56.9		282	33.2	31	16,060	-56.8		271	34.2	31	16,615	-82.5		74	8.7	30	16,027	-55.2		264	31.1	28	16,007	-59.2		289	27.6
80	31	17,499	-57.9		277	27.8	31	17,471	-57.6		272	29.1	30	17,858	-81.1		78	12.8	30	17,448	-56.1		266	27.6	28	17,404	-59.7		288	23.7
70	31	18,340	-58.3		277	23.5	30	18,312	-57.8		271	27.2	30	18,616	-77.4		82	14.4	30	18,295	-56.6		265	24.9	28	18,237	-60.4		285	19.0
60	31	19,312	-57.5		272	21.8	30	19,284	-57.5		270	26.8	28	19,513	-71.8		89	23.1	30	19,272	-56.7		264	24.9	27	19,200	-60.0		281	17.9
50	30	20,462	-56.8		273	24.1	30	20,437	-56.8		273	25.6	25	20,604	-66.6		94	37.3	30	20,428	-56.4		264	23.1	25	20,341	-60.1		281	16.1
40	29	21,878	-56.1		274	23.7	30	21,850	-56.7		271	27.0	21	21,974	-60.3		94	44.3	30	21,844	-56.1		266	22.7	23	21,733	-59.7		283	14.4
30	29	23,712	-54.8		273	28.0	29	23,683	-55.7		272	26.0	14	23,790	-54.4		87	24.7	29	23,678	-55.0		266	22.9	22	23,541	-58.2		277	18.1
25	29	24,880	-53.9		269	26.4	29	24,847	-54.3		274	28.0	11	24,956	-50.9				29	24,845	-54.1		264	23.7	21	24,690	-58.1		281	19.6
20	28	26,322	-52.9		265	28.4	28	26,282	-53.2		273	26.8	7	26,430	-48.2				26	26,268	-53.7		260	24.1	13	26,092	-56.8		274	24.1
15	28	28,185	-51.0		262	34.4	28	28,145	-50.6		267	32.1							22	28,126	-52.2		263	29.7	9	27,937	-55.6			
10	26	30,835	-46.6		261	48.2	25	30,812	-46.7		265	48.2							5	30,696	-49.2									
7	8	33,103	-42.6				20	33,228	-40.8		264	60.6																		
5							12	35,538	-35.8		265	77.9																		
4							5	37,063	-31.9																					

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST. CLOUD, MINN. 975 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	316	- 2.1	80	345	.4
1000	31	113				
950	31	525	- .9	73	191	1.4
900	31	953	- 1.3	65	259	3.9
850	31	1,409	- 2.3	57	291	6.0
800	31	1,889	- 4.2	59	291	7.4
750	31	2,399	- 6.3	55	298	9.9
700	31	2,935	- 8.9	52	300	13.0
650	31	3,505	-12.4	53	304	15.9
600	31	4,113	-16.0	53	304	19.0
550	31	4,759	-20.2	52	301	22.0
500	31	5,464	-25.1	51	297	24.5
450	31	6,215	-30.6	52	297	27.6
400	31	7,049	-36.3	46	299	30.3
350	31	7,962	-43.2	39	302	33.8
300	31	8,984	-50.6		301	35.9
250	31	10,156	-56.4		296	39.4
200	31	11,567	-57.1		293	38.1
175	31	12,414	-55.7		290	34.8
150	31	13,398	-54.7		286	33.4
125	31	14,564	-55.4		288	30.1
100	31	15,983	-56.4		286	26.2
80	31	17,397	-57.3		284	23.9
70	31	18,239	-57.9		283	21.4
60	31	19,212	-58.4		285	19.4
50	31	20,359	-58.4		285	18.1
40	31	21,763	-57.8		286	17.5
30	31	23,581	-57.2		282	18.5
25	28	24,736	-55.8		280	19.8
20	25	26,156	-55.9		271	20.8
15	22	28,004	-54.4		271	27.8
10	8	30,624	-51.0			

ST. PAUL IS., ALASKA 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	10	- 5.5	83	4	8.9
1000	30	109			356	9.5
950	30	505	- 8.6	81	3	11.3
900	30	926	-10.7	82	359	11.1
850	30	1,365	-11.6	73	338	11.8
800	30	1,828	-13.6	65	324	13.2
750	30	2,314	-15.8	62	329	15.2
700	30	2,834	-18.4	61	326	17.1
650	30	3,381	-21.3	60	323	19.0
600	30	3,971	-24.9	57	323	20.8
550	30	4,593	-29.1	50	322	21.6
500	30	5,274	-33.6	47	326	21.4
450	30	5,999	-38.5	46	325	18.8
400	30	6,808	-43.9	39	327	21.8
350	30	7,695	-48.9		326	24.5
300	30	8,696	-53.4		327	25.8
250	30	9,864	-54.6		319	27.0
200	30	11,296	-53.2		310	24.1
175	30	12,157	-52.4		302	20.6
150	30	13,154	-51.8		302	20.2
125	30	14,337	-51.7		303	18.1
100	30	15,781	-52.1		300	15.9
80	30	17,223	-52.8		294	15.9
70	30	18,083	-53.3		295	15.0
60	30	19,075	-54.0		294	14.6
50	29	20,241	-54.7		292	10.3
40	29	21,667	-55.3		290	10.7
30	28	23,506	-55.9		309	9.9
25	27	24,669	-55.6		310	10.7
20	25	26,079	-56.1		308	7.4
15	19	27,916	-55.9		161	1.2
10	9	30,562	-54.3			

SALEM, OREG. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	4.1	89	185	4.9
1000	31	138	4.7	82	191	4.1
950	31	555	4.6	69	206	9.5
900	31	996	2.8	63	212	13.0
850	31	1,458	.5	59	219	16.1
800	31	1,942	- 2.2	59	223	19.2
750	31	2,448	- 5.1	58	229	22.3
700	31	2,991	- 8.5	58	233	23.9
650	31	3,555	-12.0	53	236	24.9
600	31	4,170	-15.8	49	241	26.6
550	31	4,815	-19.7	45	246	28.9
500	31	5,523	-24.4	44	252	32.8
450	31	6,275	-30.0	40	253	36.1
400	31	7,111	-36.0	41	253	41.8
350	31	8,025	-42.3	34	249	45.5
300	31	9,053	-48.8		255	45.5
250	31	10,231	-55.5		261	44.5
200	31	11,636	-59.8		262	40.2
175	31	12,471	-58.7		264	39.2
150	31	13,443	-57.5		264	37.3
125	30	14,593	-57.5		265	37.1
100	30	16,000	-58.0		263	32.6
80	30	17,405	-58.1		266	26.2
70	30	18,244	-58.7		265	24.3
60	30	19,209	-59.3		261	23.3
50	30	20,350	-59.3		263	20.6
40	28	21,750	-59.0		270	19.8
30	24	23,561	-58.5		268	17.3
25	21	24,712	-58.4		267	16.9
20	17	26,118	-57.7		277	17.9
15	10	27,908	-56.7			

SALT LAKE CITY, UTAH 872 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,288	.5	68	127	2.9
1000	31	175				
950	31	595				
900	31	1,035				
850	31	1,497	4.0	49	171	2.9
800	31	1,989	2.2	43	201	5.2
750	31	2,504	- 1.0	42	248	5.4
700	31	3,055	- 4.5	44	281	9.5
650	31	3,634	- 8.2	46	279	12.8
600	31	4,251	-12.4	50	277	15.0
550	31	4,907	-17.1	50	273	18.5
500	31	5,619	-21.9	51	277	23.3
450	31	6,381	-27.4	49	274	27.0
400	31	7,225	-33.2	47	277	31.1
350	31	8,149	-40.3	41	279	32.4
300	31	9,182	-48.1		280	36.1
250	31	10,362	-55.9		285	39.0
200	31	11,757	-62.3		282	38.5
175	30	12,589	-61.0		283	39.8
150	30	13,554	-58.6		281	36.9
125	30	14,697	-59.2		279	34.0
100	30	16,092	-60.2		280	30.7
80	30	17,481	-60.8		278	26.4
70	30	18,310	-60.9		278	22.1
60	28	19,273	-60.6		274	19.6
50	28	20,410	-59.4		277	17.9
40	28	21,805	-59.2		275	18.3
30	27	23,608	-58.0		275	18.3
25	25	24,759	-57.5		271	22.3
20	24	26,166	-56.6		270	24.3
15	12	28,033	-54.5			

SAN ANTONIO, TEXAS 990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	243	10.8	85	39	1.2
1000	31	159				
950	31	591	11.8	74	161	6.0
900	31	1,041	10.0	66	185	8.7
850	31	1,516	9.3	54	215	9.3
800	31	2,017	7.7	47	236	9.5
750	31	2,545	5.8	44	260	9.1
700	31	3,110	2.8	35	276	12.8
650	31	3,701	- 1.2	32	278	16.7
600	31	4,339	- 5.6	35	278	20.2
550	31	5,009	-10.6	34	274	23.7
500	31	5,742	-16.0	27	272	26.2
450	31	6,517	-21.9	24	268	30.1
400	31	7,383	-28.2	30	269	37.4
350	31	8,327	-35.5	29	269	45.1
300	31	9,383	-43.5		269	52.1
250	31	10,589	-51.7		267	64.5
200	31	12,012	-57.8		267	72.8
175	31	12,854	-58.3		267	74.0
150	31	13,820	-60.4		265	68.2
125	31	14,949	-63.5		267	56.5
100	31	16,310	-66.5		267	44.5
80	31	17,657	-66.9		267	32.8
70	31	18,465	-65.5		266	27.8
60	31	19,407	-63.8		266	22.0
50	29	20,530	-61.7		264	16.9
40	27	21,920	-58.4		256	9.3
30	26	23,742	-55.5		262	8.4
25	26	24,906	-54.5		277	6.8
20	21	26,352	-52.1		273	9.3
15	11	28,252	-48.1			

SAN DIEGO, CALIF. 1001 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	124	10.0	86	27	2.3
1000	31	135			34	2.1
950	31	568	11.6	58	5	2.5
900	31	1,017	12.5	39	320	4.5
850	31	1,495	10.9	33	302	6.4
800	31	1,998	8.1	34	296	7.4
750	31	2,525	4.7	35	290	9.1
700	31	3,087	1.1	35	287	11.1
650	31	3,675	- 2.4	32	286	12.4
600	31	4,310	- 6.5	31	286	14.2
550	31	4,976	-11.3	32	284	16.7
500	31	5,709	-16.5	30	283	17.7
450	31	6,485	-22.4	31	283	19.4
400	31	7,347	-29.2	33	283	22.9
350	31	8,287	-36.8	35	282	27.8
300	31	9,336	-44.9		278	30.7
250	31	10,533	-52.9		285	35.9
200	30	11,949	-58.1		283	47.0
175	29	12,790	-58.9		281	53.2
150	29	13,757	-59.1		281	52.8
125	29	14,895	-60.9		279	44.1
100	29	16,273	-63.5		278	36.3
80	28	17,639	-64.8		276	28.4
70	28	18,455	-63.7		274	26.0
60	27	19,403	-62.3		279	19.8
50	27	20,531	-61.2		284	16.5
40	26	21,925	-59.0		275	12.2
30	26	23,739	-55.8		276	14.8
25	26	24,902	-54.9		262	15.5
20	25	26,334	-53.6		261	20.2
15	22	28,191	-51.2		272	26.2
10	18	30,860	-45.6		263	32.2
7	13	33,244	-39.9		269	48.8
5	10	35,580	-33.9			

• SAN JUAN, P. R. 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	23.7	78	83	4.7
1000	31	138	22.9	78	90	9.5
950	31	583	19.6	80	86	13.4
900	31	1,049	16.6	77	87	11.8
850	31	1,535	14.4	68	83	9.7
800	31	2,045	11.9	61	89	6.8
750	31	2,582	9.4	57	75	4.9
700	31	3,155	7.0	41	31	1.4
650	31	3,759	4.4	32	283	4.1
600	31	4,409	1.1	26	274	7.8
550	31	5,095	- 3.2	26	266	11.1
500	31	5,852	- 7.9	24	271	16.3
450	31	6,655	-13.3	24	279	21.6
400	31	7,550	-19.7	26	283	28.0
350	31	8,528	-26.3	28	283	35.7
300	31	9,625	-33.9	26	281	45.6
250	31	10,878	-43.2		275	52.6
200	31	12,345	-54.4		273	57.9
175	31	13,188	-60.5		272	58.9
150	31	14,135	-66.1		272	52.8
125	31	15,225	-71.5		273	44.7
100	31	16,528	-75.8		282	32.1
80	30	17,814	-76.4		284	16.7
70	29	18,585	-74.6		305	7.6
60	29	19,489	-69.9		7	3.5
50	29	20,595	-63.0		70	9.1
40	28	21,976	-59.8		74	15.2
30	26	23,778	-57.1		77	23.7
25	24	24,939	-54.5		86	27.6
20	23	26,375	-50.1		90	21.8
15	22	28,283	-44.7		104	9.3
10	16	31,033	-39.0		71	6.6
7	5	33,525	-32.8			

SAN NICOLAS, CALIF. 996 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	174	10.2	81	315	7.8
1000	31	137				
950	31	569	13.7	40	322	9.7
900	31	1,022	12.7	30	314	7.8
850	31	1,500	10.7	30	315	8.5
800	31	2,002	8.0	32	309	10.7
750	31	2,529	4.5	39	303	11.3
700	31	3,089	.7	43	297	11.7
650	31	3,677	- 3.0	44	293	12.4
600	31	4,308	- 7.4	41	290	14.0
550	31	4,977	-12.3	35	288	15.7
500	31	5,701	-17.3	34	287	17.9
450	31	6,478	-22.8	38	284	19.0
400	31	7,334	-29.7	35	280	20.6
350	31	8,271	-37.4	33	281	24.9
300	31	9,316	-45.5	26	281	23.7
250	31	10,509	-54.1	23	285	31.5
200	31	11,920	-59.1	23	284	45.6
175	31	12,757	-58.9	21	281	49.1
150	31	13,723	-59.7	17	278	50.9
125	31	14,857	-61.7		277	46.2
100	30	16,233	-64.4		276	36.1
80	30	17,595	-64.6		274	27.6
70	29	18,413	-63.6		273	22.9
60	28	19,364	-62.6		278	17.1
50	27	20,489	-60.9		283	14.4
40	26	21,882	-58.6		274	11.5
30	26	23,701	-56.0		271	12.8
25	26	24,863	-55.1		261	14.4
20	25	26,293	-53.0		263	21.6
15	23	28,159	-49.8		274	31.3
10	21	30,841	-43.4		266	43.3
7	10	33,291	-34.9			

*** SAULT STE. MARIE, MICH. 987 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	221	- 4.2	80	83	3.3
1000	31	120				
950	31	523	- 4.4	78	92	2.3
900	31	950	- 4.6	75	296	1.7
850	31	1,400	- 5.7	71	279	5.6
800	31	1,874	- 7.1	70	287	9.9
750	31	2,374	- 9.3	69	287	13.0
700	30	2,903	-11.8	67	289	15.2
650	30	3,466	-14.5	67	285	17.3
600	30	4,071	-17.8	59	286	19.6
550	30	4,714	-21.8	56	288	22.3
500	30	5,411	-26.6	60	288	23.7
450	30	6,158	-31.9	57	290	25.8
400	30	6,986	-37.8	50	288	28.7
350	30	7,893	-44.2		285	29.7
300	30	8,913	-50.5		288	33.8
250	30	10,086	-55.6		285	39.6
200	29	11,495	-55.3		284	37.5
175	29	12,350	-53.7		282	33.4
150	29	13,342	-53.2		281	30.5
125	29	14,515	-53.5		279	28.0
100	28	15,940	-54.8		280	26.2
80	28	17,362	-55.9		280	24.5
70	28	18,210	-56.1		277	23.1
60	25	19,190	-56.1		279	18.8
50	25	20,347	-56.8		277	17.3
40	25	21,762	-56.4		280	17.3
30	25	23,590	-55.7		272	17.9
25	25	24,747	-55.5		272	20.2
20	25	26,171	-54.8		270	23.1
15	23	28,027	-53.1		263	31.3
10	20	30,667	-50.4		262	37.3
7	[illegible]	32,970	-45.6			

SHEMYA, ALASKA 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	38	- .2	81	98	5.4
1000	31	119			114	9.9
950	31	526	- 4.1	81	121	11.5
900	31	950	- 6.3	79	133	11.8
850	31	1,396	- 8.1	72	145	9.9
800	31	1,865	-10.3	67	156	8.5
750	31	2,361	-12.6	62	159	8.9
700	31	2,885	-14.9	57	166	8.2
650	31	3,439	-17.9	57	182	8.9
600	31	4,037	-21.4	55	193	9.7
550	31	4,670	-25.4	54	211	12.2
500	31	5,359	-30.0	53	219	14.0
450	31	6,099	-35.1	54	225	13.4
400	31	6,913	-41.0	51	232	16.1
350	31	7,808	-47.5		241	19.6
300	31	8,813	-53.6		254	22.5
250	31	9,975	-57.2		256	29.3
200	31	11,386	-55.8		261	21.2
175	31	12,240	-54.1		256	20.4
150	31	13,232	-53.1		261	19.8
125	31	14,406	-53.5		264	18.3
100	31	15,841	-53.7		265	18.1
80	30	17,273	-54.0		265	18.8
70	30	18,127	-54.9		269	17.7
60	30	19,112	-55.3		270	16.1
50	30	20,273	-55.9		274	15.9
40	30	21,690	-56.6		284	14.0
30	30	23,512	-57.1		280	13.6
25	30	24,665	-57.1		286	17.0
20	27	26,083	-57.3		287	15.0
15	24	27,892	-57.4		296	19.0
10	18	30,482	-55.5		300	18.1
7	6	32,800	-54.4			

• SHREVEPORT, LA. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	9.5	75	220	1.2
1000	31	160	10.2	68	212	1.4
950	31	593	9.5	60	232	6.6
900	31	1,035	7.9	58	245	9.5
850	31	1,506	6.4	52	265	11.1
800	31	2,001	4.3	53	280	12.8
750	31	2,524	1.7	55	283	16.1
700	31	3,079	- .8	49	280	19.2
650	31	3,668	- 4.3	46	278	21.2
600	31	4,294	- 8.5	43	275	24.1
550	31	4,962	-13.2	41	275	28.2
500	31	5,683	-18.0	37	274	30.7
450	31	6,457	-23.8	37	276	34.2
400	31	7,312	-30.2	34	274	37.9
350	31	8,247	-37.7	37	273	43.1
300	31	9,291	-45.7		271	50.7
250	30	10,483	-53.2		273	57.5
200	30	11,899	-58.8		272	64.9
175	30	12,736	-58.9		272	65.3
150	30	13,702	-59.4		270	65.9
125	30	14,837	-61.7		272	59.4
100	30	16,208	-64.2		270	47.4
80	30	17,568	-64.5		271	35.2
70	30	18,385	-63.7		272	29.7
60	30	19,334	-62.1		267	27.8
50	30	20,465	-60.0		265	22.5
40	30	21,865	-57.8		268	15.0
30	30	23,688	-55.8		274	13.2
25	30	24,851	-54.4		277	10.7
20	29	26,290	-51.9		287	8.4
15	29	28,166	-49.1		266	15.2
10	20	30,859	-42.9		259	35.7
7	5	33,295	-36.0			

SPOKANE, WASH. 933 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	717	.4	[illegible]	147	3.5
1000	31	151				
950	31	564				
900	31	1,002	2.0	66	175	7.6
850	31	1,462	- .1	59	210	9.7
800	31	1,945	- 3.0	56	226	11.1
750	31	2,450	- 6.1	56	239	14.0
700	31	2,992	- 9.2	57	248	17.1
650	31	3,555	-13.0	57	249	19.8
600	31	4,167	-16.8	57	251	23.5
550	31	4,808	-21.0	55	253	26.6
500	31	5,514	-25.6	56	253	29.3
450	31	6,261	-31.2	52	253	31.1
400	31	7,095	-37.2	48	253	35.2
350	31	8,005	-43.5	41	256	39.2
300	31	9,026	-50.4		260	43.5
250	31	10,199	-56.4		266	46.6
200	31	11,601	-59.7		268	40.4
175	31	12,437	-58.7		265	36.3
150	31	13,411	-56.5		268	34.2
125	31	14,567	-56.8		268	30.3
100	31	15,979	-57.8		265	26.4
80	31	17,384	-58.0		269	24.3
70	31	18,224	-58.1		269	22.3
60	30	19,191	-58.7		267	20.6
50	30	20,336	-58.2		267	19.6
40	30	21,738	-58.9		271	17.3
30	29	23,542	-58.5		270	15.0
25	28	24,688	-58.5		278	14.6
20	20	26,107	-59.0		278	14.2
15	15	27,914	-58.0		275	18.6
10	6	30,496	-53.3			

SWAN ISLAND, W. I. 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	24.7	80	59	7.4
1000	31	124	23.8	81	58	10.3
950	31	573	20.2	85	70	12.2
900	31	1,038	17.4	77	79	11.3
850	31	1,525	14.5	75	90	9.1
800	31	2,036	11.7	71	88	6.4
750	31	2,581	10.2	49	97	4.7
700	31	3,148	8.1	36	95	2.5
650	31	3,759	4.9	32	269	1.9
600	31	4,406	1.1	30	273	5.1
550	31	5,096	- 2.9	30	273	9.7
500	30	5,852	- 7.4	28	265	14.0
450	30	6,664	-12.9	32	265	17.7
400	30	7,553	-19.5	33	261	23.9
350	30	8,531	-26.6	35	261	31.7
300	30	9,627	-34.5	32	263	38.3
250	30	10,876	-44.0		265	43.7
200	30	12,337	-55.4		264	49.1
175	30	13,177	-61.5		260	50.3
150	30	14,118	-67.3		261	48.4
125	30	15,206	-71.4		260	39.2
100	30	16,511	-75.6		261	25.4
80	28	17,795	-77.0		254	9.5
70	28	18,565	-74.9		243	3.9
60	28	19,467	-71.2		108	4.9
50	28	20,562	-65.4		88	10.7
40	28	21,934	-61.0		81	18.1
30	28	23,738	-57.0		79	23.3
25	27	24,895	-54.4		80	23.9
20	26	26,339	-50.5		86	19.4
15	19	28,218	-45.2		100	15.5
10	5	30,935	-44.2			

TAMPA, FLA. 1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	13.3	87	41	3.9
1000	31	164	14.3	77	57	6.2
950	31	598	12.8	65	74	2.5
900	31	1,051	10.6	59	252	2.5
850	31	1,526	8.8	58	256	6.4
800	31	2,026	7.4	48	264	10.3
750	31	2,552	5.3	41	270	13.2
700	31	3,117	2.6	37	266	16.9
650	31	3,713	- .9	40	268	20.8
600	31	4,348	- 4.6	39	269	27.2
550	31	5,023	- 9.0	38	269	30.3
500	31	5,760	-13.9	34	269	34.0
450	31	6,548	-19.6	35	267	40.0
400	31	7,418	-25.9	35	267	46.0
350	31	8,371	-33.0	35	267	55.0
300	31	9,438	-40.6	30	268	65.3
250	31	10,657	-49.1		267	77.1
200	31	12,094	-56.3		266	84.3
175	31	12,938	-58.2		265	87.2
150	31	13,901	-61.2		265	82.8
125	31	15,023	-64.9		264	70.3
100	31	16,373	-67.6		266	58.9
80	31	17,714	-67.6		264	42.7
70	31	18,518	-66.5		266	28.0
60	31	19,457	-64.2		268	18.3
50	31	20,580	-61.5		274	10.7
40	31	21,971	-58.7		301	5.6
30	30	23,793	-55.4		357	5.1
25	30	24,960	-53.8		27	7.4
20	30	26,403	-50.8		47	7.6
15	20	28,283	-46.9		86	1.9
10	8	30,972	-41.4			

• TATOOSH IS., WASH 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	31	6.0	83	116	7.2
1000	31	116	5.3	75	128	7.0
950	31	536	3.1	71	173	9.9
900	31	970	.3	76	190	14.0
850	31	1,426	- 2.4	77	202	15.9
800	31	1,906	- 4.8	72	211	18.1
750	31	2,408	- 7.5	70	219	19.0
700	31	2,945	-10.9	66	221	21.2
650	31	3,508	-14.5	66	223	22.9
600	31	4,112	-18.3	63	227	24.9
550	31	4,755	-22.7	60	231	28.7
500	31	5,449	-27.5	58	231	30.1
450	31	6,198	-32.8	56	233	30.5
400	31	7,018	-38.7	55	238	35.5
350	31	7,923	-44.7	50	246	40.6
300	31	8,940	-50.7		243	42.5
250	31	10,113	-55.9		250	45.1
200	31	11,520	-59.0		256	40.0
175	30	12,363	-58.1		258	38.7
150	30	13,338	-56.6		256	37.1
125	29	14,500	-56.4		260	31.3
100	26	15,928	-58.1		259	28.9
80	26	17,331	-59.0		261	24.9
70	25	18,155	-59.0		256	26.6
60	22	19,116	-58.5		257	23.9
50	17	20,260	-58.9		264	20.8
40	15	21,662	-58.7		257	22.1
30	12	23,478	-58.9		266	22.9
25	10	24,516	-59.3			
20	7	26,006	-58.4			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

TOPEKA, KANS.
984 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	269	2.7	66	252	3.9
1000	31	135				
950	31	553	5.3	61	247	9.9
900	31	994	4.5	60	266	15.9
850	31	1,458	2.6	58	286	17.3
800	31	1,947	.6	56	296	19.6
750	31	2,459	- 1.7	45	290	20.2
700	31	3,010	- 4.6	40	291	22.3
650	31	3,584	- 8.2	43	295	24.9
600	31	4,207	-12.1	40	294	27.2
550	31	4,860	-16.6	41	294	29.3
500	31	5,578	-21.5	37	292	32.1
450	31	6,337	-27.0	35	289	32.6
400	31	7,185	-33.3	34	289	38.7
350	31	8,110	-40.3	41	288	41.8
300	31	9,145	-47.4		287	44.5
250	31	10,331	-54.5		289	48.0
200	31	11,738	-59.7		285	49.9
175	31	12,575	-58.5		281	47.0
150	31	13,547	-57.3		280	43.3
125	31	14,698	-58.0		281	39.8
100	31	16,100	-58.8		280	33.6
80	31	17,496	-60.1		284	26.0
70	30	18,330	-60.1		277	23.9
60	30	19,294	-59.5		277	24.5
50	27	20,436	-58.6		276	22.5
40	27	21,943	-56.7		273	22.7
30	27	23,671	-56.0		272	27.2
25	25	24,931	-54.3		268	31.5
20	22	26,262	-53.4		267	34.0
15	19	28,128	-51.6		262	36.5
10	6	30,700	-49.6			
7						
5						

+ TRUK, CAROLINE IS.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	2	27.9	77	65	11.1
1000	31	91	27.0	75	67	12.8
950	31	539	22.9	74	72	18.1
900	31	1,014	20.0	70	76	19.4
850	31	1,506	17.5	63	83	16.1
800	31	2,023	15.6	50	90	14.8
750	31	2,568	13.4	41	92	11.3
700	31	3,147	10.3	40	95	10.7
650	31	3,761	6.8	40	100	9.5
600	31	4,415	3.6	33	92	12.0
550	31	5,111	.0	26	89	13.4
500	31	5,976	- 4.3	25	90	12.2
450	31	6,696	- 8.9	25	92	10.7
400	31	7,504	-14.5	22	87	11.7
350	31	8,604	-21.0	19	82	9.7
300	31	9,724	-29.5	20	106	7.2
250	31	10,998	-40.0	21	145	10.7
200	31	12,482	-52.4		146	12.4
175	31	13,331	-59.7		145	11.5
150	31	14,278	-67.3		117	8.9
125	31	15,356	-75.1		97	11.7
100	31	16,625	-82.1		92	14.2
80	31	17,871	-81.2		87	15.0
70	31	18,629	-77.0		95	17.5
60	31	19,526	-71.6		93	23.1
50	31	20,618	-66.2		96	37.1
40	29	21,992	-60.0		97	44.1
30	27	23,816	-54.0		89	26.8
25	25	24,991	-50.6		98	11.8
20	22	26,461	-47.8		232	1.6
15	10	28,389	-44.4			

* TUCSON, ARIZ.
924 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	789	9.1	53	150	6.6
1000	31	129				
950	31	562				
900	31	1,012	14.3	36	144	4.3
850	31	1,492	11.7	33	104	1.0
800	31	1,996	8.5	33	225	1.9
750	31	2,521	4.8	35	239	5.6
700	31	3,085	1.1	35	242	9.7
650	31	3,670	- 2.8	35	249	11.7
600	31	4,306	- 6.8	30	259	11.8
550	31	4,970	-11.4	29	265	15.2
500	31	5,703	-16.8	29	267	18.6
450	31	6,475	-22.8	29	269	21.4
400	31	7,337	-29.5	30	272	25.8
350	31	8,275	-37.2	34	274	28.9
300	31	9,220	-45.6		274	34.2
250	31	10,512	-53.8		274	37.5
200	31	11,925	-58.4		274	50.3
175	31	12,764	-58.7		275	56.9
150	31	13,730	-59.8		273	52.3
125	31	14,965	-61.4		274	47.4
100	31	16,238	-64.5		272	42.0
80	31	17,598	-64.7		272	34.2
70	31	18,413	-64.0		274	30.3
60	31	19,359	-62.7		276	24.1
50	31	20,485	-61.4		279	19.2
40	29	21,873	-59.2		271	16.1
30	29	23,690	-56.0		271	14.0
25	29	24,950	-55.2		266	15.2
20	28	26,282	-53.6		267	16.3
15	23	28,144	-51.2		266	22.0
10	19	30,812	-44.9		260	29.7
7	9	33,209	-38.4			

* VANDENBERG AFB, CALIF.
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	100	8.4	82	355	2.9
1000	31	146	9.0	79	353	4.3
950	31	572	11.5	57	356	11.1
900	31	1,026	11.3	39	359	10.5
850	31	1,502	9.6	32	348	9.1
800	31	2,003	7.2	29	318	9.1
750	31	2,526	4.1	33	301	10.9
700	31	3,099	.5	37	285	10.9
650	31	3,675	- 3.4	37	277	12.0
600	31	4,308	- 7.4	35	277	15.7
550	31	4,972	-11.9	35	278	19.2
500	31	5,703	-17.1	38	277	21.6
450	31	6,472	-23.0	38	280	22.3
400	31	7,335	-29.8	39	280	24.5
350	31	8,272	-37.4	39	280	26.8
300	31	9,317	-45.8		279	30.1
250	31	10,507	-54.5		281	35.7
200	31	11,913	-60.3		280	42.7
175	31	12,746	-59.5		278	48.4
150	31	13,712	-59.2		278	47.8
125	31	14,850	-61.0		274	44.7
100	30	16,235	-63.1		273	35.9
80	30	17,604	-63.7		272	29.3
70	30	18,423	-62.9		273	24.9
60	30	19,374	-62.0		273	22.0
50	30	20,503	-61.0		279	18.5
40	30	21,894	-58.9		283	13.4
30	29	23,707	-57.1		277	15.7
25	27	24,868	-55.6		270	17.9
20	26	26,294	-54.6		267	24.5
15	26	28,147	-51.5		270	32.6
10	23	30,826	-44.2		267	42.9
7	22	33,240	-38.0		271	65.5
5	6	35,502	-32.8			

* WAKE IS., PACIFIC AREA
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	24.2	77	65	10.5
1000	31	140	23.0	78	71	12.0
950	31	582	18.9	85	82	13.4
900	31	1,049	15.4	83	85	12.2
850	31	1,533	12.9	73	90	10.7
800	31	2,043	12.2	48	94	9.3
750	31	2,579	10.2	33	92	6.6
700	31	3,154	8.0	21	69	3.1
650	31	3,756	5.1	19	337	1.6
600	31	4,411	1.4	18	299	3.9
550	31	5,098	- 2.5	18	287	4.5
500	31	5,857	- 7.0	17	273	5.8
450	31	6,662	-12.3	18	276	7.8
400	31	7,562	-18.4	18	281	12.8
350	31	8,545	-25.5	19	285	19.4
300	31	9,646	-33.0	19	290	28.0
250	31	10,905	-42.0	15	287	34.6
200	30	12,380	-53.2		286	37.9
175	30	13,228	-59.3		281	39.4
150	30	14,178	-66.2		281	37.3
125	30	15,265	-72.8		285	32.6
100	29	16,561	-78.2		290	21.2
80	25	17,816	-78.3		290	9.1
70	23	18,584	-75.6		317	3.9
60	20	19,483	-70.0		112	2.1
50	19	20,580	-65.1		116	4.5
40	19	21,951	-61.1		98	9.7
30	19	23,752	-57.6		91	13.6
25	19	24,910	-54.3		85	14.4
20	19	26,349	-51.4		83	12.8
15	19	28,238	-45.7		81	4.5
10	17	30,959	-40.7		246	5.4
7	12	33,398	-37.5		255	5.4

* WALLOPS IS. VA. NASA
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	3.7	79	228	1.9
1000	31	156	5.7	60	250	5.6
950	31	576	4.9	55	271	12.2
900	31	1,016	2.9	49	271	14.6
850	31	1,477	.7	48	270	16.3
800	31	1,962	- 1.8	50	269	18.3
750	31	2,474	- 4.3	50	267	20.2
700	31	3,015	- 6.8	50	267	22.9
650	31	3,586	-10.0	43	266	27.0
600	31	4,203	-13.8	42	263	30.1
550	31	4,855	-17.9	39	261	31.9
500	31	5,565	-22.7	37	260	35.9
450	31	6,325	-28.3	37	262	38.3
400	31	7,165	-34.6	38	262	42.3
350	31	8,085	-41.0	37	265	47.6
300	31	9,118	-47.5		267	52.4
250	31	10,306	-53.8		266	60.2
200	31	11,727	-56.5		268	59.2
175	30	12,570	-55.9		269	59.2
150	30	13,552	-55.5		270	51.3
125	30	14,711	-56.9		270	47.6
100	30	16,117	-58.6		268	43.9
80	30	17,517	-58.8		268	37.1
70	30	18,354	-58.8		271	31.5
60	30	19,322	-58.3		271	23.7
50	30	20,472	-57.3		272	21.2
40	29	21,981	-56.0		269	22.0
30	29	23,716	-54.5		275	20.2
25	29	24,884	-54.0		272	21.2
20	28	26,322	-52.0		268	21.6
15	28	28,195	-49.5		263	30.7
10	15	30,887	-44.5			

WASHINGTON, D. C.
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	84	1.4	71	324	2.1
1000	31	150			311	2.5
950	31	571	3.2	57	279	10.7
900	31	1,003	1.7	53	282	15.5
850	31	1,462	- .6	54	285	17.9
800	31	1,944	- 2.6	56	278	18.6
750	31	2,457	- 5.3	60	275	20.0
700	31	2,993	- 7.9	52	269	22.0
650	31	3,567	-11.2	47	267	24.7
600	31	4,177	-14.7	47	265	29.5
550	31	4,831	-18.8	41	266	31.1
500	31	5,534	-23.7	40	267	35.9
450	31	6,293	-29.2	41	267	37.1
400	31	7,128	-35.2	38	269	42.0
350	31	8,046	-41.6	39	268	45.3
300	31	9,076	-48.2		266	47.8
250	31	10,261	-53.7		265	51.5
200	31	11,682	-56.7		266	54.6
175	31	12,530	-55.9		268	55.6
150	31	13,512	-55.4		268	52.6
125	31	14,672	-56.5		266	47.2
100	31	16,082	-58.0		266	41.0
80	31	17,483	-59.2		269	34.0
70	30	18,317	-58.2		270	29.5
60	30	19,288	-57.8		269	26.6
50	29	20,438	-57.0		272	23.9
40	29	21,852	-56.3		270	23.5
30	29	23,681	-55.6		275	25.1
25	29	24,844	-54.8		274	24.1
20	29	26,273	-53.9		272	27.2
15	21	28,149	-50.8		264	36.7

WINNEMUCCA, NEV.
869 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,310	- .5	61	134	1.7
1000	31	171				
950	31	591				
900	31	1,034				
850	31	1,491	4.0	46	179	2.1
800	31	1,984	2.3	44	218	6.0
750	31	2,498	- 1.4	47	241	10.3
700	31	3,048	- 5.2	50	252	14.4
650	31	3,625	- 8.3	47	257	18.6
600	31	4,244	-11.7	43	258	22.0
550	31	4,901	-15.[illegible]	38	260	25.8
500	31	5,618	-20.8	38	267	28.4
450	31	6,384	-25.4	38	269	31.9
400	31	7,220	-32.6	39	267	31.9
350	31	8,155	-39.9	38	271	35.0
300	31	9,190	-47.8		272	37.7
250	31	10,371	-56.2		273	40.6
200	31	11,764	-62.1		272	43.9
175	31	12,592	-60.4		275	41.2
150	30	13,548	-58.4		274	41.2
125	30	14,695	-58.7		276	37.3
100	30	16,094	-59.6		277	33.4
80	28	17,489	-60.0		273	26.2
70	28	18,321	-60.4		275	23.1
60	28	19,281	-60.1		275	20.2
50	28	20,420	-59.7		280	18.6
40	27	21,819	-59.0		277	16.5
30	23	23,636	-58.1		276	19.0
25	19	24,789	-57.3		272	17.7
20	13	26,207	-57.3		268	23.1
15	7	28,040	-55.1			

WINSLOW, ARIZ.
851 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,492	.8	60	199	2.5
1000	31	174				
950	31	597				
900	31	1,040				
850	31	1,504			178	2.3
800	31	1,999	5.6	37	261	6.0
750	31	2,522	2.7	35	260	8.9
700	31	3,079	- .7	36	261	9.7
650	31	3,666	- 4.3	34	260	11.3
600	31	4,295	- 8.2	35	265	12.6
550	31	4,961	-13.0	35	272	14.6
500	31	5,684	-18.2	33	276	17.3
450	31	6,455	-24.0	34	272	21.6
400	31	7,311	-30.6	33	272	23.3
350	31	8,245	-38.1	35	277	25.4
300	31	9,288	-45.2		279	28.9
250	31	10,477	-54.7		278	31.7
200	31	11,880	-60.8		276	38.5
175	31	12,712	-59.9		277	40.6
150	31	13,676	-59.5		274	42.5
125	31	14,815	-60.5		275	41.2
100	31	16,198	-62.8		275	35.0
80	31	17,569	-63.4		277	28.7
70	30	18,391	-63.1		279	24.3
60	30	19,342	-61.6		280	22.5
50	30	20,474	-61.0		279	18.3
40	30	21,865	-59.0		270	15.3
30	30	23,681	-56.4		271	19.2
25	28	24,842	-55.6		270	21.0
20	27	26,270	-54.4		266	24.7
15	20	28,125	-51.8		269	30.7
10	5	30,784	-47.1			

YAKUTAT, ALASKA
1000 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	- 5.4	90	97	6.0
1000	31	14			108	7.4
950	31	423	- 2.2	73	112	11.5
900	31	849	- 4.4	73	124	13.8
850	31	1,298	- 7.0	76	136	14.6
800	31	1,768	- 9.9	76	146	13.2
750	31	2,266	-12.9	70	161	14.2
700	31	2,786	-16.5	71	167	16.5
650	31	3,338	-20.2	71	178	17.7
600	31	3,928	-24.3	68	184	17.9
550	31	4,553	-28.5	65	189	20.4
500	31	5,233	-33.2	61	196	24.5
450	31	5,964	-38.7	55	201	25.3
400	31	6,765	-44.6		206	24.5
350	31	7,648	-50.5		213	24.9
300	31	8,641	-55.4		223	26.2
250	31	9,799	-55.8		235	20.6
200	31	11,234	-52.0		241	16.1
175	30	12,093	-52.0		247	15.9
150	30	13,090	-52.3		245	14.2
125	30	14,268	-52.3		248	12.8
100	30	15,711	-52.5		246	12.8
80	30	17,149	-53.7		258	14.8
70	30	18,006	-54.0		257	11.8
60	30	18,995	-54.4		256	9.7
50	30	20,163	-54.6		250	10.7
40	30	21,589	-55.6		272	9.9
30	29	23,420	-56.1		277	6.8
25	29	24,578	-56.5		286	5.6
20	25	26,006	-56.5		286	8.4
15	22	27,824	-57.2		302	5.6
10	10	30,426	-57.8			

+ YAP, CAROLINE IS.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	17	27.7	77	57	10.3
1000	31	99	26.5	73	62	12.8
950	31	543	22.1	74	72	18.5
900	31	1,019	19.5	67	80	19.4
850	31	1,510	17.3	57	80	18.5
800	30	2,026	15.3	48	81	14.8
750	30	2,569	12.9	40	82	13.2
700	30	3,149	10.1	32	84	14.0
650	30	3,759	7.2	28	89	12.8
600	30	4,417	3.5	26	93	13.4
550	30	5,113	- .4	20	92	12.0
500	30	5,875	- 4.4	17	97	11.5
450	30	6,694	- 9.3	15	95	13.0
400	30	7,601	-14.6	14	93	13.2
350	30	8,599	-21.5	15	85	13.2
300	30	9,716	-30.1	17	76	10.5
250	30	10,987	-40.5	17	122	8.4
200	30	12,467	-52.9		134	13.6
175	29	13,313	-60.1		127	13.2
150	29	14,258	-67.7		122	11.1
125	29	15,334	-75.2		111	13.4
100	29	16,506	-81.5		97	12.8
80	29	17,952	-82.9		91	13.8
70	29	18,602	-78.8		91	16.3
60	29	19,497	-71.6		88	21.6
50	29	20,590	-66.0		89	33.0
40	29	21,963	-60.3		92	41.6
30	28	23,778	-55.4		86	32.2
25	26	24,953	-51.9		87	20.8
20	25	26,411	-47.8		94	13.2
15	19	28,333	-45.5		108	6.2
10	8	31,028	-43.5			

YUCCA FLAT, NEV.
887 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,196	1.4	52	348	1.0
1000	30	165				
950	30	586				
900	30	1,030				
850	30	1,497	8.0	30	360	4.3
800	30	1,995	5.5	29	223	1.2
750	30	2,516	2.4	29	241	4.1
700	30	3,075	- .6	31	252	6.4
650	30	3,656	- 4.4	31	277	8.7
600	30	4,289	- 8.9	34	294	12.6
550	30	4,951	-13.1	35	290	16.1
500	30	5,677	-18.4	33	293	18.1
450	30	6,446	-24.2	R34	290	22.1
400	30	7,302	-31.0	35	281	24.1
350	30	8,235	-38.4	R35	279	25.6
300	30	9,275	-47.0		283	28.2
250	30	10,458	-56.0		281	34.4
200	30	11,851	-63.0		278	37.9
175	30	12,675	-61.7		280	47.0
150	29	13,632	-60.0		279	47.4
125	29	14,769	-60.5		280	44.3
100	29	16,152	-62.0		274	36.7
80	28	17,533	-62.2		275	30.3
70	28	18,357	-61.8		280	25.4
60	28	19,315	-61.0		282	21.2
50	28	20,450	-60.4		282	17.5
40	28	21,944	-59.0		280	16.5
30	26	23,664	-56.6		274	20.8
25	24	24,820	-56.4		270	23.3
20	23	26,243	-55.2		269	28.9
15	20	28,092	-53.1		268	32.6
10	10	30,724	-48.6			

YUMA, ARIZ.
998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	23	131	12.1	45	10	.6
1000	23	116				
950	23	550	18.0	27	294	5.2
900	23	1,012	15.5	27	276	5.4
850	23	1,493	12.0	27	269	6.0
800	23	1,997	8.6	29	263	6.8
750	23	2,523	5.2	27	257	7.8
700	23	3,086	1.7	28	268	9.3
650	23	3,675	- 2.5	31	264	10.5
600	23	4,308	- 6.8	29	274	13.2
550	23	4,973	-11.7	30	278	15.0
500	23	5,704	-16.8	27	280	18.1
450	23	6,476	-22.9	25	279	21.2
400	23	7,336	-30.1	30	281	26.6
350	22	8,270	-37.4	30	281	32.1
300	22	9,315	-45.9		280	33.8
250	22	10,504	-54.5		278	30.5
200	21	11,924	-58.9		280	40.0
175	20	12,765	-58.6		279	42.3
150	18	13,735	-59.0		278	43.7
125	17	14,875	-61.0		279	46.4
100	13	16,255	-63.4			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from lithium chloride hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. They were also equipped with carbon hygristors. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

R More than half of the observations are from statistical values.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

MARCH 1966

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Mar.									
4	1.07	1.17	1.29	1.41	1.58	1.41	1.26	1.15	1.05
5	1.07	1.19	1.30	1.43	1.56	----	----	----	----
7	1.00	1.10	1.25	1.39	1.50	----	----	----	----
8	1.03	1.09	1.26	----	----	----	----	----	----
11	----	----	----	----	1.45	1.22	1.05	.95	.83
12	.78	.91	1.06	1.24	1.45	1.24	1.02	.88	.77
13	.80	.87	1.07	----	----	----	----	----	----
14	.73	.84	1.05	1.19	----	----	----	----	----
15	.83	.93	1.09	1.27	----	----	----	----	----
16	.80	.90	1.00	1.26	1.47	----	----	----	----
17	.92	1.04	1.17	1.34	1.43	1.15	.89	----	----
21	----	----	----	----	----	1.28	1.05	.91	.79
22	----	----	----	----	1.52	1.37	1.17	1.04	.92
23	.80	.93	1.06	1.24	1.48	----	----	----	----
26	----	----	----	----	----	----	1.11	----	.89
27	.81	.91	----	----	1.44	----	----	----	----
29	.80	.90	1.06	1.23	1.41	----	----	----	.78
30	----	----	----	----	1.45	1.25	1.09	.95	.86
31	.88	.99	1.13	1.31	1.49	1.28	1.12	.99	.88
Averages	0.88	0.98	1.14	1.30	1.48	1.27	1.08	0.95	0.86

OMAHA, NEBR.

Date	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Mar.									
3	----	----	----	HM1.19	----	----	----	----	----
6	HS0.90	HS1.02	HS1.15	HS1.33	HS1.42	HS1.30	HS1.02	HS0.86	HM0.71
7	HS .88	HS1.00	HS1.12	HS1.32	HM1.37	HM1.28	HM .95	HM .74	HM .62
12	HS .57	HS .70	HS .86	HS1.10	HS1.31	HS1.09	HS .84	HS .70	HS .63
14	KM .66	KM .80	KM1.00	KM1.14	----	----	----	----	----
18	----	----	HS1.04	----	----	----	----	----	----
19	----	HS .88	HS1.02	----	----	----	----	----	----
24	----	HS .98	HS1.15	HS1.33	HS1.47	HS1.10	HM .74	HM .54	HM .40
25	HS .72	HM .82	HM1.13	HM1.19	----	----	HS .93	HS .79	HS .68
26	----	----	HM .85	HM1.04	HM1.24	‡	HS .90	HS .78	HS .61
27	----	----	HS .98	HS1.18	HS1.38	----	----	----	----
Averages	0.75	0.89	1.03	1.20	1.37	1.19	0.90	0.73	0.61

MAUNA LOA OBS., HAWAII

Date	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Mar.									
3	1.18	1.25	1.36	1.49	1.63	1.48	1.38	1.28	1.22
4	1.27	1.34	1.43	1.54	1.64	1.47	1.35	1.27	1.21
5	----	----	----	1.50	----	----	----	----	----
6	1.16	1.26	1.36	(1.48)	H 1.59	(1.39)	HI1.30	HI1.22	HI1.14
7	H 1.13	H 1.22	H 1.32	H 1.46	1.60	H 1.44	H 1.32	H 1.23	HI1.14
8	----	(1.22)	1.32	(1.45)	----	----	----	----	----
11	H 1.11	H 1.22	H 1.32	H 1.44	1.60	H 1.45	H 1.33	H 1.22	H 1.14
12	H 1.15	H 1.25	H 1.35	H 1.47	1.60	H 1.44	H 1.32	H 1.23	H 1.14
13	HS1.22	HS1.31	HS1.39	HS1.50	1.60	HI1.41	HI1.31	HI1.22	H 1.14
14	HS1.24	HS1.31	HS1.40	HS1.51	H 1.57	----	----	----	----
15	HS1.21	HS1.30	HS1.39	HS1.50	----	----	----	----	----
16	HS1.18	HS1.25	HS1.35	HS1.48	----	----	----	----	----
18	H 1.14	H 1.21	H 1.31	H 1.45	----	----	----	----	----
21	----	----	----	----	(1.56)	----	----	----	----
22	HS1.15	HS1.24	HS1.34	HS1.46	1.61	HI1.43	HI1.30	HI1.20	HI1.11
23	H 1.14	H 1.23	H 1.33	H 1.44	H 1.57	(1.37)	(1.21)	----	----
24	H 1.12	H 1.22	H 1.33	H 1.46	H 1.56	----	----	----	----
25	H 1.17	H 1.26	H 1.36	H 1.47	H 1.56	----	----	----	----
26	H 1.13	H 1.23	H 1.32	H 1.44	H 1.56	(1.37)	(1.23)	(1.15)	(1.03)
27	HI1.02	HI1.12	HI1.23	HI1.37	HI1.54	HI1.36	HI1.22	HI1.11	HI1.01
28	H 1.14	H 1.21	H 1.31	H 1.43	H 1.56	H 1.38	H 1.28	H 1.17	H 1.07
29	H 1.13	H 1.21	H 1.33	H 1.44	H 1.57	----	----	----	----
30	----	----	----	----	H 1.59	H 1.43	H 1.26	H 1.16	H 1.06
31	HI .91	HI1.08	HI1.22	HI1.37	H 1.56	H 1.38	H 1.23	H 1.11	H 1.02
Averages	1.15	1.24	1.34	1.46	1.58	1.42	1.30	1.20	1.12

MADISON, WIS.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Mar.									
1	----	----	----	----	S 1.39	----	----	----	----
7	M 0.85	S 0.94	S 1.10	S 1.29	S 1.40	S 1.32	----	----	----
28	S .87	S .97	----	----	----	----	----	----	----
Averages	0.86	0.96	1.10	1.29	1.40	1.32	----	----	----

BLUE HILL OBS., MASS.

Date	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Mar.									
3	0.91	1.06	1.16	1.30	----	----	----	----	----
7	.67	.79	.94	1.11	----	----	----	----	----
8	.70	----	----	----	----	1.13	0.96	0.79	0.67
9	.82	.90	1.01	----	1.28	1.15	.91	.76	.60
10	.90	1.00	1.12	1.28	1.34	1.06	.82	.66	.53
14	.61	----	----	----	----	1.17	.96	.83	.71
15	.72	.84	.98	1.16	1.44	----	----	----	----
16	.84	.94	1.06	1.21	1.37	1.29	1.10	.96	.87
17	.89	.98	1.08	1.23	1.37	1.10	----	----	----
18	----	----	----	----	1.03	----	----	----	----
19	.45	.53	.70	.87	1.01	----	----	----	----
21	.76	.87	1.00	1.17	1.33	1.16	.96	.82	.71
25	----	----	----	----	1.42	1.18	.94	.77	.67
26	.67	.72	.87	1.16	1.30	----	----	----	----
28	.87	.94	1.06	1.23	1.40	----	----	----	----
29	.70	.89	.99	1.18	1.37	----	----	----	----
Averages	0.75	0.87	1.00	1.17	1.31	1.16	0.95	0.80	0.68

TUCSON, ARIZ.

Date	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Mar.									
3	----	----	----	----	----	----	----	0.93	0.87
4	0.93	1.04	1.15	----	----	----	----	----	----
7	.83	.96	1.03	----	----	----	----	----	----
11	.63	.77	----	----	----	----	----	----	----
12	.53	.68	.84	----	----	----	----	----	.61
14	.71	.83	----	----	----	----	----	----	----
15	.69	----	----	----	----	----	----	----	----
16	.69	.79	.94	----	----	----	----	----	----
17	.86	----	----	----	----	----	----	----	----
22	.89	.99	----	----	----	----	----	.75	.64
27	.75	----	----	----	----	----	----	----	----
28	----	----	.88	----	----	----	----	----	----
29	.67	.78	----	----	----	----	----	----	----
30	.71	.82	----	----	----	----	----	----	.63
31	.74	.85	----	----	----	----	----	----	----
Averages	0.74	0.85	0.97	----	----	----	----	0.84	0.69

GUAM, M. I.

Date	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
	No observations due to cloudiness								

HS	Slight haze
HM	Moderate haze
HI	Intense haze
KM	Moderate smoke
( )	Clouds present
‡	Wind mast
H	Haze
S	Slight haze - indeterminable
M	Moderate haze - indeterminable
*	Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	262	422	442	502	524	440	471	425	431	416	434	511	463	483	471	485	524	537	464	372	509	558	543	339	514	504	542	371	487	578	612	472
AMES IOWA	345	110	184	192	265	414	445	324	317	217	276	441	207	362	393	416	212	361	378	192	106	19	305	529	398	536	264	465	349	473	451	321
ANNETTE ALASKA	225	283	114	157	196	76	194	156	88	131	189	85	40	231	210	339	139	135	301	165	229	24	243	65	62	114	133	18	167	212	60	154
APALACHICOLA FLORIDA	544	356	210	80	543	569	583	507	553	543	542	416	98	254	521	379	473	555	527	534	498	557	425	601	645	287	597	521	381	586	612	468
ARGONNE NAT. LAB.	371	344	126	181	246	218	388	328	233	128	104	50	402	257	355	393	396	138	74	431	267	122	87	297	401	453	407	494	102	366	347	274
ASTORIA OREGON	57	135	197	62	256	53	244	39	145	320	305	95	279	152	74	178	135	70	111	63	311	308	405	470	469	132	340	261	402	154	448	215
ATLANTA GEORGIA	508	399	52	270	413	297	546	523	536	534	516	465	235	197	199	138	525	531	581	564	480	544	462	615	622	272	595	618	575	593	617	452
BARROW ALASKA	---	---	79*	56	59*	112	143	135	118	158	145	157	151	114	202	133	171	228	188	---	220	238	249	257	254	243	296	310	228	265	279	185*
BETHEL ALASKA	88	206	208	198	152	191	179	200	236	233	248	---	---	---	---	322	226	337	343	349	362	332	267	359	376	364	366	358	299	301	385	277
BISMARCK N.DAK.	258	98	53	136	420	429*	347*	429	226	293	416	404*	418	393	377	298	102	93	242	475	448	353	495	481	193	377	488	476	459	466	407	340*
BLUE HILL MASS.	225	432	394	202	92	135	334	394	428	426	316	110	80	441	510	507	493	423	345	251	520	289	194	114	431	493	394	494	563	256	140	336
BOISE IDAHO	315	428	391	427	258	155	164	187	166	385	445	414	300	244	100	264	464	302	247	277	381	527	521	505	508	510	529	525	539	529	481	371
BOSTON MASSACHUSETTS	239	408	382	205	---	---	---	380	432	427	311	109	73	437	502	497	468	393	340	208	491	264	165	---	403	497	401	517	532	234	135	350
BROWNSVILLE TEXAS	504	573	572	592	614	595	366	248	80	---	456	475	599	631	575	607	629	615	475	650	487	465	179	269	183	232	231	295	94	494	602	446
CANTON ISLAND P.I.	651	661	231	656	615	632	677	648	644	672	664	681	681	595	506	629	212	602	651	693	694	627	512	518	658	676	---	---	520	505	429	591
CAPE HATTERAS N.C.	459	419	261	75	335	477	498	487	---	516	490	474	336	358	73	468	562	538	501	535	560	497	497	330	514	373	541	512	593	479	448	426
CARIBOU MAINE	59	189	278	421	76	131	263	384	416	---	444	444	353	430	426	490*	437	246	316	149	187	219	360	389	68	308	201	405	480	511*	245	311*
CHARLESTON S.C.	441	349	54	80	459	478	555	553	554	541	480	511	249	199	138	517	579	558	436	586	593	505	512	354	625	321	611	621	583	605	618	460
CLEVELAND OHIO	284	314	270	313	195	176	257	361	738	243	187	97	287	421	422	425	401	247	217	112	251	158	236	209	236	187	331	415	417	217	669	300
COLUMBIA MISSOURI	396	206	132	207	244	374	477	410	105	163	128	152	288	361	379	431	429	433	493	404	395	234	232	538	511	249	362	541	466	438	495	344
DAVIS CALIFORNIA	460	367	476	230	318	372	411	347	149	388	434	250	484	427	411	484	490	362	535	547	505	549	542	521	519	527	470	456	531	540	568	441
DODGE CITY KANSAS	424	407	379	343	463	468	359	428	311	412	403	477	477	416	446	482	461	515	432	341	423	134	551	518	491	530	522	531	470	531	526	441
E. LANSING MICHIGAN	289	353	151	233	326	164	288	375	310	81	113	40	447	461	435	419	420	96	125	296	364	85	97	258	229	333	407	536	143	272	464	278
EL CENTRO CALIF. NPF	325	404	444	439	247	425	415	411	380	359	331	---	---	---	442	405	449	467	379	480	492	470	279	329	441	382	399	483	477	491	510	413
EL PASO TEXAS	485	470	549	622	596	464	594	584	549	578	607	603	605	541	599	615	641	627	568	527	588	653	584	412	585	643	477	490	626	668	682	575
ELY NEVADA	117	420	---	525	442	396	471	341	380	416	466	377	498	291	452	531	559	363	376	500	478	578	583	566	561	582	575	586	593	601	537	457
EPPLEY NEWPORT R.I.	---	393	411	111	87	224	395	368	405	418	182	109	100	370	475	485	393	423	386	227	495	244	368	205	477	471	460	507	548	275	123	338
FAIRBANKS ALASKA	177	170	182	189	164	173	152	234	175	229	---	116	236	256	270	237	283	166	154	273	255	229	249	298	195	251	356	237	290	357	278	228
FORT WORTH TEXAS	515	357	507	551	571	536	389	201	235	204	143	318	498	159	554	566	516	606	---	424	433	457	630	577	384	580	429	140	479	651	632*	441*
FRESNO CALIFORNIA	338	415	476	345	315	331	463	327	423	336	459	166	494	418	471	538	513	456	388	551	545	538	468	371	529	518	536	530	526	534	542	447
GAINESVILLE FLORIDA	565	541	476	403	594	597	612	569	365	546	507	504	158	362	581	421	583	480	536	620	588	622	594	293	672	362	621	640	496	635	663	523
GLASGOW MONTANA	233	163	306	434	394	425	263	449	330	391	405	392	417	346	415	223	250	216	257	394	408	478	506	458	506	470	501	493	450	423	458	382
GRAND JUNCTION COLO.	172	133	291	490	493	329	420	335	438	410	513	511	368	508	507	---	514	509	359	399	349	470	572	497	556	590	594	600	619	606	548	457
GREAT FALLS MONTANA	231	151	327	379	327	314	330	315	310	327	349	328	156	258	306	352	336	405	262	302	162	457	437	413	433	427	431	447	394	321	---	333
GREENSBORO N.C.	470	356	102	141	390	323	397	513	509	476	461	467	265	424	115	489	345	500	393	500*	---	428	450	353	590	313	561	604	604	375	595	417*
INDIANAPOLIS INDIANA	457	413	250	---	---	---	---	555	---	---	---	61	110*	205	399	446	472	189	253	487	299	310	141	289	58	249	393	592	352	377	482	327*
ITHACA NEW YORK	178	212	464	45	27	129	110	375	353	254	193	11	159	310	361	570	434	398	304	134	358	94	403	14	418	224	455	385	453	216	309	269
LAKE CHARLES LA.	493	217	252	---	543	560	519	293	546	525	137	207	259	219	378	500	523	489	442	472	---	---	354	616	211	66	188	154	326	576	596	381
LAKELAND FLORIDA	570	492	473	394	504	532	607	586	413	503	504	475	161	338	498	359	494	480	560	577	606	614	566	556	681	373	622	448	76	440	572	486
LANDER WYOMING	361	258	356	503	473	515	332	455	355	445	499	463	265	420	475	372	452	510	454	551	413	479	569	567	556	554	559	564	500	582	455	462
LARAMIE WYOMING	482	223	323	533	540	599	459	173	416	255	556	609	396	555	481	565	725	626	512	354	342	395	765	694	690	675	673	698	637	720	612	525
LAS VEGAS NEVADA	474	237	521	531	427	477	486	294	446	476	478	479	502	501	502	435	558	494	483	499	581	627	520	288	504	328	593	605	620	624	632	491
LITTLE ROCK ARKANSAS	466	338	183	504	318	529	501	483	451	448	247	290	172	94	287	497	463	424	556	439	388	281	582	611	568	562	545	507	549	588	---	429
LOS ANGELES CALIF.	240	531	491	481	295	482	468	239	415	406	402	235	279	378*	299	454	511	501	457	513	539	509	306	514	389	335	346	416	172	405	564	406*
MADISON WISCONSIN	418	295	188	209	262	394	464	227	414	122	136	91	464	459	363	325	413	162	176	441*	293	49	81	439	344	551	512	539	236	475	274	317*
MANHATTAN KANSAS	382	198	397	306	365	480	447	408	146	90	137	487	465	480	451	468	399	515	504	427	---	376	541	562	542	542	474	530	528	523	517	423
MAUNA LOA OB.HAWAII	485	568	739	747	677	731	732	693	532	504	744	754	756	758	441	579	572	453	398	589	741	784	760*	701	686	748	776	789	---	801	805	668*
MEDFORD OREGON	268	292	365	129	244	86	192	82	135	390	292	278	420	485	278	287	352	400	454	230	420	536	526	528	522	513	519	527	524	459	520	363
MIAMI FLORIDA	523	214	481	510	275	561	620	514	483	408	482	454	234	380	632	473	521	604	440	653	659	513	464	497	419	406	558	---	---	---	---	481
MIDLAND TEXAS	---	---	---	585	583	532	278	534	546	554	481	579	584	545	559	563	592	603	543	467	562	---	---	467	442	615	337	343	632	637	640	531
NASHVILLE TENNESSEE	485	351	125	404	239	358	514	508	504	488	460	438	358	227	155	231	482	124	563	522	494	488	197	537	616	371	462	609	594	484	607	419
NEW YORK N.Y.U	346	437	282	44	57	157	341	448	377	418	73	57	78	410	471	518	426	418	113	303	500	344	233	239	556	466	588	398	589	200	501	335
NORTH OMAHA NEBRASKA	316	173	375	224	352	524	500	324	200	253	464	512	453	477	455	485	363	486	548	437	250	36	531	639	486	501	507	581	604	562	507	424
OKLAHOMA CITY OKLA.	413	285	405	424	430	471	378	83	284	156	127	314	476	300	---	438	435	474	427	365	328	475	536	500	398	513	435	442	505	524	516	395
PAGE ARIZONA	233	298	460	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	529	---

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

MARCH 1966

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	200	191	481	490	389	418	459	445	403	385	459	478	379	478	432	494	498	494	423	431	518	522	346	334	274	183	541	506	526	533	542	427
PORTLAND MAINE	179	299	339	309	76	109	359	437	444	438	463	283	145	494	501	498	474	365	249	147	490	386	242	63	97	489	207	498	542	292	202	326
PROSSER WASHINGTON	328	301	354	275	175	186	314	86	107	453	405	299	351	248	376	334	443	235	363	365	402	482	493	498	516	503	503	504	516	292	528	362
RAPID CITY S.DAK.	190	50	106	---	409	407	298	386	306	274	375	350	388	398	362	228	207	399	352	418	282	356	511	477	465	384	469	455	452	402	427	341
RENO NEVADA	289	348	442	318	350	335	323	347	234	421	305	244	434	386	375	491	421	459	447	508	452	516	508	511	507	513	514	481	474	524	519	419
RICHLAND 25 NW WASH.	324	322	278	219	250	194	335	125	106	419	390	296	307	250	341	341	432	170	371	425	377	475	463	473	481	476	482	473	482	232	488	348
RIVERSIDE CALIFORNIA	199	527	554	560	397	532	497	443	546	448	444	476	470	314	400	365	593	549	522	571	549	602	316	344	388	411	232	503	444	593	626	465
RUSTON LOUISIANA	443	261	196	443	440	505	428	426	460	481	243	297	143	111	402	484	473	164	503	470	399	370	492	546	342	466	504	239	164	546	551	387
SAINT CLOUD MINN.	417	94	40	131	299	461	463	396	239	52	63	252	284	353	123	172	262	76	349	482	175	245	211	569	186	560	557	443	536	431	241	295
SALT LAKE CITY UTAH	118	305	433	511	387	413	428	325	384	355	494	462	280	432	403	181	582	435	324	502	102	588	567	555	557	568	556	572	575	590	558	437
SAN ANTONIO TEXAS	505	417	554	568	572	537	144	162	116	78	163	316	582	555	556	256	441	369	253	359	395	209	509	461	248	150	130	358	365	634	637	374
SANTA MARIA CALIF.	436	448	474	423	250	469	451	333	420	435	463	254	446	365	480	500	518	447	427	529	513	518	360	311	514	505	251	412	497	512	552	436
SAULT STE MARIE MICH	---	384	---	32	148	---	456	298	---	139	57	78	345	340	470	225	---	102	264	476	451	359	41	219	---	---	566	575	199	---	467	291
SEATTLE WASH. UNIV.	185	311	181	128	243	68	145	74	144	244	329	65	239	227	153	284	276	52	216	161	329	369	388	455	445	437	254	392	422	92	389	248
SEATTLE TACOMA WASH.	241	301	275	145	266	69	167	74	145	215	341	106	253	192	131	360	315	65	201	174	379	413	440	476	479	472	274	445	463	144	419	271
SPOKANE WASHINGTON	211	390	362	325	142	95	280	94	91	340	409	266	144	225	229	256	380	110	194	347	400	445	460	460	445	450	453	440	478	206	487	310
STATE COLLEGE PENN.	245	444	314	34	99	251	237	496	406	446	180	238	334	247	493	522	493	448	337	258	430	297	458	51	347	236	367	339	558	223	477	332
STERLING VIRGINA	405	373	381	60	254	333	331	497	444	492	192	431	257	48	264	549	536	486	381	385	492	449	468	61	538	351	422	578	583	324*	---	379*
STILLWATER OKLAHOMA	422	325	406	425	427	478	403	46	321	84	151	337	494	118	424	472	449	526	462	376	315	513	542	527	437	552	482	507	479	549	543	406
TAMPA FLORIDA	585	476	510	522	474	487	612	585	502	506	467	506	134	431	589	326	520	409	---	---	605	632	563	611	692	355	619	407	114	538	649	497
TUCSON ARIZONA	300	252	533	533	400	370	502	507	458	446	510	523	418	521	509	525	553	543	498	430	535	576	341	371	411	402	470	563	557	585	583	475
WAKE ISLAND,PACIFIC	---	---	496	483	504	509	511	523	521	430	---	396	510	406	556	308	523	525	500	486	539	553	554	557	553	578	571	409	532	548	559	505

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

MARCH 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	123	10	22	-85	29	5	32	17	91	50	83	171	196	230	182	192	-88	73	116	163	152	71	207	221	211	236	213	241	204	211	158	123

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

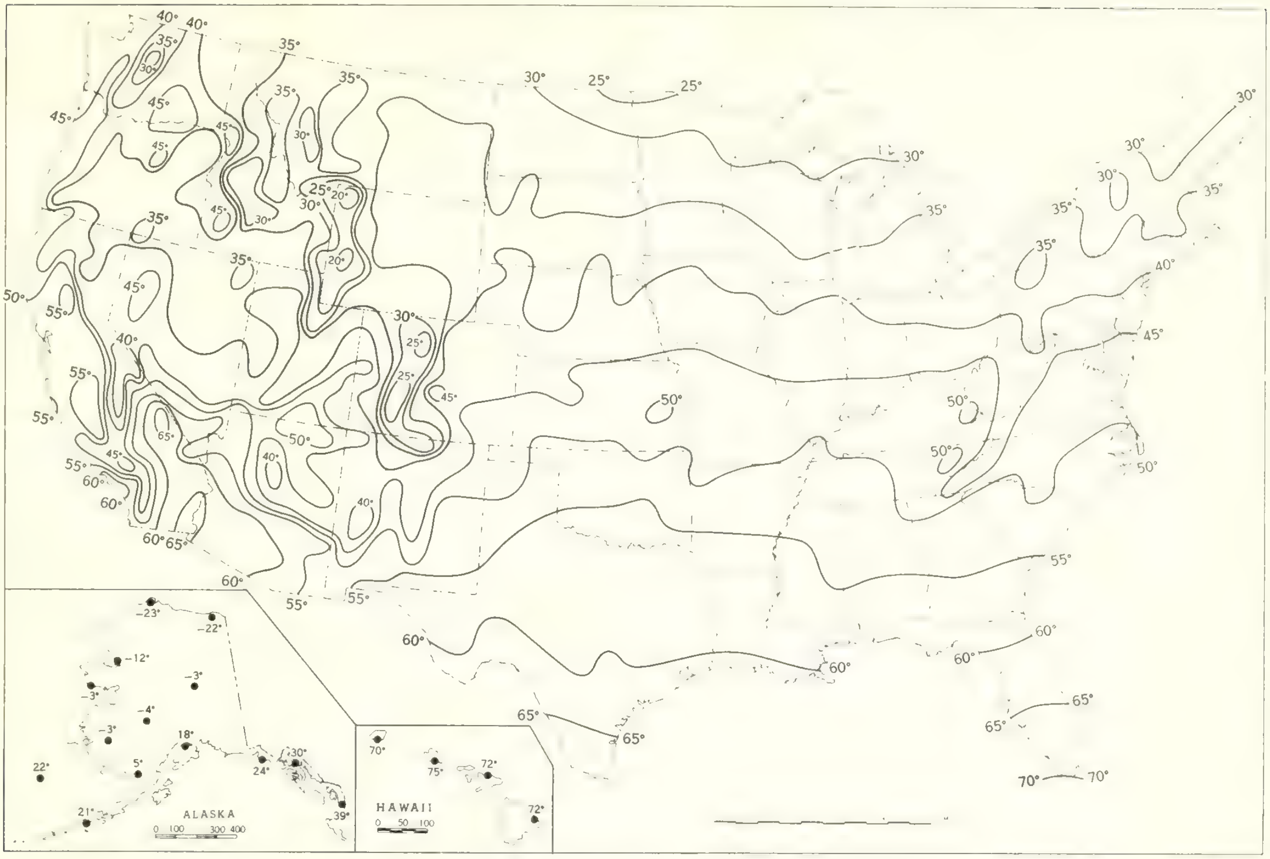
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λs Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

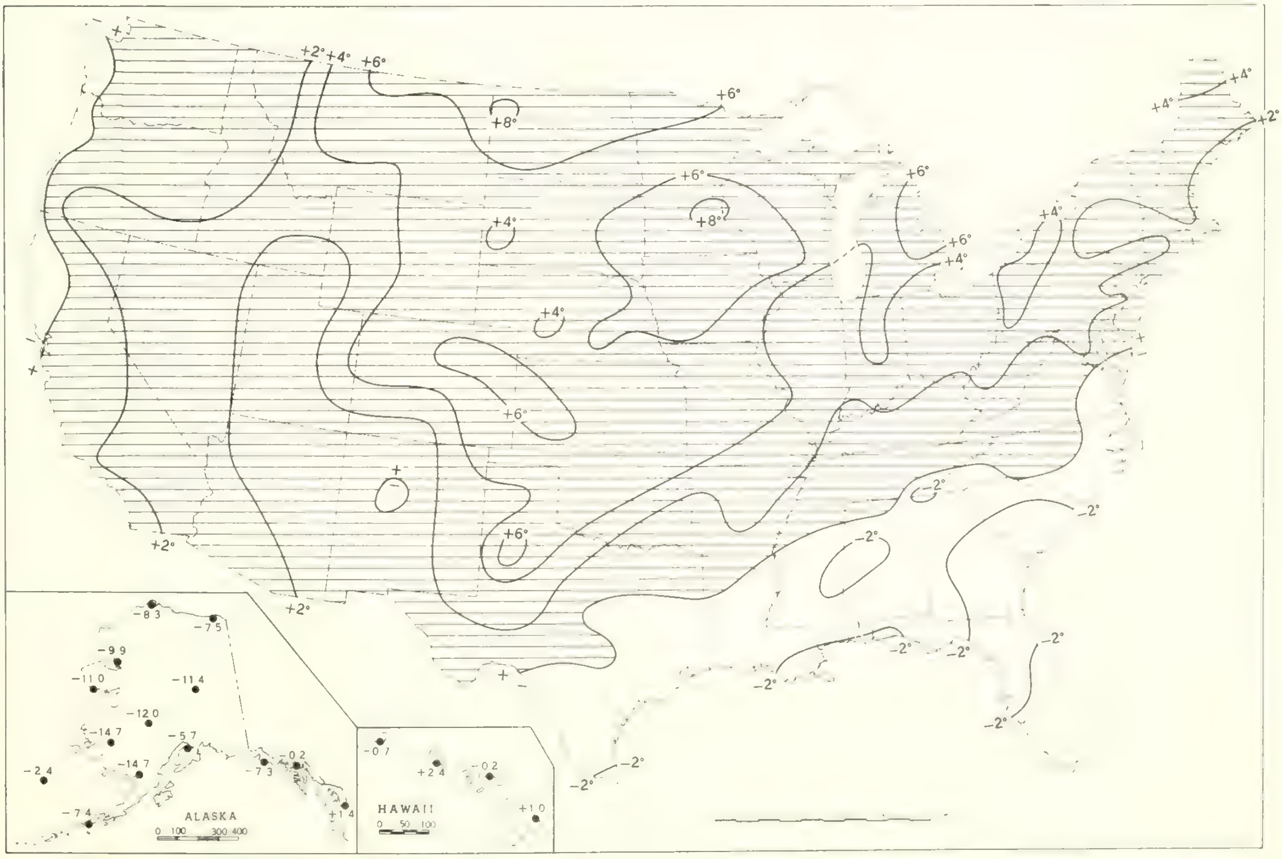
Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

Chart I. A. Average Temperature (°F.) at Surface, March 1966.



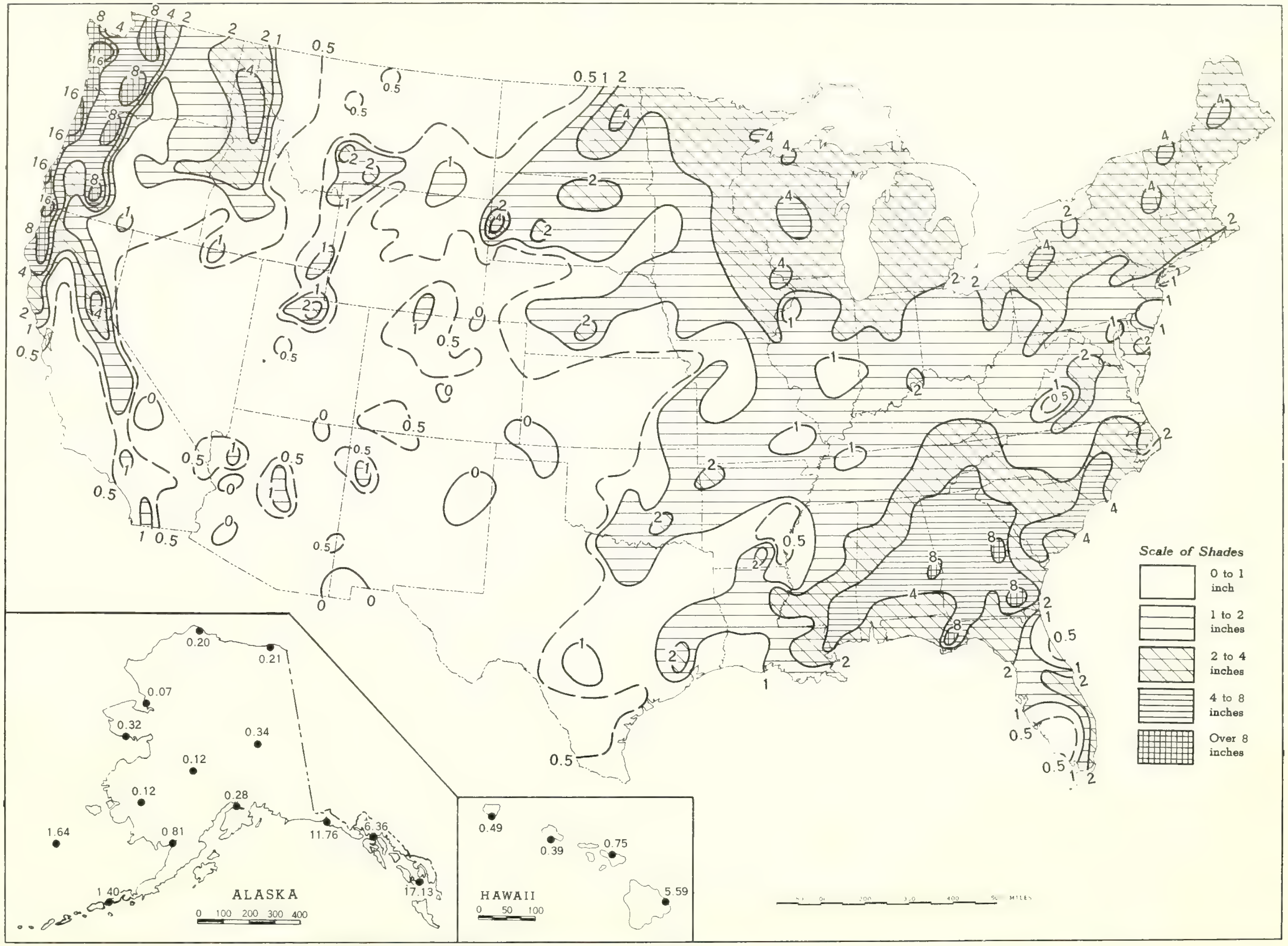
B. Departure of Average Temperature from Normal (°F.), March 1966.



A. Based on reports from over 870 Weather Bureau and cooperative stations. The monthly average is half the sum of the monthly average maximum and monthly average minimum, which are the average of the daily maxima and daily minima, respectively.

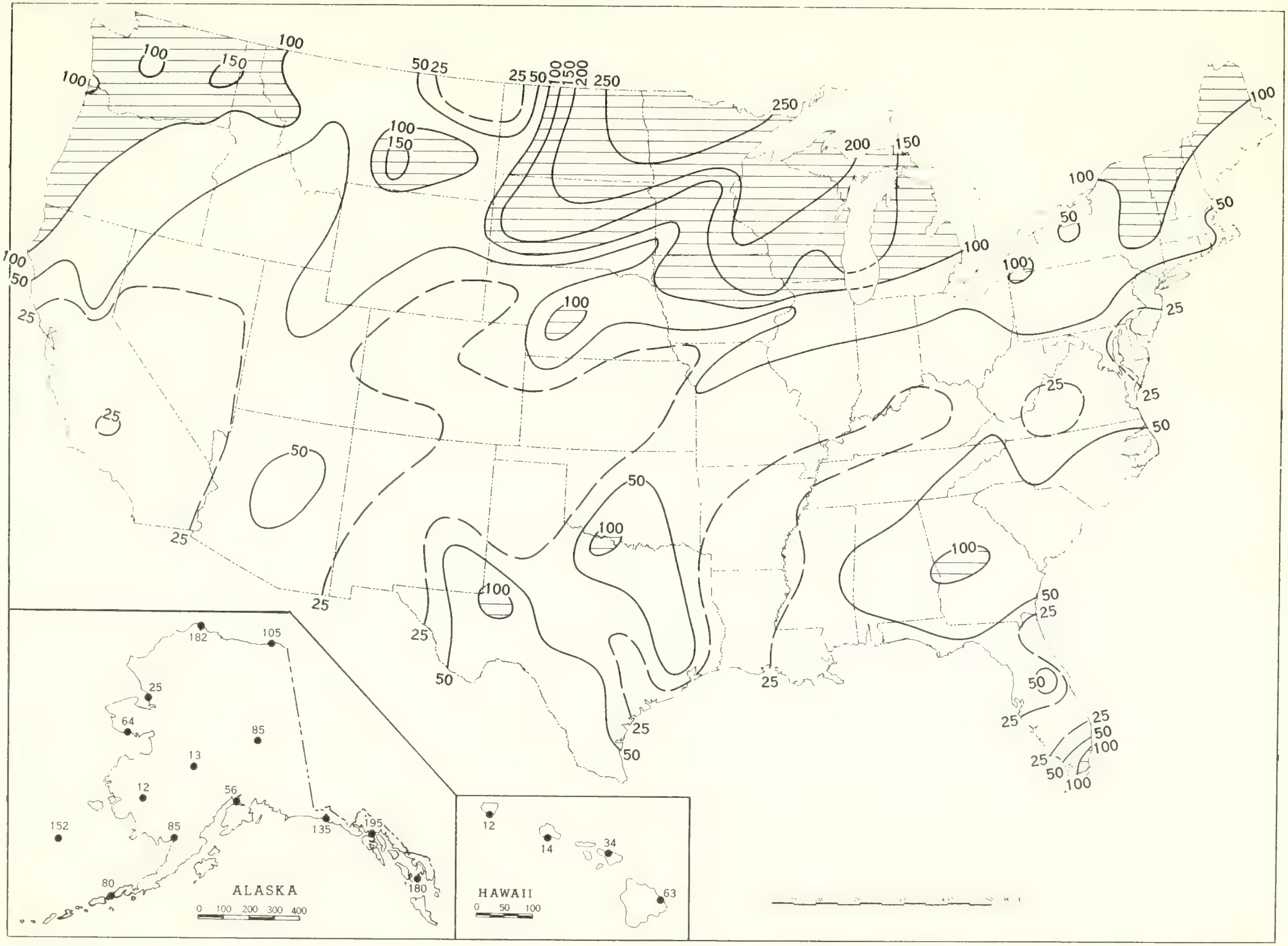
B. Departures from normal are based on the 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart II. Total Precipitation (Inches), March 1966.



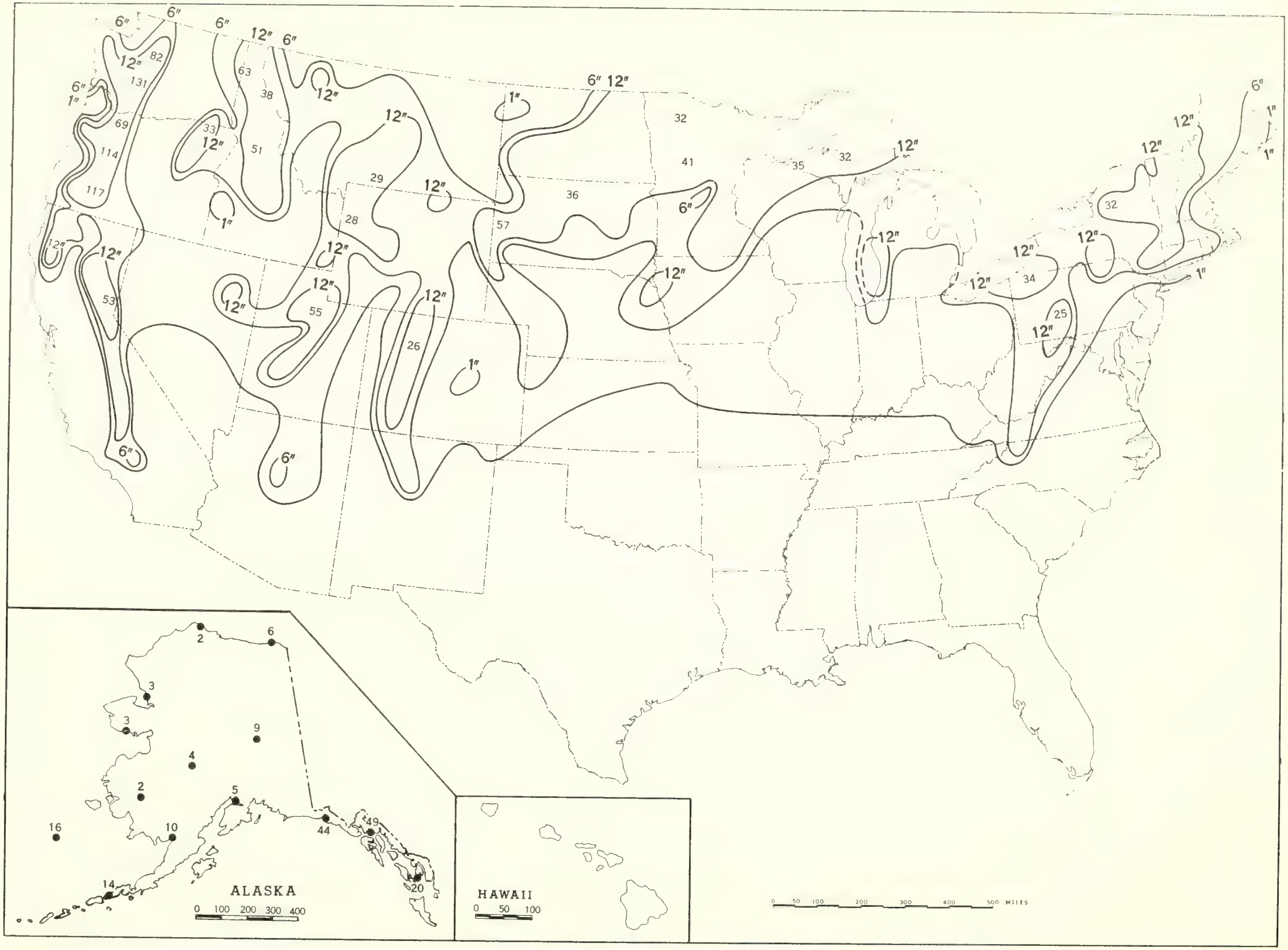
Based on daily precipitation records at about 870 Weather Bureau and cooperative stations.

Chart III. Percentage of Normal Precipitation, March 1966.



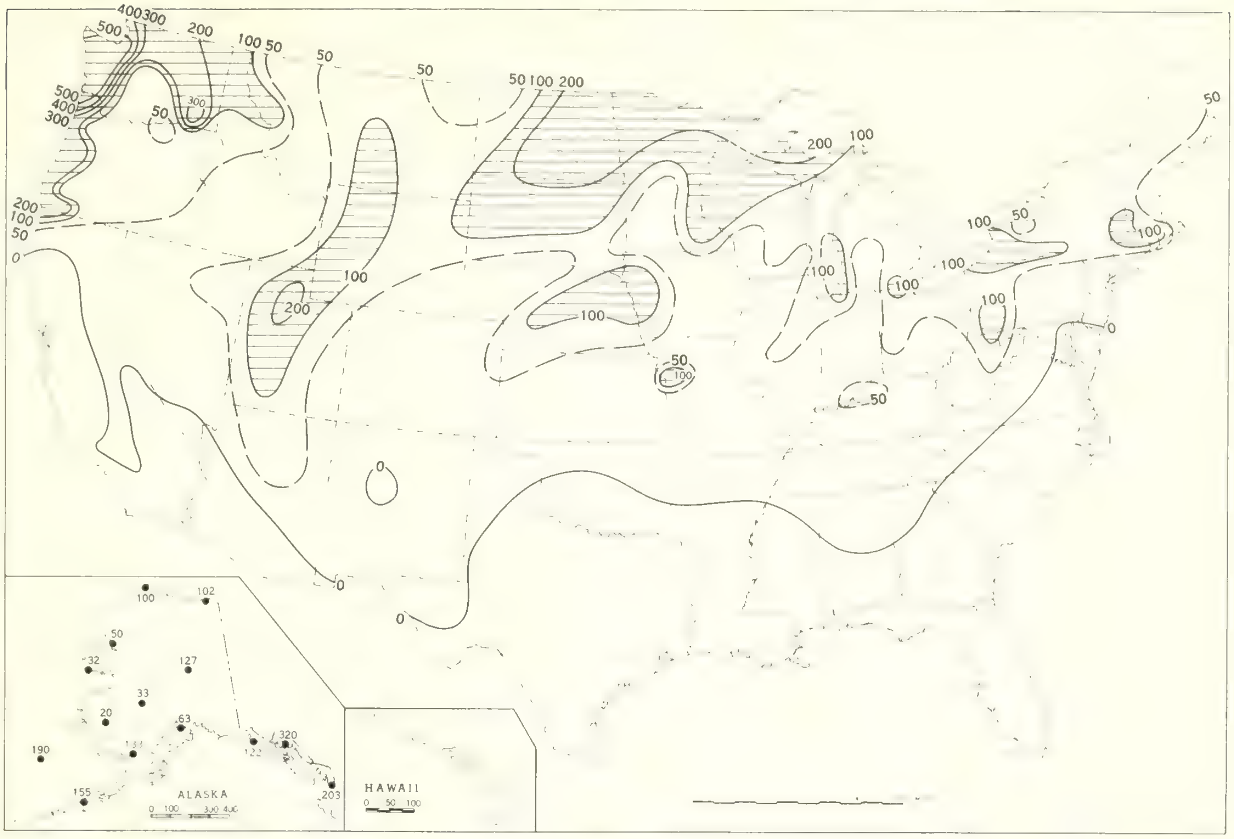
Normal monthly precipitation amounts are computed from the records for 1931-60 for first-order Weather Bureau stations.

Chart IV. Total Snowfall (Inches), March 1966.

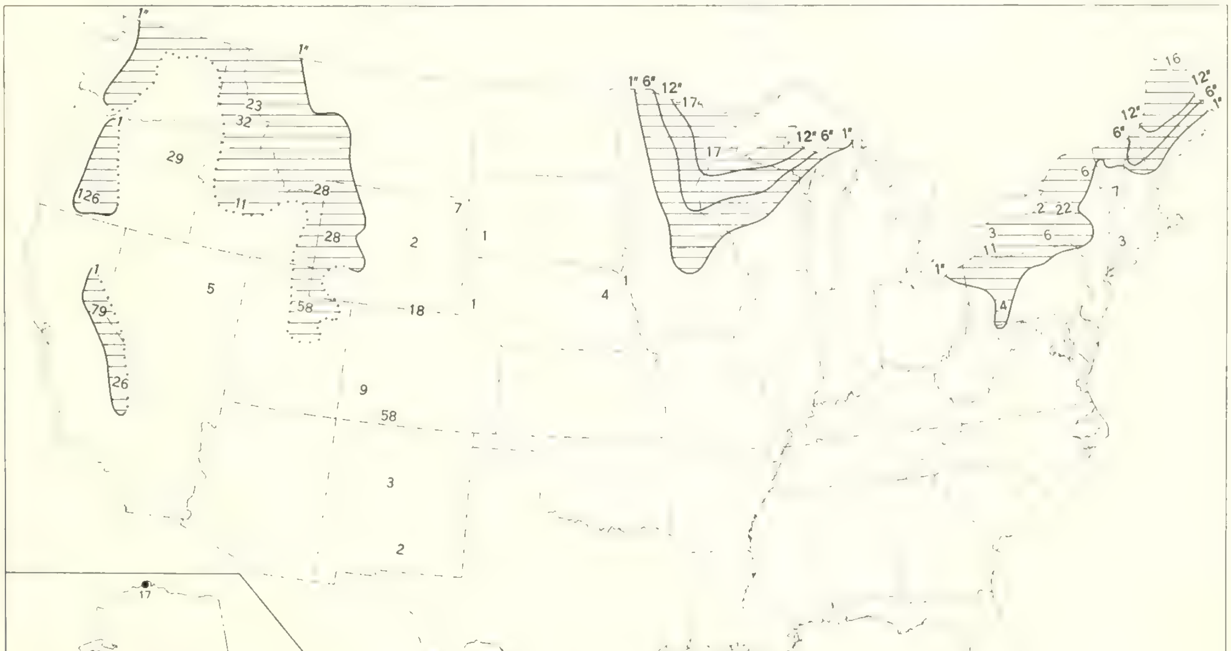


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, March 1966.

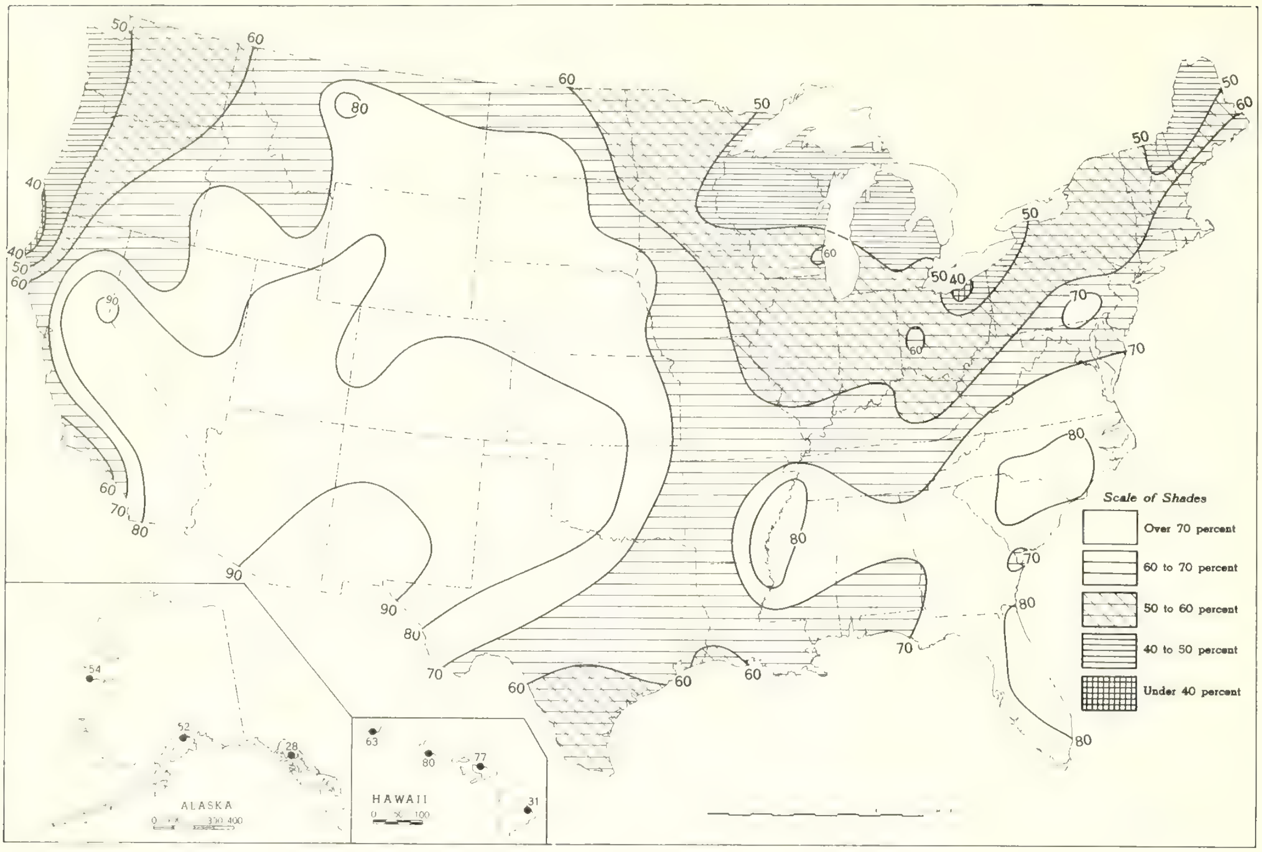


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., March 28, 1966.

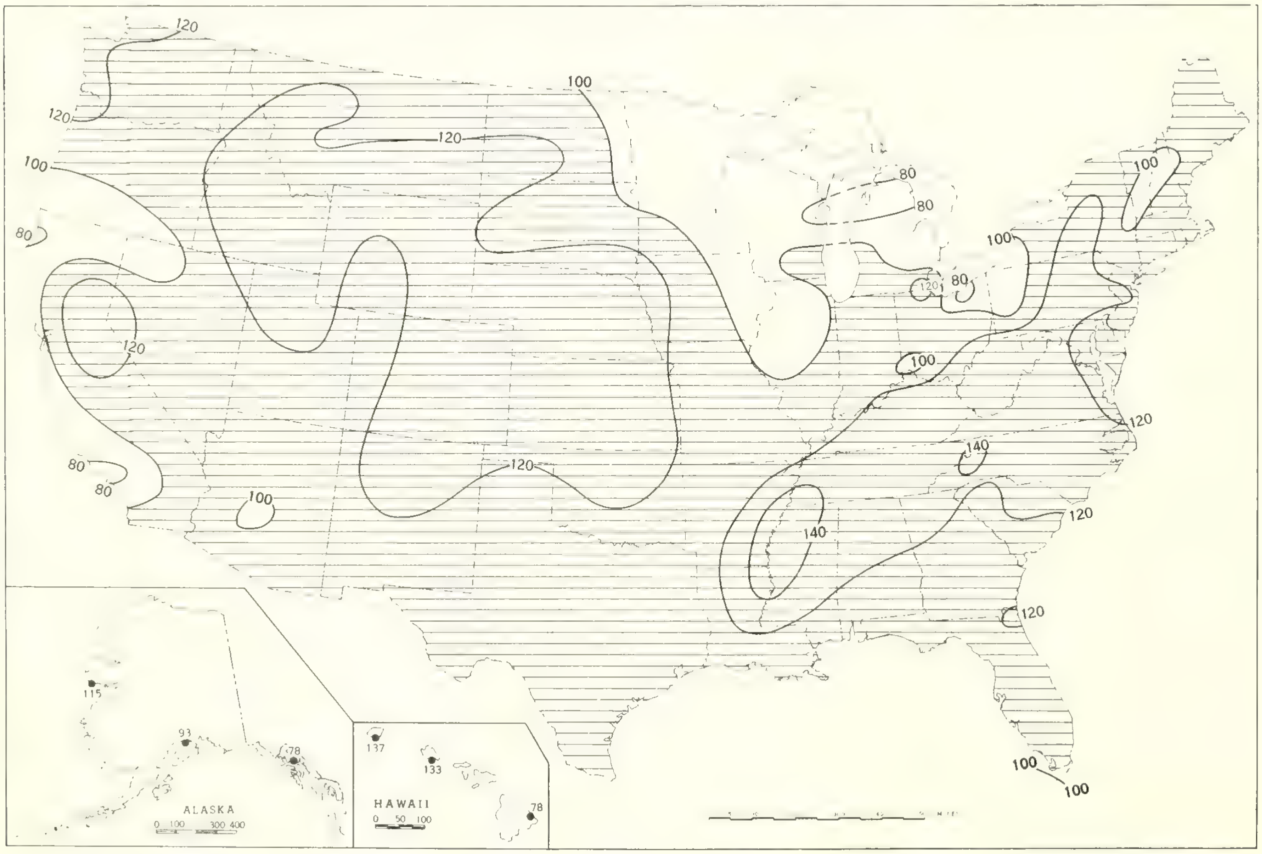


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a. m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, March 1966.

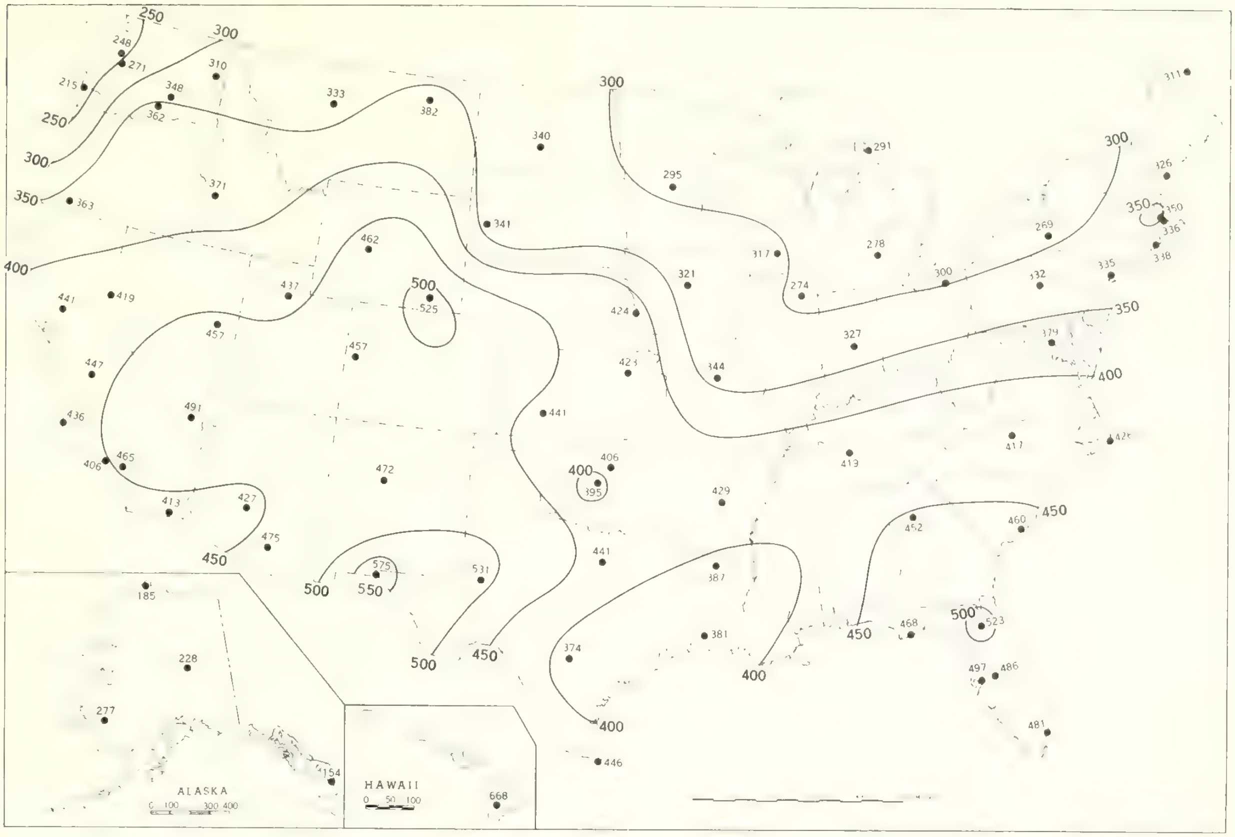


B. Percentage of Mean Monthly Sunshine, March 1966.

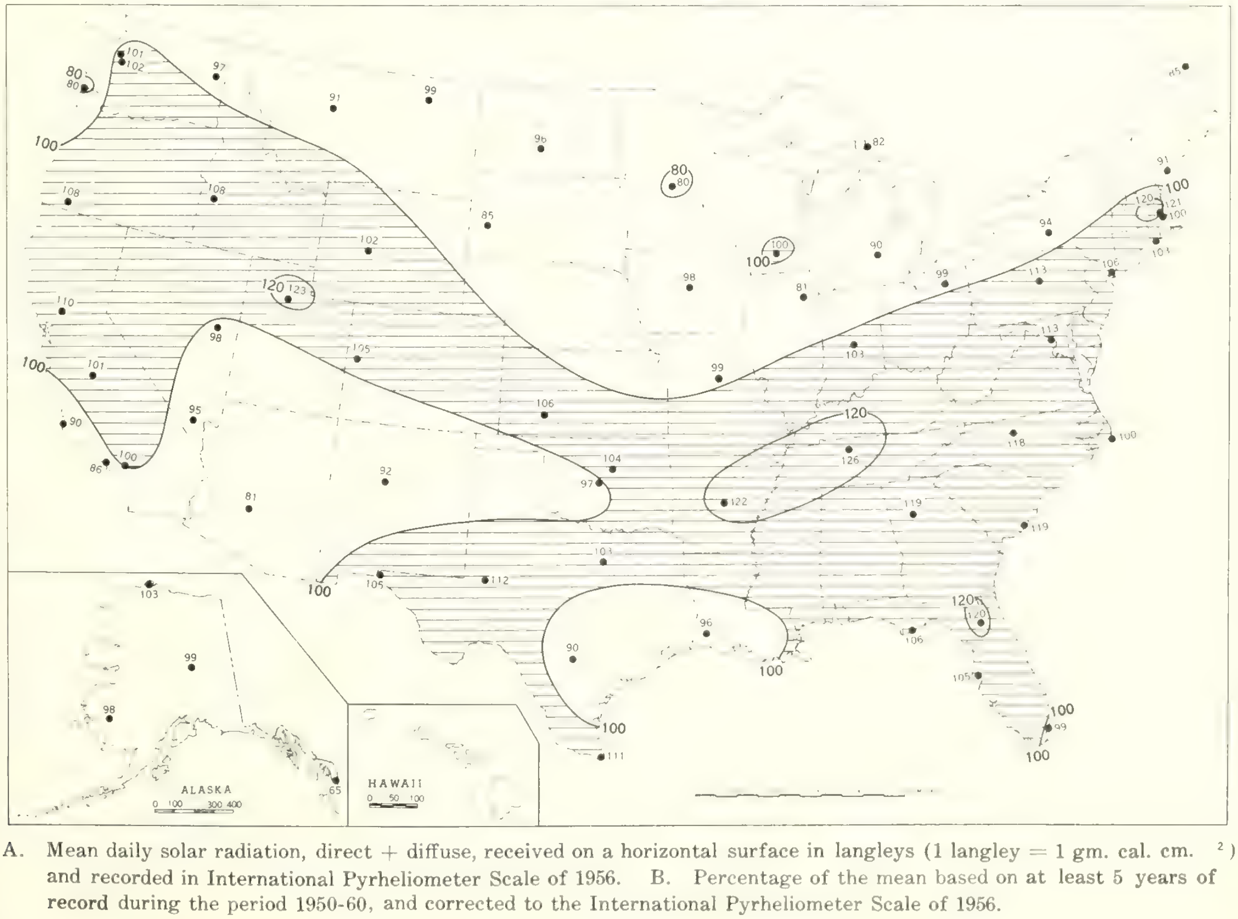


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, March 1966.

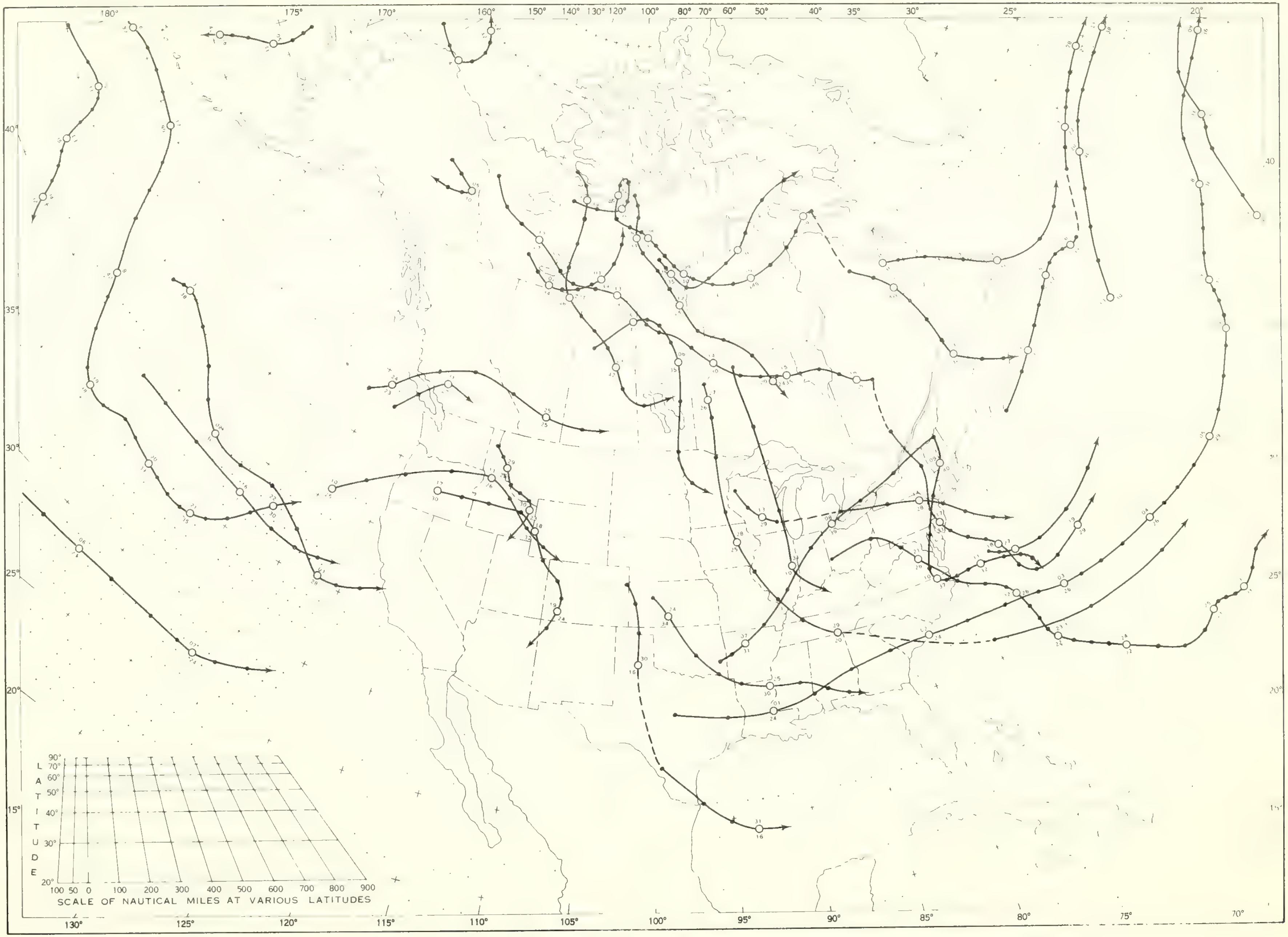


B. Percentage of Mean Daily Solar Radiation, March 1966.



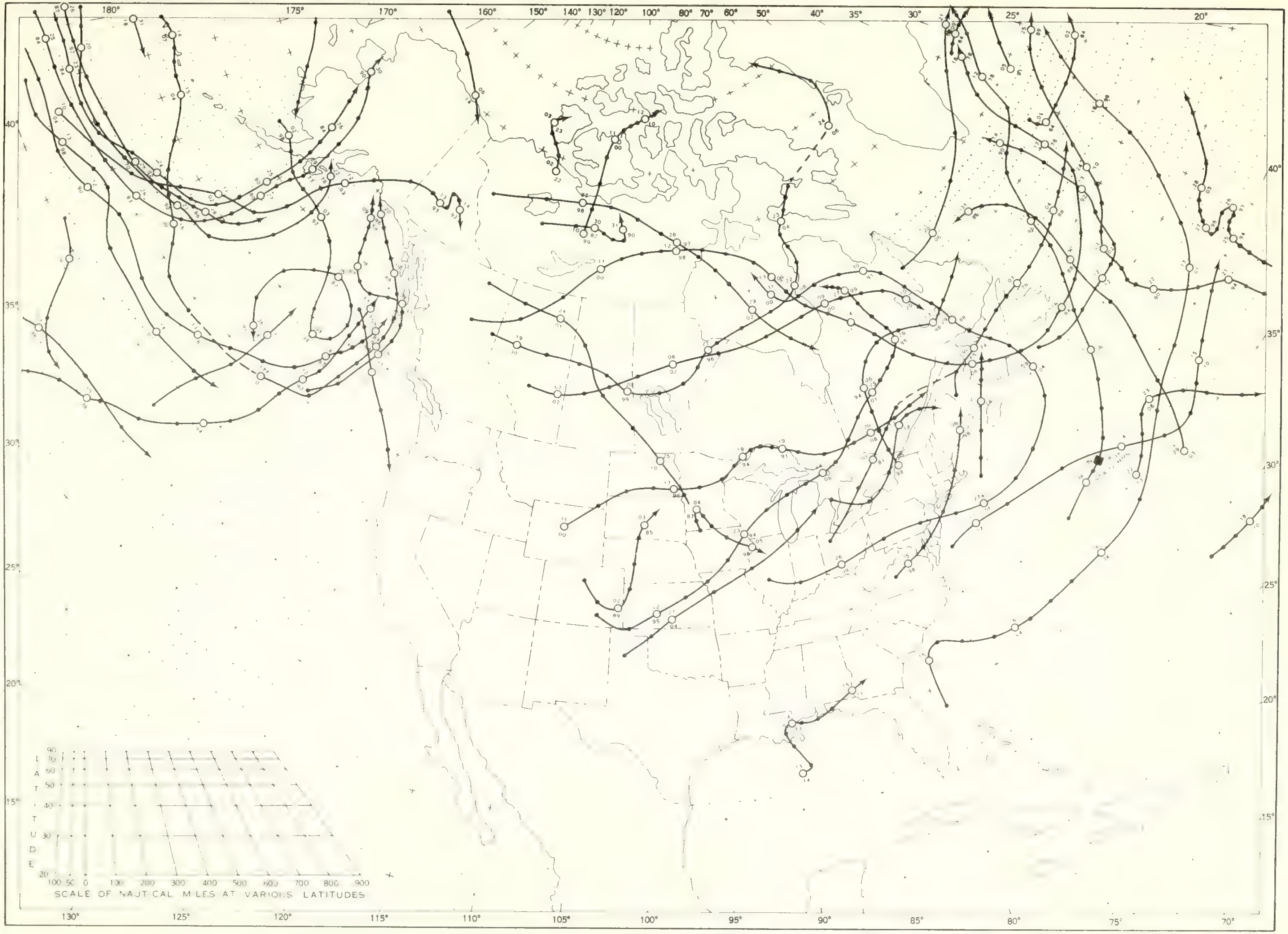
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, March 1966.



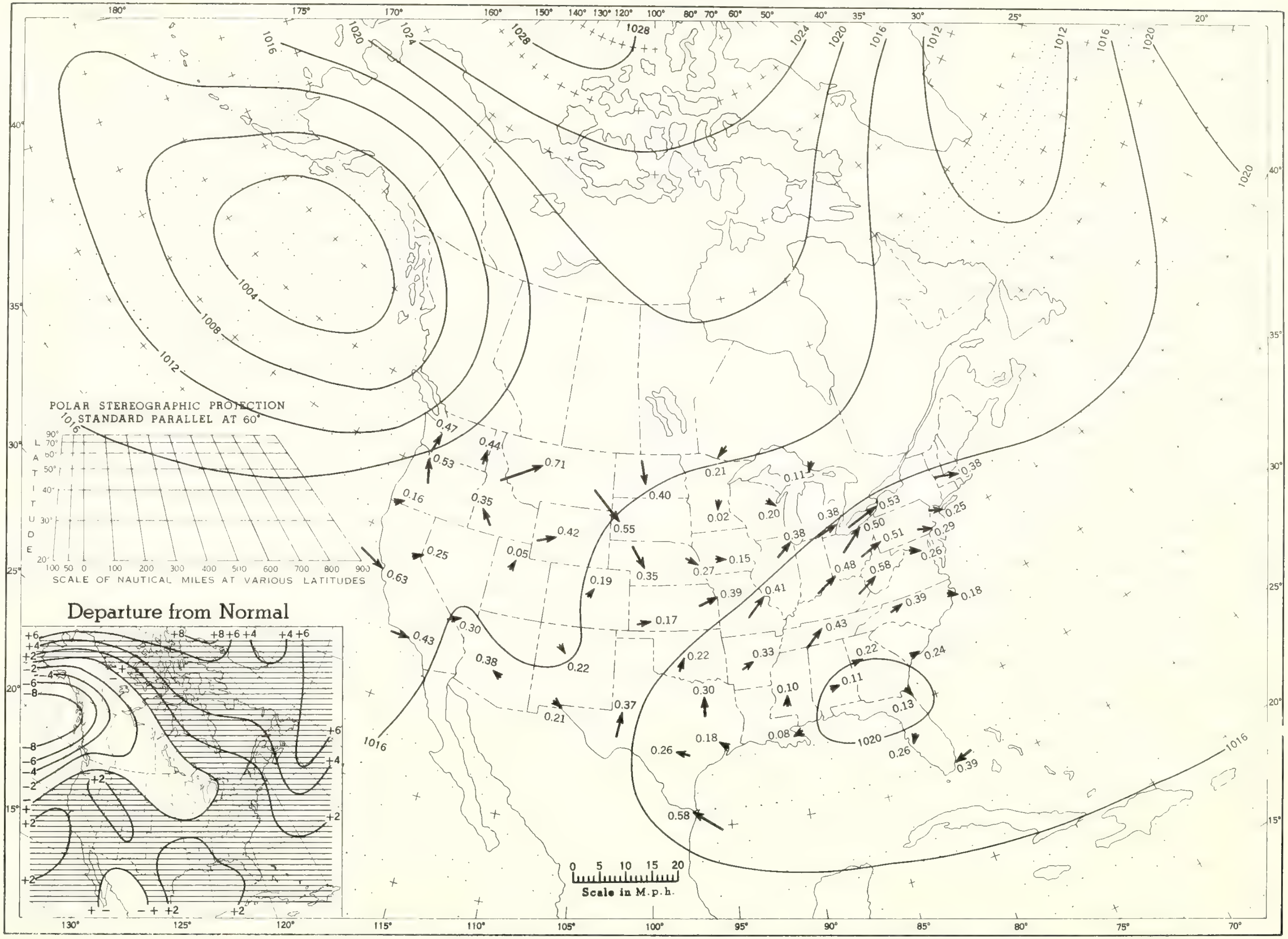
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, March 1966.



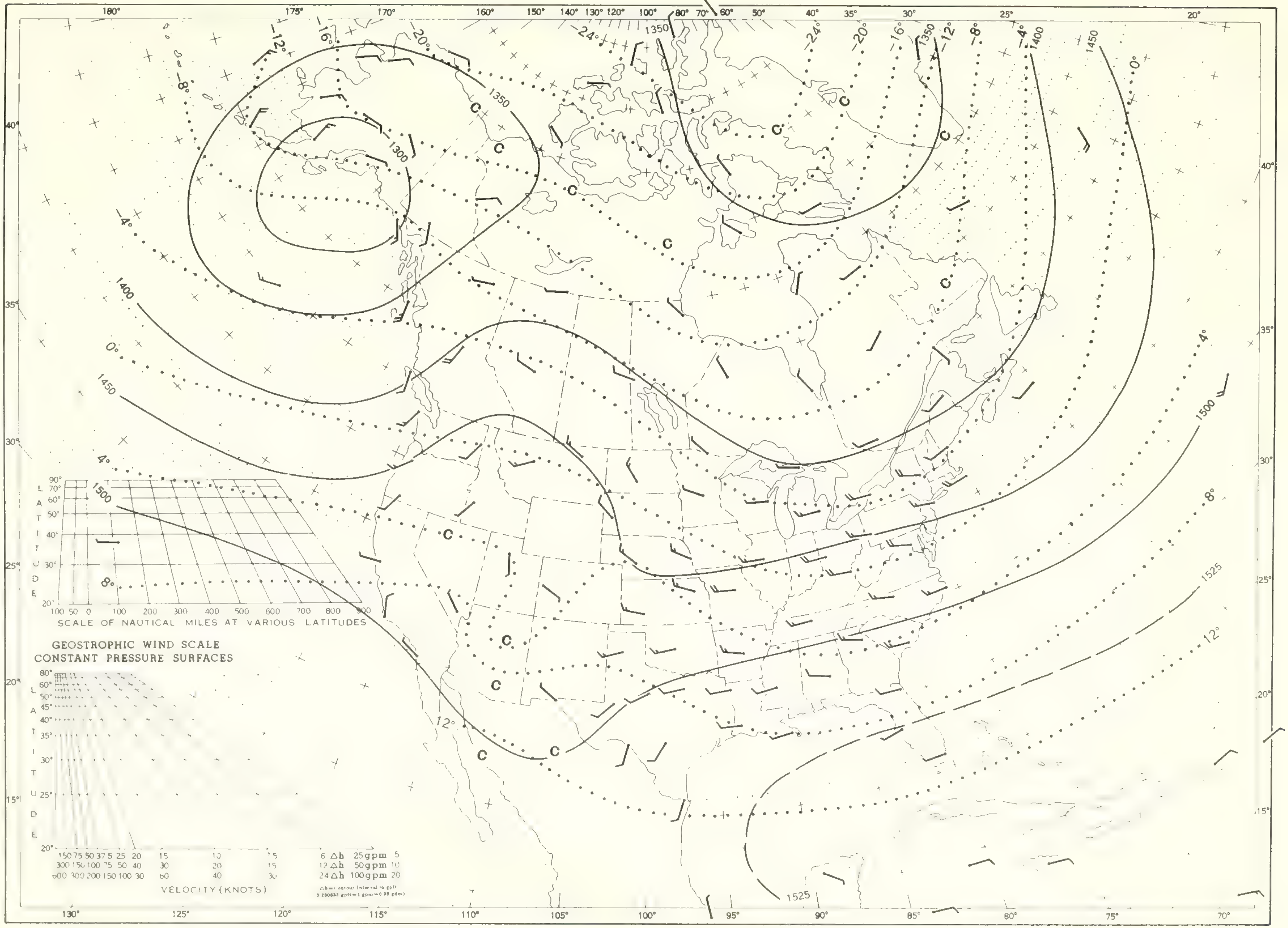
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and **Resultant** Surface Wind, March 1966. Inset: Departure of Average Pressure (mb) from Normal, March 1966.



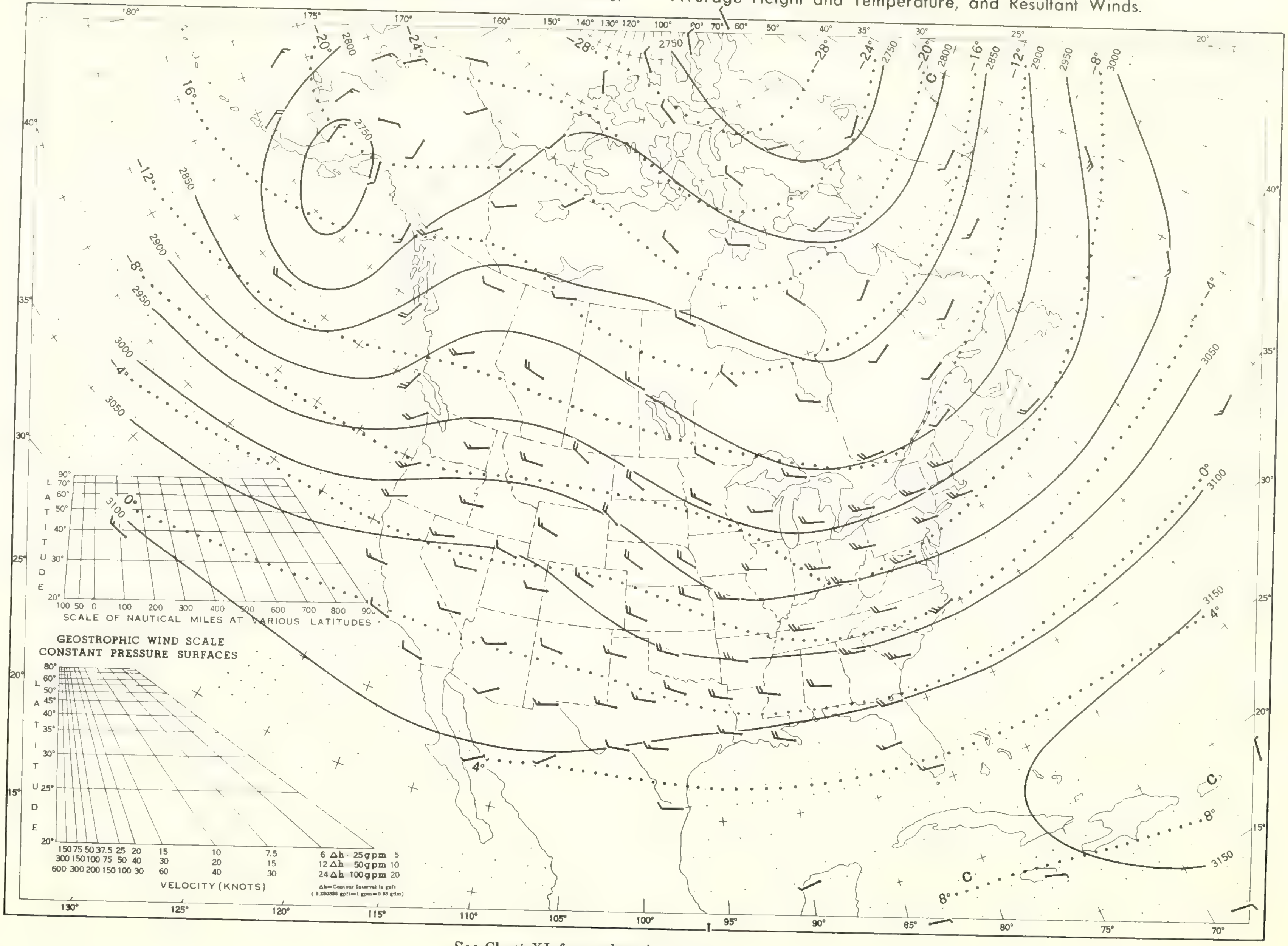
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, March 1966. Average Height and Temperature, and Resultant Winds.



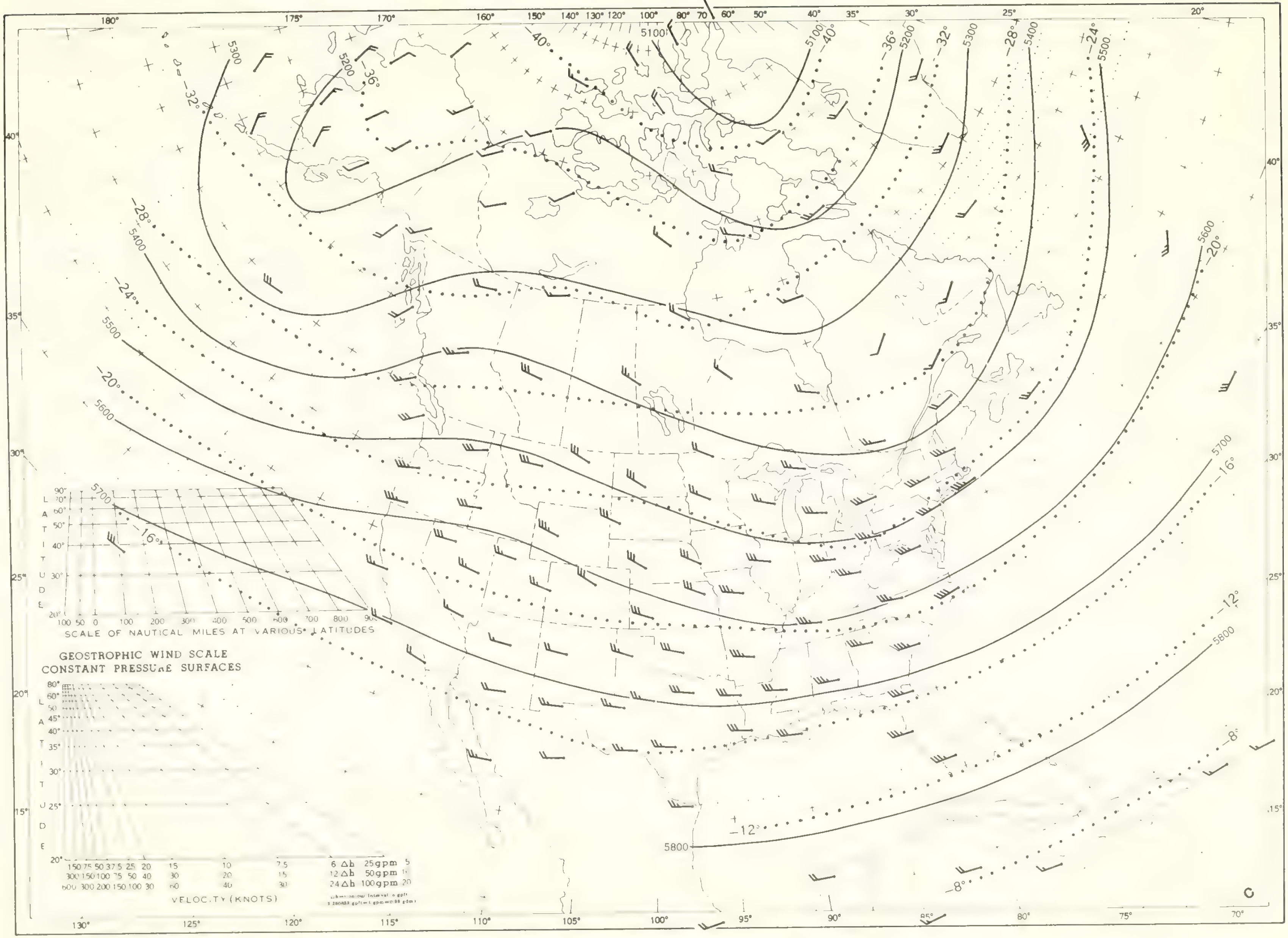
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, March 1966. Average Height and Temperature, and Resultant Winds.



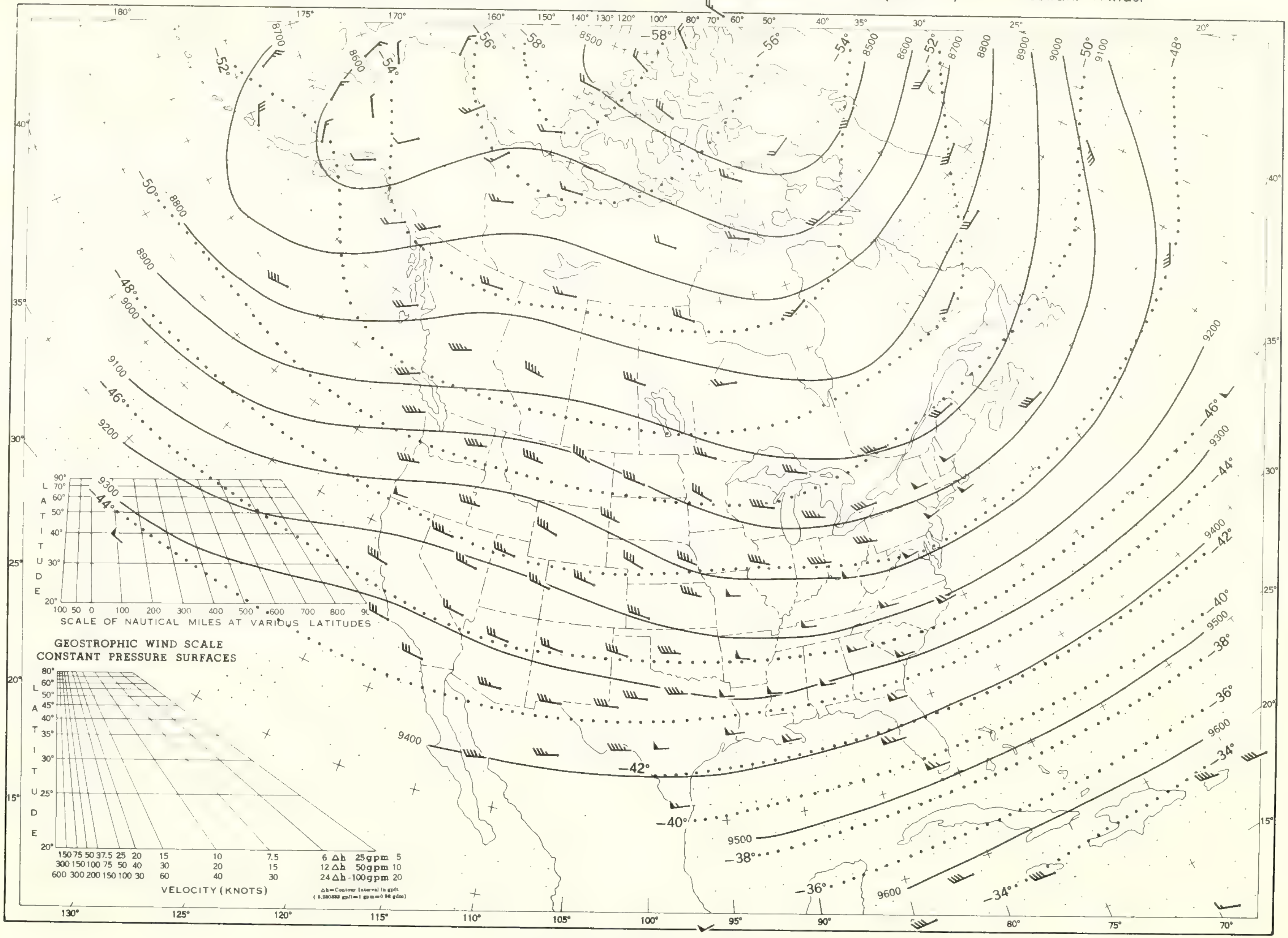
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, March 1966. Average Height and Temperature, and Resultant Winds.



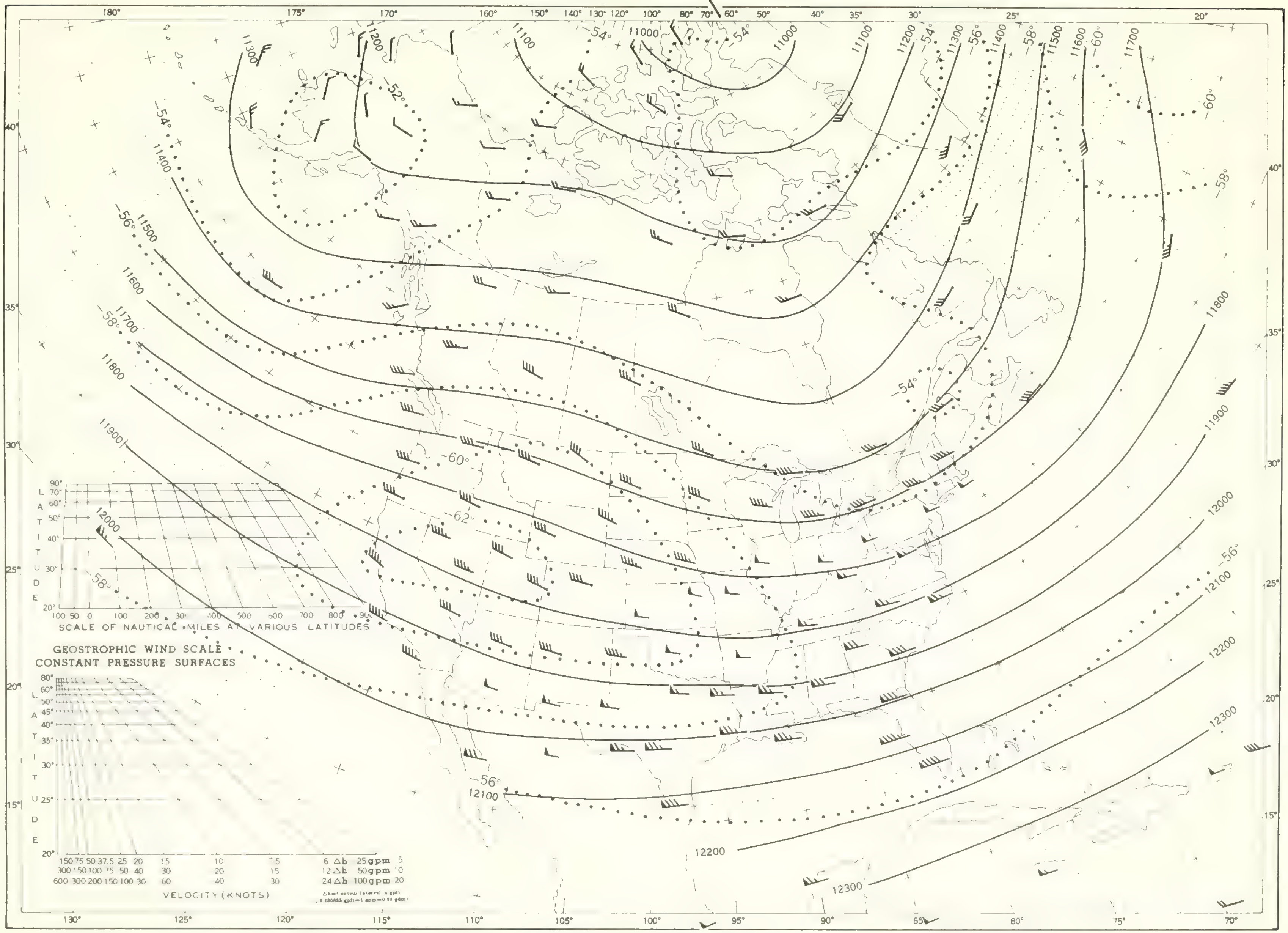
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, March 1966. Average Height and Temperature, and Resultant Winds.



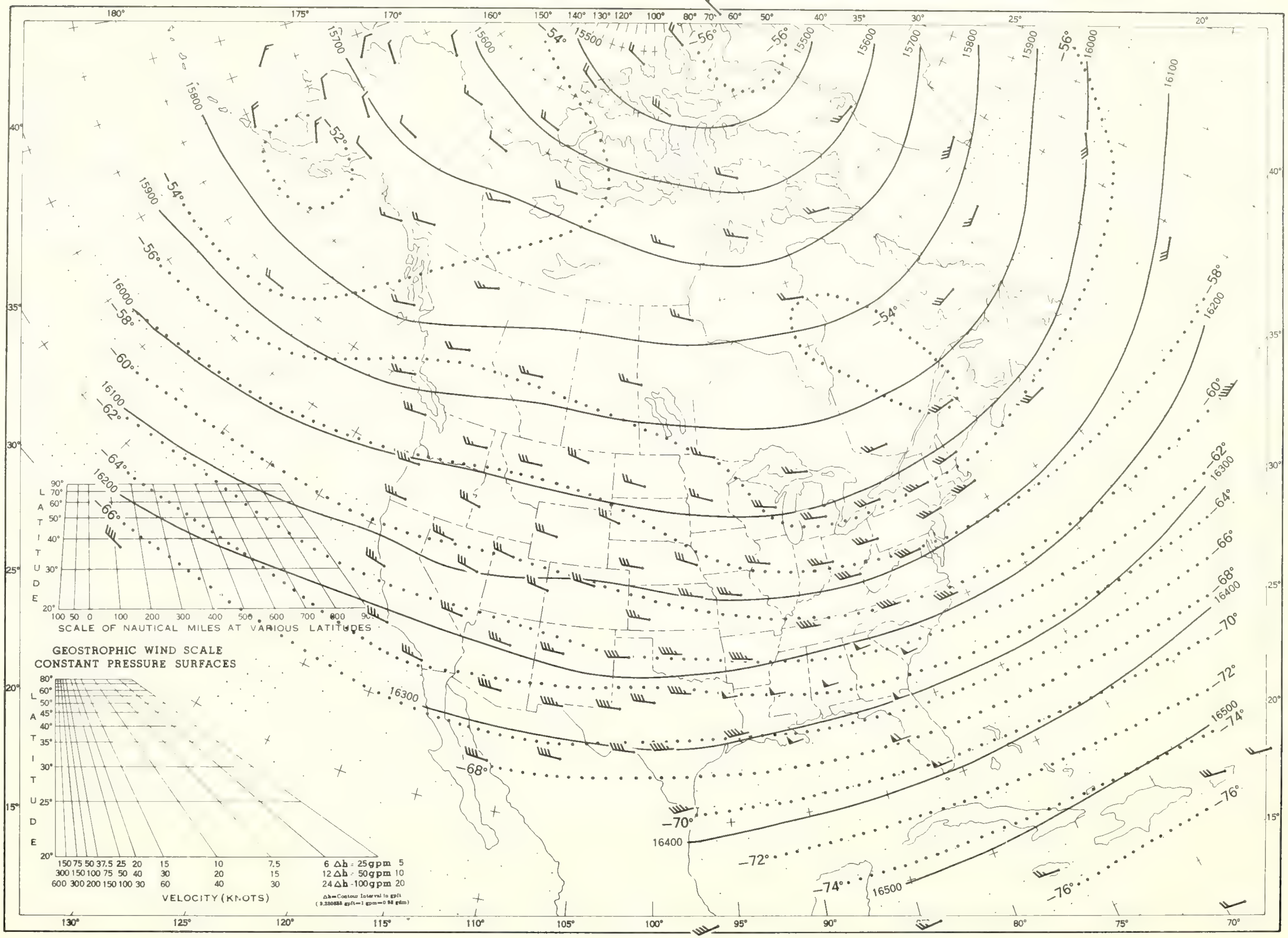
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, March 1966. Average Height and Temperature, and Resultant Winds.



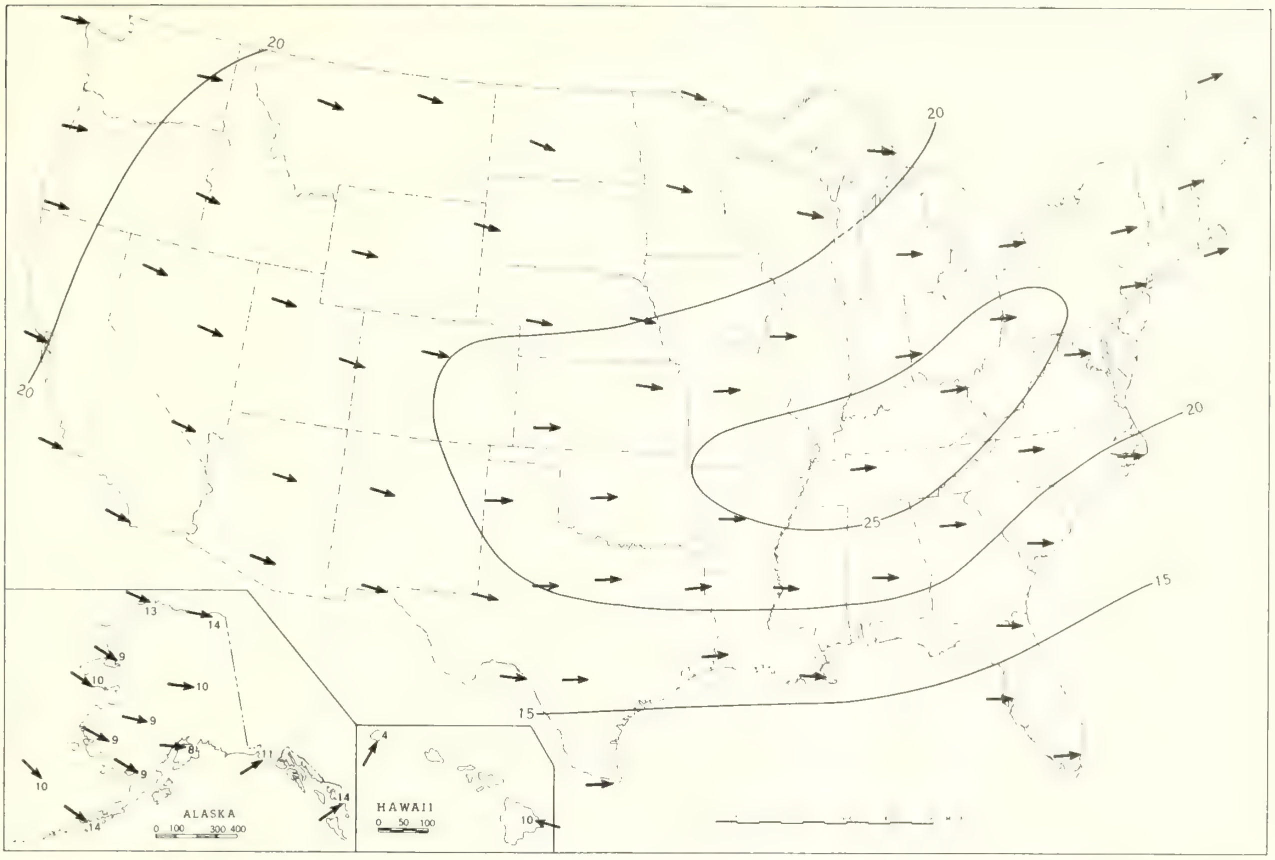
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, March 1966. Average Height and Temperature, and Resultant Winds.

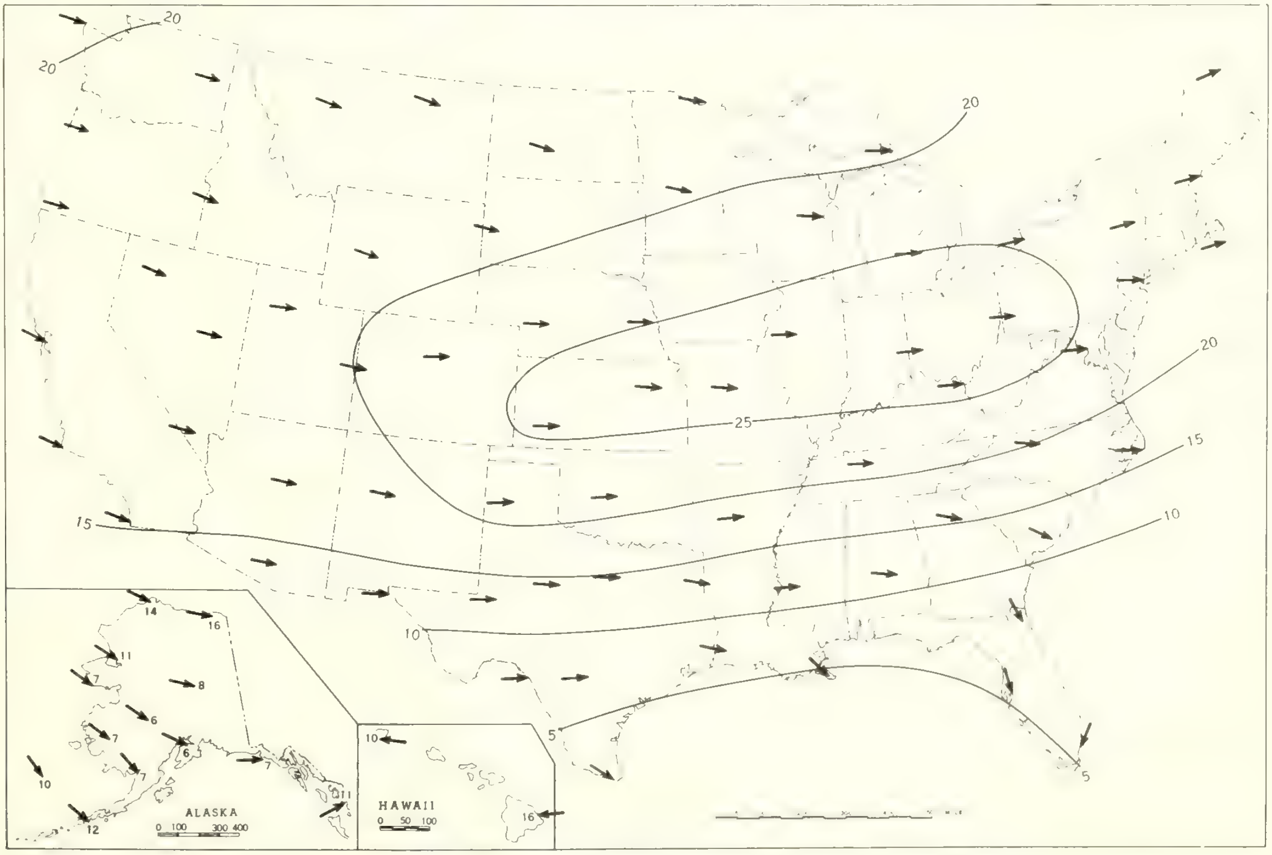


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, March 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, March 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

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NATIONAL SUMMARY

APRIL 1966
Volume 17 No. 4

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 4 APRIL 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Heavy rainfall southeast Plains and lower Mississippi Valley.

2. Dry weather and drought continued in much of Northeast.

3. Severe flash floods in northeast Texas.

4. Second consecutive dry month in Far West.

5. Record snowstorm in Central Rockies.

TEMPERATURE.--Temperatures for April 1966 averaged above normal in the Pacific States and some other parts of the Far West, in the Gulf coastal areas from Texas through Alabama, and in northern Maine. Relative to normal, the warmest area was California's Central Valley which was about 4° warmer than normal, and where Sacramento had its warmest April during a record dating back to 1878. The rest of the 48 states were cooler than normal, by as much as 4° to 6° in the northern Great Plains. Trenton, N. J., had its coolest April since 1943, and Bridgeport, Conn., its coolest on record.

Hidden in the monthly averages were the wide temperature fluctuations which began in March and continued through April. East of the Mississippi the first half of the month was much colder than normal, the third week unusually warm, and the rest of the month cold in the North and warm in the South. In the West the first half of the month was warm and the second half cold except that the last few days of the month were unusually warm in California. On April 1 high temperatures set new records for so early in the season at scattered stations over the western half of the Nation. Among these were Valentine, Nebr., 79°; Helena, Mont., 75°; Burns, Oreg., 78°; Fresno, Calif., 90°; and Phoenix, Ariz., 96°. On the 4th and 5th, however, a freeze caused extensive damage to fruit, particularly apricots and sweet cherries in west-central Colorado.

Following a prolonged abnormally warm period, unusually cold weather covered the western half of the nation about the 18th to 21st. Apricots and cherries which escaped freeze damage in the Grand Junction, Colo., area on the 4th and 5th were nearly wiped out on the 19th and 20th. Fruit was also damaged by this freeze in areas around Denver, Colo.; Pendleton, Oreg.; Walla Walla, Wash.; Amarillo, Tex., and many others. Record low temperatures for so late in the season were reported on the 20th as follows: 2° at Rapid City, S. Dak.; 8° at Flagstaff, Ariz.; and 1° at Lander, Wyo. Casper, Wyo., recorded -3.9° on the 19th, the lowest on record there for April.

PRECIPITATION.--Precipitation was well above normal in a broad belt extending from Texas and Louisiana northeastward through Illinois, southern Michigan, Ohio, and most of Pennsylvania, slightly above in the Dakotas, and generally below elsewhere.

In northeastern Texas where frequent thunderstorms occurred, rainfall was unusually heavy. Monthly totals ranged up to 26.68 inches at Gladewater. Dallas measured 15.40 inches, the greatest April rainfall there on record. The heaviest rainfall in this area fell during the last decade. Dallas recorded 12.39 inches during the last 9 days of the month. During this period severe flash floods caused heavy property losses and a number of persons lost their lives.

Unusually heavy rains also fell outside northeast Texas. Some of the largest monthly totals included 17.42 inches at Rodessa, La.; 12.49 at Onward, Miss.; 11.39 at Yuba, Okla.; and 17.75 inches at Stamps, Ark. Louisville, Ky., had rain on 23 days and a monthly total of 9.56 inches, the greatest amount on record there for April. The area of above normal rainfall extended eastward over the Appalachians from Pennsylvania through the Carolinas where March moisture had been much below normal. Moderate to heavy precipitation fell in South Dakota at intervals during the last 3 weeks, and in North Dakota the last week. This was the third consecutive month with above normal precipitation in the Dakotas. Major flooding which began in March, caused mainly by rapid snowmelt, gradually subsided during the rest of the month.

This was the second consecutive dry month in most of the Far West. In some sections dry weather has prevailed for 3 months or longer. Pendleton, Oreg., received only 0.08 inch for its second driest April. Prolonged dry weather in the Far Southwest caused a decline of ground water levels which were at record lows at the end of the month.

In the Northeast Drought area, New England received less than 50 percent of normal precipitation. Monthly amounts were also below normal in New York, New Jersey, and along the Atlantic coast southward. The drought intensified in Rhode Island, Massachusetts, Maryland, and Delaware.

SNOW.--Snowfall and precipitation were both well below normal in the Western States for April, continuing the trend begun in January. Above normal temperatures removed the snow cover faster than usual. The water supply outlook decreased over most of the West, and shortages were expected in most areas dependent upon streamflow. The only exception was a slight improvement in some areas of Montana, owing to above normal mountain precipitation. Heavy snows and above normal precipitation the last 2 months of 1965 helped maintain above normal amounts of water in reservoirs.

Snow, mostly light, fell in the Rockies at the beginning of the month, and flurries were reported from the northern Rockies to New England. The latter flurries persisted through the first decade.

A storm centered over the central Rockies April 18 brought heavy snowfall to a wide belt extending from Utah to Wisconsin. Lander, Wyo., reported 20 inches and over 20 inches fell in eastern Wyoming and the Black Hills of South Dakota.

DESTRUCTIVE STORMS.--A number of severe tornadoes crossed the central Florida Peninsula on April 4, causing 9 deaths, many injuries, and millions of dollars property damage. The nine fatalities were the greatest 1 day tornado death toll on record for the State. Damage was heaviest in the Tampa and Lakeland areas but extended eastward to Cocoa.

During a period of stormy weather around the 18th, 19th, and 20th, snow fell over a wide area from Utah to Wisconsin, and winds up to 60 m.p.h. whipped up dust in eastern New Mexico and the Texas Panhandle. Severe thunderstorms and a few tornadoes occurred in an area extending from lower Great Plains to the Great Lakes. Torrential rains in northeast Texas caused severe flash floods which were blamed for the death of at least 12 persons.

CONDENSED CLIMATOLOGICAL SUMMARY

APRIL 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	90	30+	Bridgeport 2W	22	6	Vernon	10.76	2 Stations	1.09
Alaska	Data will be delayed									
Arizona	Parker	101	1	Jacob Lake	1	20	Colorado City	1.08	83 Stations	.00
Arkansas	Nimrod Dam	90	1	Calico Rock	19	6	Stamps	17.75	Rohwer 2NNE	2.83
California	Palm Springs	108	1	White Mountain 2	-2	20+	Strawberry Valley	4.63	135 Stations	.00
Colorado	Eversoll Ranch	88	29+	2 Stations	-9	20+	Berthoud Pass	3.41	Rangely	.00
Connecticut	2 Stations	72	26+	4 Stations	20	13+	Bridgeport WBAP	2.26	Manchester	.85
Delaware	do	84	24	2 Stations	26	11+	Lewes 1SW	5.03	Middletown 1WSW	2.65
Florida	7 Stations	92	30+	Fountain 3SSE	31	11	Loxahatchee	5.95	De Soto City 8SW	.04
Georgia	4 Stations	90	28+	2 Stations	23	10+	Carters	11.69	Waynesboro 2NE	.61
Hawaii	Data will be delayed									
Idaho	Swan Falls Power House	86	2	Warren	-6	19	Headquarters	2.43	Leadore No 2	T
Illinois	2 Stations	82	20+	Bloomington Normal	21	10	Glendale Exp Station	9.62	Stockton	2.24
Indiana	Shoals Hiway 50 Bridge	83	19	Culver Experiment Farm	15	7	Charlestown Ord Plant	8.68	Bluffton	1.86
Iowa	Logan	84	26	Inwood 2W	14	9	Columbus Junction	5.73	Logan	.45
Kansas	Aetna 2S	90	16	3 Stations	15	21	Le Roy	6.30	Deerfield 10NNW	.11
Kentucky	2 Stations	88	24+	Blaine 2W	18	10	Lovelaceville	10.59	Pikeville	3.62
Louisiana	Donaldsonville	91	14	2 Stations	29	5	Rodessa	17.42	Leesville	3.65
Maine	4 Stations	68	26+	Clayton Lake 2	10	2	Rumford Power Plant	1.43	Clayton Lake 2	.27
Maryland	Leonardtown 3NW	88	24	Unionville	21	11	Oakland 1SE	6.46	Crisfield Somers Cove	1.50
Massachusetts	2 Stations	72	25+	2 Stations	20	15+	Edgartown	1.88	Salem CG Air Station	.50
Michigan	Adrian 2NNE	78	18	Champion Van Riber Pk	-1	8	Niles	6.45	New berry State Hosp	.73
Minnesota	Canby	75	25	Gunflint Lake	4	3	Hibbing Pwr Substation	3.92	Preston	.62
Mississippi	5 Stations	90	14+	2 Stations	27	7+	Onward	12.49	Corinth 4SW	2.38
Missouri	Ozark Beach	88	1	5 Stations	18	10+	Ellsinore	10.12	Conception	1.03
Montana	Toston 3SW	78	1	Summit	-11	19	Red Lodge	6.52	2 Stations	.11
Nebraska	Freemont	86	25	Harrisburg 10NW	-8	20	Hemingford	2.74	Valparaiso	.22
Nevada	Sunrise Manor Las Vegas	100	2+	Gibbs Ranch	-1	20	Emigrant Pass Hwy Sta	1.10	6 Stations	.00
New Hampshire	Concord WBAP	72	25	Mount Washington	-2	27	Mount Washington	3.61	Milford	.75
New Jersey	2 Stations	81	24+	High Point Park	19	1	Audubon	4.72	Ringwood	1.95
New Mexico	do	94	29+	2 Stations	0	5	Elk 3E	3.27	14 Stations	.00
New York	3 Stations	78	21+	do	8	4	West Field 3SW	5.30	Norfolk	.18
North Carolina	Dunn 4NW	92	27	Grandfather Mountain	9	9	Lake Toxaway 2SW	10.38	Morehead City	.49
North Dakota	Upham 3N	72	23	Hannah 2N	3	30	Park River	3.53	Dickinson FAA AP	.44
Ohio	Ironton	86	18	Jackson 2NW	18	10	Ironton	6.71	Grover Hill	1.75
Oklahoma	Frederick	94	19	Boise City 2E	19	20	Yuba 2W	11.39	Regnier	T
Oregon	Drain 1NNE	87	4	Mt Fanny	5	19	Headworks Ptld Water	4.37	4 Stations	.00
Pennsylvania	Newell	86	21	Clermont 4NW	15	17+	Morgantown	6.25	Boswell 15W	1.13
Puerto Rico	Dos Bocas	98	30	Cayeyie	50	28+	Rio Blanco Upper	14.09	Yauco 1S	.05
Rhode Island	Providence WBAP	71	25	Greenville	25	1	Greenville	1.57	Woonsocket	.98
South Carolina	Pinopolis Dam	92	28	Laurens	24	6	Caesars Head	8.69	Bamberg	.52
South Dakota	5 Stations	82	26+	Custer	-15	20	Mt Coolidge	7.57	2 Stations	.80
Tennessee	2 Stations	88	28+	Coldwater	15	6	Union City	8.39	Pulaski Water Plant	2.29
Texas	Pandale	102	13	2 Stations	21	21+	Gladewater	26.68	4 Stations	.00
Utah	2 Stations	90	26+	Silver Lake Brighton	-5	20	Alta	3.20	5 Stations	.00
Vermont	Rutland	75	21	2 Stations	12	27+	Mount Mansfield	2.31	Middlesex	.67
Virginia	Hopewell	90	24	do	19	7+	Trout Dale	6.94	Tangier Island	.44
Washington	Dallesport FAA AP	83	6	Mount Spokane Summit	10	19	Cedar Lake	7.77	5 Stations	.00
West Virginia	Dunlow 5E	88	18	Terra Alta No 1	11	6	Jane Lew	8.03	Grantsville 2NW	3.00
Wisconsin	Shorewood	75	24	2 Stations	5	3	Kenosha	3.68	La Crosse WBAP	.60
Wyoming	Wheatland	82	26	Seminoe Dam	-18	18	Parkman 5WNW	5.08	3 Stations	.20

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
																									Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F	F		F.				F.	%	In.	In	In.			In.	In.	M.p.h.		M.p.h							%
ALABAMA																																
BIRMINGHAM	620	994.2	1016.6	74	50	62.2	- 0.9	86	13	31	10	0	3	49	67	8.37	3.90	5.08	10	4	0.0	0	2.7	22	34	5	22+	8	6	16	6.5	58
HUNTSVILLE	600	993.2	1016.2	74	52	63.0	1.4	85	22	34	10+	0	0	47	58	4.04	0.05	1.09	12	7	0.0	0	2.6	19	29	16	18	6	7	17	6.6	
MOBILE	211	1009.1	1016.9	78	59	68.4	0.8	86	28+	41	5	0	0	58	74	2.37	- 3.99	1.55	9	6	0.0	0	5.5	18	31	15	18	7	6	17	6.4	
MONTGOMERY	194	1009.5	1016.9	76	55	66.0	2.5	87	13	39	11+	0	0	52	64	1.24	- 3.65	0.89	5	4	0.0	0	3.9	21	24	W	8+	10	6	14	5.7	53
ALASKA																																
ANCHORAGE PRK STRIP	85			43	28	35.2	- 0.5	53	30+	20	23+	0	24			0.47	- .05	0.14	6	0	3.0	6										
ANCHORAGE	141	1012.9	1017.8	42	28	35.3		53	30	18	1	0	22	23	63	0.70		0.24	7	0	6.1	14	0.9	26	21	15	27+	7	9	14	6.2	60
ANNETTE	110	1015.6	1019.7	50	35	42.5	- 0.6	65	6	22	11	0	6	32	71	3.22	- 5.92	0.82	11	0	2.3	1	0.8	25	29	34	9+	4	9	17	7.4	
BARROW	22	1028.4	1029.2	2	-12	- 5.1	- 5.3	22	28	-25	22+	0	30	-10	79	0.28	0.17	0.27	2	0	2.9	19	7.5	9	31	33	9	9	11	10	5.5	
BARTER ISLAND	39	1026.8	1028.8	2	-16	- 6.8	- 7.7	24	28	-34	8	0	30	-13	71	0.05	- 0.12	0.02	4	0	0.9	31	1.8	10	35	27	24	15	8	7	4.0	
BETHEL	125	1012.5	1016.5	32	14	23.0	- 2.9	50	29	- 5	21+	0	28	18	80	0.17	- 0.41	0.14	2	0	0.3	14	6.3	1	30	32	10	6	9	15	6.7	
COLD BAY	94	1009.5	1013.4	38	31	34.4	1.1	46	19+	18	3	0	17	31	87	1.31	- 0.15	0.47	15	0	1.4	9	8.8	14	52	16	17				9.3	
FAIRBANKS	436	1003.1	1020.7	38	16	27.1	- 2.3	54	30	1	21	0	28	15	62	0.32	0.07	0.25	4	0	1.5	22	0.9	31	24	22	20	10	11	9	5.2	
JUNEAU	12	1019.0	1019.7	47	29	38.1	0.1	60	8	17	12	0	22	31	81	2.08	- 0.79	0.44	13	0	1.5	1	3.8	11	32	12	21	6	[illegible]	19	7.2	41
KING SALMON	43	1014.2	1015.4	37	23	30.1	- 2.7	49	30	4	1	0	24	25	79	0.49	- 0.15	0.20	9	0	0.8	13	3.4	6	29	33	11+	4	7	19	7.4	
KOTZEBUE	10	1023.0	1023.7	18	0	9.1	- 4.1	42	30	-20	24	0	30	3	76	0.17	- 0.14	0.09	4	0	4.6	34	1.8	5	30	31	11	8	6	16	6.5	
MC GRATH	349	1006.6	1021.8	35	11	23.1	- 4.5	49	29	- 9	21+	0	30	10	56	0.31	- 0.16	0.14	4	0	0.8	19	2.5	35	21	25	20+	9	10	11	5.7	
NOME	13	1020.7	1021.5	24	6	15.2	- 6.0	43	30	-15	20	0	30	9	75	0.61	- 0.19	0.38	6	0	6.2	31	6.9	4	44	31	11+	11	8	11	5.9	48
ST. PAUL ISLAND	22	1013.2	1014.2	31	25	27.8	- 0.6	42	30	14	13	0	26	24	86	2.09	1.13	1.00	18	0	14.3	11	13.8	5	46	1	17+	1	3	26	9.2	
SHEMYA	122	1002.7	1006.4	36	30	33.8	- 1.7	41	21+	23	1	0	25	30	84	2.14	0.08	0.71	18	0	2.5	T	3.5	7	43	7	18	1	3	26	8.8	
YAKUTAT	28	1017.6	1018.6	41	25	33.2	- 3.8	54	30+	14	11	0	30	28	83	8.04	0.81	3.93	1[illegible]	0	18.5	24	1.9	12	21	12	2	8	4	18	7.2	
ARIZONA																																
FLAGSTAFF	6993	785.6	1015.2	62	27	44.7	1.4	73	1	8	20	0	25	18	38	0.27	- 0.91	0.27	2	1	5.1	5	3.1	21	24	21	18+	13	9	8	4.4	
PHOENIX	1117	971.6	1010.1	88	52	69.8	2.6	96	1	43	22	15	0	32	27	T	- 0.32	T	0	1	0.0	0	1.4	16	40Y	SW	18+	13	13	4	3.8	9[illegible]
TUCSON	2584	925.5	1010.5	82	51	66.8	0.9	89	27+	43	22+	0	0	30	28	0.12	- 0.15	0.12	1	3	0.0	0	3.3	22	42	SW	18	15	4	8	3.4	[illegible]
WINSLOW	4895	847.6	1012.6	73	37	55.2	- 0.4	86	2	18	5	0	9	18	27	0.12	- 0.33	0.12	1	1	0.9	T	6.1	23	48	21	18	20	6	4	3.2	
YUMA	194	1003.1	1010.2	89	58	73.8	3.2	97	1	46	21+	17	0	36	24	T	- 0.09	T	0	0	0.0	0	2.3	24	30	NW	15	16	7	7	3.2	9[illegible]
ARKANSAS																																
FORT SMITH	449	997.3	1014.0	73	48	60.5	- 1.2	87	27	29	6	0	1	46	64	8.50	4.26	1.76	15	8	0.0	0	0.8	4	45	W	20	10	4	16	6.6	51
LITTLE ROCK	257	1005.4	1014.0	73	52	62.4	0.0	84	27	35	5	0	0	49	65	7.29	2.36	2.65	11	7	0.0	0	0.6	19	32	NW	20	7	6	17	6.8	47
TEXARKANA	372	1001.0	1014.2	76	53	64.3	0.3	86	12	36	5	0	0	52	68	16.65	11.35	5.11	12	12	0.0	0	3.3	18				10	6	14	5.9	
CALIFORNIA																																
BAKERSFIELD	494	996.5	1014.3	81	54	67.5	4.5	92	16	44	20	3	0	41	42	0.03	- 0.81	0.03	2	0	0.0	0	4.0	34	25	31	17	17	8	5	3.5	
BISHOP	4108			77	38	57.4	2.3	90	1	32	20	1	2			T	- 0.46	T	0		0.0	0						16	10	4	3.2	
BLUE CANYON	5280			60	42	51.2	5.6	71	15+	28	19	0	5			3.54	- 1.28	1.56	6		8.8	19			28	7	22	13	8	9	4.5	
BURBANK	724	988.5	1013.3	77	51	64.2	3.0	97	15	44	21	2	0	48	65	0.01	- 1.20	0.01	1	0	0.0	0	4.3	16	23	25	11	11	12	7	4.7	
EUREKA U	43			55	45	50.4	0.2	78	3	37	13	0	0			1.34	- 1.33	0.52	4		0.0	0			38	NW	26	8	8	14	6.3	64
FRESNO	328	1002.4	1014.2	82	49	65.5	4.2	93	25+	39	19	6	0	44	52	0.15	- 0.98	0.13	3	0	0.0	0	3.9	31	26	NW	17	16	7	5	3.1	9[illegible]
LONG BEACH	34	1013.5	1014.5	72	54	62.8	2.6	99	15	47	20	2	0	49	67	T	- 0.77	T	0	0	0.0	0	3.1	23	18	28	18	8	13	9	5.3	
LOS ANGELES	97	1010.5	1014.5	69	54	61.7	2.3	95	15	50	20	1	0	51	72	0.01	- 1.04	0.01	1	0	0.0	0	5.0	25	31Y	W	18	9	13	8	5.0	
LOS ANGELES U	270			74	55	64.4	2.6	99	15	50	20	2	0			0.00	- 1.17	0.00	0		0.0	0			22	SW	18	10	14	6	4.4	6[illegible]
MT SHASTA R	3544			65	36	50.6	3.1	78	24	21	19	0	7			0.48	- 2.29	0.25	3		0.0	0										
OAKLAND	6	1015.6	1016.6	68	53	60.8	4.2	88	23	48	13	0	0	49	69	0.39	- 0.99	0.22	3	0	0.0	0	6.2	28	24	27	17	12	8	9	4.9	
RED BLUFF	341	1002.0	1014.7	78	49	63.5	2.9	89	24+	34	20	0	0	38	47	0.68	- 1.15	0.41	3	1	0.0	0	3.1	35	30	N	26+	11	8	11	7.2	41
SACRAMENTO	17	1013.5	1014.5	78	46	62.9	4.5	89	24	40	21+	0	0	45	60	0.47	- 0.93	0.29	3	0	0.0	0	3.0	25	36	SW	17	16	8	6	3.8	9[illegible]
SANDBERG R	4517			66	47	56.6	5.8	82	1	33	19	0	0			0.00	- 0.97	0.00	0	0	0.0	0			39	25	2				3.7	
SAN DIEGO	13	1013.5	1014.7	67	55	61.3	- 0.2	81	14	50	20	0	0	51	73	T	- 0.79	T	0	0	0.0	0	3.7	25	20	NW	13	10	10	10	5.4	66
SAN FRANCISCO	8	1015.6	1016.4	67	45	57.4	2.2	84	23	42	20	0	0	45	70	0.40	- 0.90	0.25	3	0	0.0	0	7.3	29	26	WNW	30+	15	5	10	4.4	
SAN FRANCISCO U	52			65	51	57.9	2.2	84	23+	47	1	0	0			0.36	- 1.08	0.18	3		0.0	0			26	NW	2[illegible]					77
SANTA CATALINA	1568			67	52	59.7	3.0	90	15	47	20	1	0			0.03	- 1.19	0.02	2	0	0.0	0						11	10		4.4	
SANTA MARIA	236			70	45	57.4	1.8	95	15	36	21	2	0			0.03	- 1.16	0.03	2		0.0	0						13	9	8	4.2	
STOCKTON	22	1014.2	1015.3	79	48	63.5	3.8	90	24+	38	20	2	0	43	54	0.27	- 0.87	0.18	4	0	0.0	0	6.2	30	29	25	17	15	7	8	3.4	
COLORADO																																
ALAMOSA	7536			60	23	41.4	- 0.4	69	29+	9	5	0	27			0.15	- 0.54	0.26	6		3.6	1						10	17	3	4.4	
COLORADO SPRINGS	6145	809.7	1014.2	59	30	44.4	- 1.2	77	26	13	20	0	18	23	51	1.79	- 0.52	0.27	10	2	4.1	1	1.8	3	35	31	2	4	14	12	6.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station ∅	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No of days: Max. 90 F. or above	No of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
DENVER	5283	834.1	1015.0	60	30	44.6	-1.8	79	26	13	20	0	20	26	56	1.46	-0.65	0.64	11	2	6.4	5	0.8	4	45	NW	2	7	12	11	6.1	73
GRAND JUNCTION	4855	849.6	1011.5	66	39	53.6	1.3	83	26	25	5	0	5	23	34	0.83	0.08	0.59	4	1	0.8	T	0.5	29	40	SW	26	13	8	9	4.7	80
PUEBLO	4684	853.4	1012.4	68	33	50.4	-0.3	84	26	19	5	0	12	27	47	1.24	-0.94	0.09	6	1	1.3	1	1.8	6	49	N	7	8	14	8	5.3	77
CONNECTICUT																																
BRIDGEPORT	7	1018.0	1018.6	51	35	43.4	-4.6	67	25	26	1	0	11	34	73	2.26	-1.54	0.70	13	0	T	T	0.7	8	33	8	13	1	14	15	7.4	
HARTFORD	169	1010.8	1017.5	58	36	46.9	-1.6	71	25	29	12+	0	11	32	63	1.38	-2.35	0.73	10	0	T	T	0.8	32	26	NW	25	1	12	17	7.6	49
NEW HAVEN	6			53	36	44.5	-2.6	71	25	27	1	0	8			1.99	-1.90	0.64	11		T	T			24	NW	25	1	14	15	7.3	51
DELAWARE																																
WILMINGTON	78	1014.9	1017.9	57	39	47.9	-4.2	75	21	27	5	0	6	36	68	3.16	-0.17	0.89	12	1	T	T	0.9	36	23	5	27+	1	12	17	7.7	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.2	1017.7	62	44	52.7	-3.0	86	24	35	3	0	0	39	64	3.33	0.18	1.23	11	0	0.0	0	1.6	1	30	NW	2	1	10	19	7.9	30
FLORIDA																																
APALACHICOLA U	13			75	62	68.5	1.0	81	30+	50	10+	0	0			2.15	-2.15	1.98	5	0	0.0	0			25	W	1	14	8	8	4.4	72
DAYTONA BEACH	31	1017.6	1019.0	79	57	68.2	-0.7	85	27+	45	11+	0	0	56	69	2.56	-0.41	2.56	1	0	0.0	0	3.4	14	25	35	10	9	14	7	5.2	
FORT MYERS	15	1018.0	1018.2	84	61	72.4	-0.4	90	30	51	8+	1	0	61	73	3.03	0.39	1.44	7	2	0.0	0	2.7	10	26	11	22+	11	13	6	4.7	
JACKSONVILLE	20	1017.6	1018.5	79	57	68.1	-0.6	89	13	42	11+	0	0	56	70	2.25	-1.30	0.93	6	1	0.0	0	3.1	19	30	SW	1	12	9	9	4.8	82
KEY WEST	4	1016.6	1017.1	79	71	75.0	-0.8	82	28+	63	1	0	0	65	72	2.15	-0.33	0.72	7	3	0.0	0	10.5	10	30	SE	21+	8	12	10	5.6	73
LAKELAND U	214			80	60	70.2	-1.3	87	14	51	6+	0	0			1.84	-1.67	1.63	5		0.0	0						8	16	6	5.1	78
MIAMI	7	1017.6	1018.0	80	66	72.8	-1.4	89	4	57	7+	0	0	61	71	1.80	-2.08	1.43	7	2	0.0	0	6.8	11	26	11	22+	4	17	9	6.4	
ORLANDO	108	1014.6	1018.7	81	60	70.5	-0.7	88	27	49	7	0	0	56	66	1.92	-1.50	1.87	3	1	0.0	0	2.8	14	25	29	4	8	15	7	5.1	
PENSACOLA	112	1013.5	1017.5	76	60	67.6	-0.3	81	30	42	5	0	0	57	72	2.77	-2.48	2.52	6		0.0	0	4.8	17	57	SE	18					70
TALLAHASSEE	55	1015.9	1018.1	79	53	66.2	-1.3	86	29+	37	11	0	0	54	70	2.21	-2.43	0.94	7	2	0.0	0	3.1	19	24	16	18	9	14	7	5.2	
TAMPA	19	1018.0	1018.2	80	58	69.2	-2.2	89	29	45	11	0	0	56	67	1.57	-1.27	1.52	3	2	0.0	0	2.1	14	31	27	4	8	14	8	5.3	74
WEST PALM BEACH	15	1017.6	1018.4	81	65	73.0	-0.9	90	4	53	3+	1	0	60	68	2.73	-1.61	1.55	8	1	0.0	0	6.1	12	39	27	9	6	15	9	5.8	
GEORGIA																																
ATHENS	802	988.5	1017.5	73	49	61.0	-0.1	85	13	34	5	0	0	48	68	4.55	0.16	1.60	11	5	0.0	0	2.4	23	25	24	7	6	13	11	6.4	
ATLANTA	1010	980.0	1016.9	71	50	60.6	0.4	84	13	31	5	0	2	47	66	4.19	-0.28	1.42	10	3	0.0	0	2.2	20	30	SW	8	8	9	13	6.2	52
AUGUSTA	143	1011.9	1017.2	76	48	62.2	-1.0	87	24+	32	3	0	1	47	63	2.37	-1.19	1.62	8	4	0.0	0	2.7	21	25	26	7+	8	9	13	6.1	
COLUMBUS	385			78	52	65.2	1.5	86	13	35	6+	0	0	51	66	2.76	-1.83	1.03	5		0.0	0	2.2	22	22	26	6	9	6	15	5.9	
MACON	354	1004.7	1017.6	78	51	64.9	-0.7	87	28+	35	11+	0	0	50	65	0.97	-2.78	0.60	5	0	0.0	0	2.7	21	30	W	1	9	6	15	6.1	60
ROME	637			73	47	60.0	0.2	85	13	27	6	0	6			4.55	-0.04	1.54	12		0.0	0										
SAVANNAH	46	1016.3	1018.2	76	52	64.7	-1.0	88	27+	33	3	0	0	51	67	1.88	-1.82	0.57	7	3	0.0	0	3.5	20	34	W	7	10	11	9	5.4	63
HAWAII																																
HILO	31	1014.9	1016.0	79	64	71.8	0.2	85	12	59	21+	0	0	63	76	5.24	-6.68	2.17	18	0	0.0	0	3.2	35	26	1	19	0	13	17	7.9	26
HONOLULU	7	1015.6	1016.2	83	67	75.1	0.9	86	29+	60	20	0	0	60	62	0.46	-0.85	0.19	5	1	0.0	0	6.4	4	26	N	19	8	16	6	5.5	83
KAHULUI	48	1013.9	1016.3	79	66	72.7	-0.7	85	28+	61	19+	0	0			0.54	-0.90	0.18	14	0	0.0	0	9.3	5	28	N	19	0	23	7	6.4	65
LIHUE	103	1012.2	1017.5	77	63	69.8	-2.7	80	28+	57	22	0	0	61	74	1.63	-1.71	0.88	16	0	0.0	0	7.7	4	22	NE	19	2	20	8	6.2	69
IDAHO																																
BOISE	2838	916.0	1016.6	63	36	49.2	-1.2	82	1	22	19	0	11	27	46	0.61	-0.55	0.32	5	0	0.1	T	2.4	31	33	NW	18	10	8	12	5.5	89
IDAHO FALLS 42NW R	4790			58	23	40.3	-2.8	74	1	4	20	0	28			0.08	-0.41	0.07	2				2.0	29	34	SW	26+					
IDAHO FALLS 46W R	4932			57	25	41.0	-2.3	72	1	12	20	0	25			0.30	-0.21	0.26	4	1	0.4	T	3.2	26	40	SW	26					
LEWISTON	1413			63	38	50.7	-0.1	76	7	20	19	0	4			0.31	-0.83	0.14	4		0.0	0						7	8	15	6.4	
POCATELLO	4454	862.2	1015.9	60	29	44.2	-2.3	74	25	18	4	0	22	21	44	0.31	-0.75	0.21	4	0	1.3	T	7.1	24	45	SW	26	6	9	15	6.6	66
ILLINOIS																																
CAIRO U	314			66	48	56.9	-2.5	79	20	35	10+	0	0			9.45	5.38	1.78	16		0.0	0			28	NE	26	3	6	21	7.8	51
CHICAGO O HARE	658	991.2	1016.1	55	35	45.2	-2.0	76	18	24	10	0	9	34	66	6.28	3.34	1.81	14	5	T	T	1.9	1	33	27	1	4	11	15	7.3	
CHICAGO MIDWAY	607	993.2		56	40	47.7	-1.3	76	18	31	4	0	4	34	63	5.13	2.09	1.23	15	4	T	T	2.0	1	32	E	27	4	10	16	7.5	38
MOLINE	582	993.9	1015.8	57	37	47.0	-3.0	75	26+	22	10	0	6	36	67	3.96	0.79	0.97	16	5	0.1	T	1.4	35	48	SW	19	3	9	18	7.3	43
PEORIA	652	991.5	1015.8	58	38	48.1	-2.7	76	18	26	10	0	8	37	69	3.98	0.01	1.21	13	5	T	T	1.6	36	40	NW	1	2	11	17	7.8	44
ROCKFORD	724	988.2	1015.7	54	35	44.1	-3.7	70	24	23	10	0	11	33	68	4.96	1.91	1.42	12	2	T	0	2.2	1	29	22	19	5	10	15	6.9	
SPRINGFIELD	588	992.9	1015.3	58	41	49.5	-3.9	74	19	28	9	0	5	40	71	5.75	2.16	1.91	16	7	T	T	1.1	36	38	W	1	2	11	17	7.8	40

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1001.7	1015.8	63	43	53.3	- 4.4	80	18	24	10	0	5	43	71	5.33	1.35	1.67	14	5	T	T	1.0	29	38	SW	20	3	8	19	7.8	45
FORT WAYNE	791	985.4	1015.6	55	37	45.8	- 3.5	78	18	25	8	0	11	37	74	2.49	- 0.65	0.49	16	4	2.0	T	1.1	31	38	W	1	2	5	23	8.5	42
INDIANAPOLIS	792	986.1	1015.5	61	42	51.3	0.5	80	18	27	10	0	4	37	62	3.32	- 0.42	0.96	14	1	T	T	1.0	32	34	SW	6+	2	6	22	8.3	35
SOUTH BEND	773	987.1	1015.5	54	36	45.3	- 2.2	76	18	25	4	0	8	33	65	5.72	2.14	1.66	17	3	5.4	3	0.9	33	29	29	20	1	9	20	8.1	
IOWA																																
BURLINGTON	694			57	38	47.8	- 3.0	77	19	27	9	0	7	38	69	3.35	- 0.09		13	5	T		2.9	1	26	31	6+	4	9	17	7.3	
DES MOINES	938	981.0	1016.4	56	36	46.0	- 2.7	77	26+	24	21	0	14	34	66	1.74	- 0.79	0.85	10	2	T	T	3.2	2	37	NW	19	5	7	18	7.4	47
DUBUQUE	1065			54	35	44.7	- 2.1	72	24	29	21+	0	11			2.88	- 0.20	1.15	15		T	T						3	10	17	7.4	
SIOUX CITY	1095	976.3	1016.6	56	36	45.9	- 3.0	81	26+	23	21+	0	12	32	61	0.67	- 1.58	0.25	6	2	T	T	2.6	36	38	NW	1	6	5	19	7.2	48
WATERLOO	868	983.7	1016.1	54	33	43.7	- 3.6	73	25	26	21+	0	16	34	72	3.89	1.19	1.14	11	2	0.4	T	2.3	1	36	33	1	4	8	18	7.2	
KANSAS																																
CONCORDIA	1470	962.1	1015.4	61	37	48.0	- 4.0	81	25+	24	21	0	9	34	63	0.84	- 1.28	0.34	7	4	T	0	3.5	3	36	NW	1	6	6	18	6.9	48
DODGE CITY	2582	923.1	1014.3	64	38	51.2	- 2.4	85	16	24	5	0	10	35	61	2.18	0.34	1.35	5	3	T	0	2.3	4	48	NE	8	5	13	12	6.6	64
GOODLAND	3645	887.2	1014.6	61	33	46.9	- 1.2	78	16	21	20	0	13	32	62	0.56	- 1.03	0.30	7	3	0.9	T	0.7	36	40	31	27+	9	12	9	5.9	
TOPEKA	876	983.4	1015.5	63	38	50.8	- 3.6	83	17	24	21+	0	10	37	62	1.98	- 1.31	0.75	10	6	T	T	2.7	3	36	NW	27+	4	8	18	7.2	53
WICHITA	1321	966.8	1014.7	66	41	53.5	- 3.2	85	16	27	5	0	6	39	63	2.21	- 0.09	0.72	6	6	0.0	0	3.4	4	36	NW	27	4	11	15	6.9	55
KENTUCKY																																
COVINGTON	869	984.1	1015.8	58	42	50.1	- 2.1	76	18	26	10	0	8	40	70	5.38	2.16	1.05	17	1	0.1	0	1.8	23	27	24	24+	0	5	25	8.8	
LEXINGTON	966	980.7	1016.3	61	45	52.6	- 1.8	78	18	29	10	0	5	41	69	7.16	3.12	1.74	16	1	T	T	2.8	19	23	25	1	1	6	23	8.4	
LOUISVILLE	474	998.0	1015.7	62	45	53.4	- 1.4	78	18	28	10	0	1	43	71	9.56	5.74	2.54	19	3	0.4	T	1.3	23	37	NW	1	0	8	22	8.2	43
LOUISIANA																																
ALEXANDRIA	92	1011.2	1015.3	76	55	66.4	0.6	85	27+	35	6	0	0	57	75	8.83	3.13	3.19	11	9	0.0	0	3.1	18	23	19	11+	9	4	17	6.4	
BATON ROUGE	64	1013.2	1016.1	78	56	67.8	- 0.4	85	30+	41	5	0	0	57	72	7.97	3.20	3.21	11	8	0.0	0	4.2	16	23	20	26+	3	10	17	7.1	
LAKE CHARLES	14	1014.2	1015.3	79	61	69.8	1.9	85	30+	44	6	0	0	60	76	8.59	4.22	3.05	12	9	0.0	0	5.6	16	44	15	21	3	10	17	7.2	
NEW ORLEANS	3	1015.2	1015.9	78	60	68.7	0.8	86	30	40	6+	0	0	59	74	4.92	0.37	1.85	8	6	0.0	0	4.5	16	30	5	21	6	13	11	6.2	
SHREVEPORT	252	1004.7	1014.1	77	56	66.2	0.9	87	28+	37	5	0	0	53	68	8.02	3.45	2.03	13	12	0.0	0	4.2	18	35	34	30	7	10	13	6.5	47
MAINE																																
CARIBOU	624			46	29	37.6	1.2	59	30+	17	27	0	25			0.73	- 1.90	0.36	6		2.8	8						4	8	18	7.1	
PORTLAND	61	1014.9	1017.4	49	31	39.9	- 2.6	67	25	24	7+	0	21	29	69	1.00	- 2.73	0.47	10	0	0.7	T	1.8	25	33	NW	26	5	11	14	6.8	55
MARYLAND																																
BALTIMORE	148	1012.2	1017.8	59	40	49.5	- 4.7	80	24+	30	11+	0	7	35	63	4.39	0.79	1.85	15	0	T	0	1.3	30	34	[illegible]	7	1	11	18	7.6	34
MASSACHUSETTS																																
BLUE HILL OBS R	629			52	34	43.0	- 2.7	67	25	26	1	0	12			1.38	- 2.62	0.53	11		T	T			34	NNW	25					50
BOSTON	15	1016.6	1017.8	52	39	45.9	- 2.0	70	25	34	1	0	0	32	62	1.24	- 2.53	0.56	13	0	T	T	0.3	18	30	W	26+	3	9	18	7.3	54
NANTUCKET	43	1017.3	1017.5	49	32	40.6	- 3.7	58	26+	26	17	0	18	34	80	1.51	- 2.25	0.45	11	0	T	T	0.6	23	28	E	13	11	6	13	5.9	62
PITTSFIELD	1170			51	31	40.8	- 2.2	67	23	23	1	0	23			1.81	- 2.06	0.82	14		1.1	T										
WORCESTER	986	974.7	1017.4	51	33	42.0	- 2.6	65	22	25	1	0	19	29	66	1.62	- 2.31	0.73	7	0	0.8	T	3.3	27	27	31	11	3	11	16	7.1	
MICHIGAN																																
ALPENA	689	990.9	1016.7	49	29	38.8	- 3.3	69	24	20	3	0	22	26	65	1.61	- 1.02	0.35	14	3	4.8	2	0.8	6	38	E	27	5	10	15	7.0	50
DETROIT	619	993.2	1016.2	54	38	46.3	- 1.3	77	20	31	9+	0	6	32	61	2.86	- 0.14	1.00	10	2	0.7	T	1.4	33	35	27	21	2	7	21	7.8	45
DETROIT M WAYNE CO	633	991.5	1016.0	54	35	44.4	- 2.8	75	20+	25	8	0	16	35	72	2.65	- 0.40	0.97	14	2	1.8	T	0.7	31				3	6	21	7.9	
DETROIT WILLOW RUN	711	987.8	1016.3	54	34	44.0	- 3.7	76	18	25	12+	0	17	32	65	2.53	- 0.52	0.82	13	2	[illegible]	1	0.7	32	31	9	27	2	6	22	8.0	
FLINT	770	987.5	1015.9	52	35	43.5	- 0.2	75	20	27	9	0	14	32	67	1.83	- 0.83	0.51	12	2	2.6	T	0.4	23	28	9	27+	2	9	19	8.0	
GRAND RAPIDS	784	986.1	1015.8	54	34	43.8	- 1.9	71	20	25	8	0	18	35	74	4.62	1.68	1.13	15	3	2.8	1	1.0	33	30	NE	27+	2	12	16	7.5	45
HOUGHTON LAKE	1150	973.9	1016.6	46	30	37.3		65	24	22	3	0	23	30	73	2.08		0.61	14	1	7.1	4	0.8	31	23	9	27	6	7	17	7.3	
LANSING	841	983.7	1015.8	53	33	43.0	- 2.7	75	20	21	8	0	19	34	73	3.01	0.14	0.70	13	3	2.0	T	1.3	25	34	W	1	2	10	18	8.0	44
MARQUETTE U	677			45	31	37.8	- 1.5	63	17	25	14+	0	22			1.58	- 1.12	0.48	15		12.4	10			36	SE	27	7	8	15	6.4	58
MUSKEGON	627	992.9	1016.1	53	34	43.5	- 1.7	67	20	28	17+	0	15	34	73	3.47	0.89	0.82	15	3	3.7	T	1.0	34	33	9	27	5	8	17	7.2	
SAULT STE MARIE	721	989.5	1016.5	45	30	37.8	- 0.2	58	24+	25	27+	0	23	28	72	1.68	- 0.48	0.53	15	2	5.0	2	1.8	32	42	SE	28	3	11	16	7.4	57
MINNESOTA																																
DULUTH	1428	965.1	1017.8	41	28	34.7	- 2.3	62	22	19	3	0	26	25	69	1.99	- 0.37	0.69	13	0	10.2	11	2.2	2	49	E	27	3	6	21	7.8	54

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: .01 inch or more	Precipitation: No of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	No of days (sunrise to sunset): Partly cloudy, 4-7	No of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	975.9	1018.3	42	27	34.5	- 2.9	58	23+	11	21	0	27	21	59	1.30	- 0.26	0.41	10	1	10.5	9	2.4	35	38	12	27	3	8	19	7.5	
MINNEAPOLIS	834	980.1	1017.1	51	34	42.5	- 2.1	68	25	22	21	0	13	30	65	0.89	- 0.98	0.22	9	0	0.4	T	2.6	36	33	N	1	3	8	19	7.6	41
ROCHESTER	1297	968.2	1016.7	49	33	40.9	- 3.1	68	25	24	21	0	17	31	70	1.08	- 1.11	0.34	10	0	0.4	T	2.1	35	35	33	1	4	8	18	7.4	
ST CLOUD	1034	970.5	1017.0	48	30	39.1	- 3.7	65	16	21	30	0	22		66	1.66	- 0.36	0.72	9		1.6	1						2	6	22	8.3	
MISSISSIPPI																																
JACKSON	310	1004.1	1016.1	77	53	64.9	- 0.1	87	13	35	10+	0	0	53	70	5.76	0.85	2.76	10	7	0.0	0	4.0	16	32	SE	21	8	8	14	6.2	57
MERIDIAN	293	1005.4	1016.4	77	51	64.2	- 0.2	88	13	32	5	0	1	52	70	4.32	- 1.01	1.35	10	9	0.0	0	3.3	19	25	14	18	9	5	16	6.1	
VICKSBURG U	234			75	56	65.7	0.0	85	20	42	5	0	0			12.39	7.47	6.08	11		0.0	0			31	SE	21+	11	4	15	5.9	63
MISSOURI																																
COLUMBIA	778	986.5	1014.9	61	42	51.5	- 3.1	82	19	29	5	0	4	37	63	4.12	0.82	1.43	14	4	T	0	1.9	3	45	Nw	1	3	7	20	7.7	61
KANSAS CITY	742	988.2	1015.1	64	42	52.8	- 2.9	82	17	31	21+	0	4	37	59	3.04	- 0.52	0.99	12	6	T	T	2.3	2	29	NW	27+	4	8	18	7.5	50
SAINT JOSEPH	811			68	39	53.4	- 0.2	85	25	20	21	0	10			1.06	- 2.09	0.31	9	5	T	0	3.1	36	29	32	27+	4	7	19	7.0	
ST LOUIS	535	994.9	1015.6	62	42	51.7	- 3.2	79	19	30	10+	0	4	40	67	6.03	2.32	2.20	16	6	T	0	0.7	33	34	Nw	1	2	5	23	8.2	46
SPRINGFIELD	1268	969.5	1014.9	64	40	52.2	- 3.4	83	27	25	5	0	8	40	68	4.85	0.76	2.10	11	9	T	0	0.9	8	36	SW	19	8	5	17	6.9	47
MONTANA																																
BILLINGS	3567	891.3	1017.2	51	29	40.1	- 5.9	70	25	13	19	0	22	25	61	1.10	- 0.21	0.32	9	3	2.5	1	3.5	32	47	Nw	2	1	9	20	8.2	51
GLASGOW	2284			49	27	37.8	- 5.6	67	15	10	29	0	20			0.59	- 0.42	0.20	9		1.7	2						3	7	20	7.7	
GREAT FALLS	3662	888.6	1017.9	51	29	40.2	- 3.4	70	1	15	29+	0	20	24	56	0.74	- 0.24	0.32	7	0	6.0	1	4.9	27	36	Nw	2	0	5	25	8.7	54
HAVRE	2582			52	27	39.1	- 4.0	67	11+	11	19	0	23			0.41	- 0.56	0.25	6		5.9	3			40	Nw	2	3	8	19	7.8	56
HELENA	3828	881.1	1018.0	56	29	42.5	- 0.8	75	1	16	19	0	23	25	54	0.51	- 0.32	0.18	9	2	1.9	1	5.9	29	40	W	2+	0	8	22	8.5	56
KALISPELL	2965	912.0	1018.0	53	30	41.7	- 2.0	67	6	16	19	0	18	28	63	0.65	- 0.39	0.28	7	0	0.9	T	1.4	13	32	1	7	3	5	22	7.9	
MILES CITY	2629	922.8	1017.3	53	29	41.1	- 4.6	69	25	19	29+	0	19	27	60	0.85	- 0.21		11	0	0.9		3.7	32								
MISSOULA	3190	905.5	1018.7	56	31	43.7	- 0.6	71	1	16	19	0	18	27	58	0.66	- 0.31	0.28	10	1	5.7	3	2.7	31	29	W	1	4	8	18	7.2	60
NEBRASKA																																
GRAND ISLAND	1841	949.5	1016.6	58	33	45.5	- 4.1	81	25	22	6	0	12	32	65	1.20	- 1.08	0.66	9	1	0.4	T	2.3	36	32	34	1	7	5	18	6.8	
LINCOLN U	1150			57	37	46.7	- 5.1	80	25	26	9	0	11			0.66	- 1.79	0.29	9		T	T			34	SE	2	6	6	18	7.1	46
NORFOLK	1544			55	33	44.0	- 4.4	79	25	20	9	0	16			0.94	- 1.24	0.64	5		T	T						7	5	18	7.3	
NORTH PLATTE	2775	916.7	1015.4	57	31	43.8	- 3.9	80	25	19	20+	0	17	31	65	1.05	- 0.96	0.59	6	2	5.0	2	1.6	2	37	Nw	2	5	9	16	6.9	59
OMAHA	978	960.7	1016.4	60	37	48.2	- 3.5	84	25	21	9	0	11	33	58	0.83	- 1.73	0.36	8	2	T	T	2.6	2	37	NW	1	7	5	18	7.1	54
SCOTTSBLUFF	3957	878.1	1015.3	57	28	42.5	- 4.1	81	26	- 3	20	0	18	28	61	1.11	- 0.70	0.48	6	2	5.6	4	3.4	35	38	32	2	4	10	16	6.9	
VALENTINE	2587			55	28	41.5	- 4.2	81	26	6	20	0	20			1.06	- 0.92	0.32	10		6.2	6			35	Sw	26	5	10	15	7.0	56
NEVADA																																
ELKO	5050	844.9	1016.4	63	25	44.3	0.0	79	1	12	20	0	27	21	44	0.64	- 0.18	0.54	4	0	2.0	T	3.1	26	29	26	21+	10	9	11	5.4	
ELY	6253	807.7	1014.3	61	24	42.6	0.0	74	16	6	20	0	27	16	40	0.16	- 0.79	0.12	3	1	1.4	1	1.6	30	31	Nw	26	13	4	13	5.1	83
LAS VEGAS	2162	935.3	1011.2	82	51	66.4	1.9	95	2	34	20	6	0	15	16	0.01	- 0.22	0.01	1	0	0.0	0	2.9	25	48	NW	18	17	7	6	3.3	94
RENO	4404	865.9	1015.4	71	30	50.2	2.2	88	1	19	27+	0	23	23	37	0.03	- 0.51	0.02	3	0	T	0	1.8	30	36	S	9	11	14	5	4.4	98
WINNEMUCCA	4299	867.9	1016.1	66	28	46.6	0.7	84	1	12	20	0	22	18	35	0.42	- 0.40	0.28	3	1	0.0	0	3.4	31	34	NW	26+	8	13	9	5.4	70
NEW HAMPSHIRE																																
CONCORD	342	1004.7	1017.6	56	29	42.2	- 1.6	72	25	19	15	0	21	26	57	1.16	- 2.15	0.48	11	0	T	0	1.3	30	31	Nw	26	5	8	17	7.1	56
MT WASHINGTON OBS	6262			26	14	20.1	- 2.9	40	21	- 2	27	0	30			3.61	- 2.28	0.86	20	0	22.5	16			87Y	W	26	3	8	19	7.7	32
NEW JERSEY																																
ATLANTIC CITY	64	1015.9	1018.2	57	37	47.2	- 3.8	76	24	26	1	0	10	35	66	2.58	- 0.83	0.91	10	0	0.0	0	0.6	9	26	9	28+	1	12	17	7.7	27
ATLANTIC CITY U	11			54	43	48.2	- 1.7	72	25	35	11	0	0			2.58	- 0.80	0.80	10						39	WNW	2					
NEWARK	11	1016.9	1018.0	56	40	48.2	- 4.1	72	26+	32	1	0	1	34	61	3.01	- 0.50	0.99	13	0	0.0	0	0.4	32	24	31	25+	2	15	13	7.3	
TRENTON U	56			56	40	48.2	- 3.5	78	21	34	5+	0	0			2.79	- 0.42	0.84	13		0.0	0			26	NW	2	1	13	16	7.6	46
NEW MEXICO																																
ALBUQUERQUE	5310	835.8	1011.1	70	39	54.6	- 1.1	82	2	27	5	0	6	20	31	0.04	- 0.43	0.04	1	0	T	0	1.7	26	46	W	19	17	8	5	3.7	88
CLAYTON	4969			65	35	49.8	- 0.9	80	26	20	20	0	9			0.43	- 0.76	0.29	3		T	T						11	10	9	5.3	
RATON	6379			65	29	47.1	0.2	78	2	9	5	0	18			0.66	- 0.40	0.31	8		3.6	1						7	14	9	5.7	
ROSWELL	3617			77	43	59.8	0.8	90	2	30	6	1	2			1.97	1.24	1.91	5	2	0.0	0			39	N	3	17	6	7	4.0	77
SILVER CITY	5373			72	42	56.8	0.4	78	29+	33	6	0	0			0.09	- 0.20	0.06	2		0.0	0						16	12	2	3.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1006.8	1017.7	55	33	44.0	-2.2	69	23	22	12	0	17	28	56	1.46	-1.31	0.80	11	0	T	0	2.4	26	33	SW	21	1	7	22	8.0	41
BINGHAMTON	1590	957.3	1017.2	50	33	41.5	-2.0	70	21	25	12+	0	14	31	70	2.51	-0.43	0.83	14	1	2.0	1	1.6	25	26	NW	25	1	5	24	8.4	43
BUFFALO	705	990.5	1016.5	51	36	43.3	-0.2	74	20	28	12	0	8	34	72	2.06	-0.95	0.96	19	0	3.2	1	4.8	22	31	E	27	2	6	22	8.0	39
NEW YORK U	132	1013.9	1017.1	58	42	49.7	-1.7	73	26+	34	1	0	0	31	54	2.69	-0.74	1.04	13	0	0.0	0	1.0	1	28	NE	13	3	14	13	6.9	43
J.F. KENNEDY	15	1017.3	1017.9	55	40	47.5	-1.5	74	25	33	1	0	0	35	68	3.24	-0.24	1.21	12	0	T	0	1.2	16	23	19	21+	2	13	15	7.0	
NEW YORK LA GUARDIA	11	1016.3	1018.0	55	42	48.6	-2.6	71	25	36	1	0	0	35	64	2.31	-1.26	0.94	14	0	T	0	1.6	5	26	NE	13	3	14	13	7.2	
ROCHESTER	547	997.0	1017.5	54	35	44.4	-0.7	75	21	27	12	0	13	33	67	2.04	-0.63	0.57	13	0	0.9	T	3.0	25	34	NW	21	6	4	20	7.5	46
SYRACUSE	410	1001.7	1016.9	52	33	42.6	-3.4	75	21	24	1	0	17	30	64	3.05	-0.03	1.18	11	0	0.5	T	1.3	27	34	NW	21	4	3	23	7.5	53
NORTH CAROLINA																																
ASHEVILLE	2140	940.4	1016.9	63	41	52.0	-2.6	77	24	24	11	0	10	42	76	5.47	1.45	2.17	14	2	T	0	0.5	22	29	34	10+	5	8	17	7.2	54
CAPE HATTERAS R	7	1017.6	1018.0	65	49	56.8	-2.5	77	28+	31	11	0	2	48	72	1.21	-1.78	0.46	7	3	0.0	0	2.0	25	39	SSW	1	6	13	11	6.0	63
CHARLOTTE	735	989.5	1017.0	70	47	58.7	-1.6	83	24	33	6	0	0	45	64	1.73	-1.76	0.66	10	3	0.0	0	1.9	22	29	SW	7	9	7	14	6.4	64
GREENSBORO	897	985.8	1017.5	66	44	55.9	-1.5	84	24	30	6	0	3	44	70	0.97	-2.46	0.28	13	0	0.0	0	1.6	25	30	W	2	2	10	18	7.4	39
RALEIGH	434	1001.4	1017.4	69	45	57.0	-2.3	86	24	32	17+	0	2	42	62	2.02	-1.50	1.04	12	4	0.0	0	2.2	23	29	25	7+	8	7	15	6.5	46
WILMINGTON	28	1016.9	1018.2	73	51	62.2	-0.3	84	25+	35	11+	0	0	49	66	1.48	-1.38	0.78	9	5	0.0	0	3.1	21	32	SW	1	10	7	13	5.8	75
NORTH DAKOTA																																
BISMARCK	1647	957.0	1018.0	48	28	38.0	-5.5	69	23	17	20+	0	19	25	63	1.23	0.01	0.75	8	0	4.9	2	3.6	36	32	NW	28	3	11	16	7.5	52
FARGO	896	984.8	1018.3	46	29	37.2	-4.8	70	16	11	20	0	24	27	69	1.78	0.06	0.74	8	1	5.0	2	3.3	36	40	SE	27	3	7	20	8.0	35
WILLISTON	1899			47	26	36.8	-5.5	70	15	11	20	0	24			0.94	0.00	0.43	8		6.2	4			36	E	26+	1	11	18	8.0	52
OHIO																																
AKRON	1208	971.2	1016.2	55	37	46.0	-2.7	78	18	26	11	0	16	37	74	3.32	-0.02	0.99	16	3	4.8	T	0.8	23	25	26	1	2	4	24	8.3	
CINCINNATI OBS	761			60	44	52.1	-2.1	80	18	30	10	0	2			5.70	2.07	1.28	18		T	T			34	W	1					24
CLEVELAND	777	986.5	1016.1	54	38	46.2	-0.4	79	20	26	8	0	9	35	69	3.61	0.20	1.56	16	2	2.5	T	1.2	24	35	W	1	3	6	21	8.1	37
COLUMBUS	812	986.1	1016.2	58	41	49.4	-1.4	80	18	25	8	0	9	39	71	4.89	1.40	1.37	16	2	0.7	T	0.8	23	36	W	1	0	6	24	8.8	39
DAYTON	1002	979.3	1015.9	59	41	49.7	-1.0	80	18	25	5	0	9	41	75	2.63	-0.69	0.81	17	2	1.7	1	1.5	22	34	W	1	1	5	24	8.7	37
MANSFIELD	1295			54	38	45.5	-1.4	76	18	26	8	0	13			2.73	-0.58	0.72	17	2	2.7	1						3	3	24	8.4	
TOLEDO	676	990.9	1016.4	55	36	45.6	-1.3	80	18	23	8	0	14	35	70	2.81	0.04	1.15	13	2	1.1	T	0.8	31	32	NW	1	1	5	24	8.3	42
YOUNGSTOWN	1178	972.9	1016.4	53	36	44.6	-2.4	77	20	27	17+	0	15	35	73	4.34	0.64	1.43	17	4	7.2	1	0.8	22	40	27	1	3	3	24	8.2	
OKLAHOMA																																
OKLAHOMA CITY	1280	967.2	1013.6	70	46	57.8	-2.1	88	19	33	20+	0	0	42	61	3.68	0.56	1.34	8	5	0.0	0	3.7	3	36	NW	2	10	6	14	6.0	62
TULSA	650	989.8	1014.0	71	45	57.9	-1.0	92	27	32	21+	1	2	42	61	4.84	0.82	1.22	10	8	0.0	0	1.9	1	38	S	10	8	7	15	6.3	58
OREGON																																
ASTORIA	8	1020.3	1021.0	57	41	49.0	0.0	78	4	30	19	0	4	41	77	2.90	-2.28	1.27	12	0	T	0	3.5	29	22	26	12	7	3	20	7.3	
BURNS U	4151	873.7	1017.5	61	31	45.8	-0.2	78	1	19	20	0	18	23	45	0.15	-0.60	0.14	2		T	T	4.6	32				10	8	12	5.4	
EUGENE	359	1006.8	1020.2	64	41	52.5	1.7	75	5+	34	29	0	0	43	75	0.52	-1.86	0.29	3	0	0.0	0	1.7	32	23	36	3	7	9	14	6.6	
MEACHAM	4050			50	32	41.2	0.4	66	8	18	19	0	17			0.92	-1.88	0.40	8		3.9	4						6	7	17	6.6	
MEDFORD	1298	970.9	1018.7	70	37	53.5	2.7	82	5+	27	19	0	7	37	59	0.45	-0.61	0.35	4	0	0.0	0	2.5	32	20	35	28+	9	10	11	6.5	
PENDLETON	1482	964.8	1018.6	64	40	52.0	0.0	77	6	23	19	0	4	31	47	0.08	-1.01	0.05	2	0	T	0	4.6	27	35	26	25	8	10	12	5.7	
PORTLAND	21	1017.0	1020.3	61	40	50.6	-1.2	75	5	32	19	0	1	41	73	0.85	-1.24	0.21	10	0	0.0	0	1.5	30	30	E	4+	6	8	16	7.1	61
SALEM	196	1012.9	1020.2	64	37	50.5	-0.6	79	4	28	19	0	4	41	71	1.07	-1.26	0.41	6	0	0.0	0	1.7	29	23	20	11	8	8	14	6.2	
SEXTON SUMMIT R	3836	885.2	1018.0	58	37	47.6	2.9	73	6	25	26	0	13			1.13	-0.72	0.65	4		T	T			33	33	27+	12	10	8	5.0	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	83.9	0.3	91	12	74	2	7	0			4.19	0.57	3.07	12	0	0.0	0						1	12	17	7.7	
ENIWETOK	13	1009.8	1010.3	86	77	81.5	-0.8	88	3	73	1	0	0	74	78	1.86	0.58	0.49	10		0.0	0	16.8	6								
TAGUAC GUAM R	361			86	74	80.0	0.1	88	19	72	25+	0	0			1.31	-1.72	0.32	15		0.0	0			26	SE	9+					55
JOHNSTON	7	1014.2	1014.8	81	73	77.1	-0.9	82	28+	67	1	0	0	66	69	0.31	-1.97	0.14	10	0	0.0	0	15.9	6	30	E	25+	7	16	7	5.8	66
KOROR R	94	1005.8	1009.4	88	76	81.9	0.5	90	11	73	30	1	0	75	83	15.27	4.88	5.33	23	3	0.0	0	5.9	8	24	SE	28	0	0	30	10.0	63
KWAJALEIN	8	1008.8	1009.5	86	77	81.3	0.5	88	29	73	10+	0	0	74	81	11.65	6.63	3.51	18	0	0.0	0	16.8	7	30	7	17	1	2	27	9.2	
MAJURO	10	1009.1	1009.5	84	77	80.7	0.1	87	24	73	9	0	0	75	83	16.03	3.72	3.26	20	1	0.0	0	12.4	8	30	E	30	0	8	22	8.8	48
MARCUS ISLAND	20	1014.9	1016.6	81	70	75.1	-0.6	85	30	63	1	0	0	68	79	0.94	-0.97	0.25	10	1	0.0	0	6.3	9	35	N	2	7	16	7	5.6	73
PAGO PAGO	12	1009.8	1010.0	88	76	81.6		92	6	72	18+	8	0	75	83	10.42		2.73	22	1	0.0	0	5.3	10	27	SE	23	2	10	18	8.7	43
PONAPE R	123	1004.6	1005.7	87	76	81.7	1.2	89	7	73	7	0	0	75	81	6.07	-13.97	0.97	20	0	0.0	0	7.9	7	18	NE	29+	0	4	26	[illegible]	[illegible]
TRUK MOEN ISLAND	5	1008.5	1008.9	86	78	82.0	1.2	89	7	74	11+	0	0	75	79	7.53	-4.79	3.67	16	0	0.0	0	10.2	8	28	NE	9	0	7	23	8.6	79
WAKE	11	1014.9	1015.2	83	73	78.0	-0.4	85	19	69	12	0	0	70	79	1.30	-0.57	0.76	12	0	0.0	0	13.6	5	26	4	8	10	15	5	5.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max. 90 F. or above	No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP [illegible]	62	[illegible]	[illegible]	[illegible]	77	82.1	0.3	89	30+	73	9	0	0	75	81	1.86	- 4.52	0.71	14	0	0.0	0	9.3	5	25	NE	20	0	2	28	9.7	37
PENNSYLVANIA																																
ALLENTOWN	387	[illegible]	[illegible]	55	36	45.7	- 3.6	70	26+	27	1	0	10	34	68	3.75	- 0.01	1.23	13	0	0.0	0	1.1	30	28	29	2	1	11	18	7.8	
ERIE	732	[illegible]	1016.7	52	37	44.5	- 1.0	78	20	28	14	0	8	36	76	4.26	0.70	1.31	16	2	4.8	1	2.5	25	30	16	28	4	7	19	7.2	
HARRISBURG	338	1004.7	1017.6	56	[illegible]	49.0	- 2.8	76	15	29	5	0	3	38	68	3.44	0.42	0.98	15	0	T	0	1.0	30	26	NW	2	2	6	22	8.1	43
PHILADELPHIA	5	[illegible]	1017.9	57	[illegible]	47.8	- 4.2	78	21	26	11	0	5	34	62	4.35	0.95	1.83	13	1	T	0	1.0	36	25	NE	13+	1	10	19	7.9	42
PITTSBURGH	1137	[illegible]	1016.4	56	39	47.9	- 1.1	78	20	28	17+	0	8	37	70	3.73	0.65	1.08	15	4	2.7	T	1.1	30	44	28	1	0	6	24	8.6	29
READING U	266			56	41	48.7	- 3.5	74	21	33	5	0	0			4.08	0.66	0.90	14		T	T			37	NW	1	1	12	17	7.6	37
SCRANTON	930	983.1	1017.7	55	37	46.0	- 2.4	69	23	26	1	0	7	33	65	2.91	- 0.36	0.79	13	2	0.7	T	1.0	23	23	NW	25+	1	6	23	8.1	46
WILLIAMSPORT	527	998.0	[illegible]	57	36	46.6	- 2.6	72	26	28	15+	0	11	34	66	2.83	- 0.72	0.83	17	0	0.1	T	0.6	29	23	25	6	2	4	24	8.1	
RHODE ISLAND																																
BLOCK ISLAND	110			43	36	42.2	- 2.4	61	26+	29	10	0	5			1.32	- 2.29	0.53	7		0.0	0						10	5	15	6.1	
PROVIDENCE	51	[illegible]	1017.9	54	34	43.8	- 3.4	71	25	27	6	0	12	31	65	1.48	- 2.27	0.55	10	0	T	0	1.3	24	29	30	25	3	11	16	7.3	44
SOUTH CAROLINA																																
CHARLESTON	41	[illegible]	1017.9	75	51	63.2	- 1.6	85	13	35	11	0	0	51	68	2.83	- 0.05	1.68	6	4	0.0	0	3.4	19	44Y	W	2	9	10	11	5.6	51
CHARLESTON U	9			72	58	64.8	- 0.8	81	28	46	5	0	0			2.69	0.15	1.91	9		0.0	0			38	W	2					
COLUMBIA	217	1009.1	1017.2	76	50	63.1	- 0.5	88	1	33	11	0	0	48	62	3.58	- 0.43	1.31	8	5	0.0	0	3.0	22	32	26	7	11	5	14	5.9	52
GRVLLE-SPARTANBURG	957	982.4	1017.0	71	47	59.1	- 1.8	82	1	32	6	0	1	45	66	2.53	- 1.41	0.61	14	2	0.0	0	2.2	24	29	SW	1	8	9	13	6.4	52
SOUTH DAKOTA																																
ABERDEEN	1296	969.9	1017.6	51	27	38.9	- 5.9	73	16	5	30	0	22	27	64	0.92	- 1.12	0.36	9	0	7.2	3	2.8	2	32	4	26	5	6	19	7.3	
HURON	1282	969.5	1017.1	53	30	41.3	- 3.7	76	25	15	20	0	18	30	68	1.95	0.11	0.76	11	0	6.3	4	1.8	36	34	NW	1	5	7	18	7.3	54
RAPID CITY	3165	903.6	1016.9	50	27	38.7	- 5.8	75	25	2	20	0	23	25	63	2.50	0.83	0.63	13	1	10.0	7	6.9	34	42	NW	2	2	9	19	7.5	48
SIOUX FALLS	1418	964.8	1017.0	52	30	41.1	- 4.8	74	25	18	9	0	21	29	65	1.71	- 0.60	0.86	7	0	0.9	1	2.4	2	26	32	1	4	7	19	7.3	
TENNESSEE																																
BRISTOL	1507	962.4	1016.7	65	44	54.9	- 1.7	80	23	26	10	0	4	43	68	5.04	1.88	2.08	16	3	T	0	2.2	27	28	31	1	1	9	20	8.0	
CHATTANOOGA	670	991.5	1016.4	70	47	58.3	- 2.6	81	13	28	6	0	6	46	69	2.93	- 1.36	0.98	11	7	0.0	0	2.0	21	30	NW	8	2	9	19	7.6	47
KNOXVILLE	980	981.7	1016.8	67	49	58.9	0.0	83	18	32	10	0	1	45	64	2.88	- 0.82	0.67	14	5	0.0	0	2.9	25	49	W	30	3	5	22	7.8	36
MEMPHIS	255	1005.4	1015.6	71	51	60.6	- 0.8	83	20	32	6	0	1	47	64	5.42	0.79	1.41	11	7	0.0	0	2.3	21	35	SE	18+	6	6	18	6.8	57
NASHVILLE	590	993.9	1015.5	69	49	58.8	- 0.8	80	23+	29	10	0	3	46	66	5.08	1.34	1.47	15	6	0.0	0	2.3	22	27	SE	18	3	7	20	7.6	42
OAK RIDGE	905			67	47	57.0	- 0.8	81	24+	28	10	0	2			5.50	1.30	2.74	13		0.0	0			29Y	N	13+	4	3	23	8.2	
TEXAS																																
ABILENE	1762	951.6	1012.4	76	51	63.2	- 1.1	91	27	39	15	5	0	44	58	6.80	4.53	2.31	8	8	0.0	0	1.1	14	34	NW	29	13	5	12	5.2	70
AMARILLO	3604	888.9	1011.9	69	40	54.5	- 3.0	87	2	25	20+	0	4	33	53	0.87	- 0.45	0.67	3	2	0.0	0	1.4	13	38	N	8	11	10	9	5.1	70
AUSTIN	597	990.9	1012.7	79	59	69.1	1.4	90	27	42	6	1	0	56	68	3.74	0.19	2.03	4	5	0.0	0	3.5	15	27	W	17	7	8	15	6.5	40
BROWNSVILLE	16	1011.5	1011.9	81	67	74.1	0.2	90	18	53	6	1	0	66	82	0.80	- 0.75	0.40	6	3	0.0	0	11.3	14	32	SE	24	3	12	15	7.0	57
CORPUS CHRISTI	41	1010.8	1012.5	80	64	71.9	0.2	91	3	43	6	1	0	64	81	5.03	2.89	3.76	7	4	0.0	0	10.0	14	45	S	14	3	7	20	7.7	26
DALLAS	481	996.3	1013.4	75	55	64.7	- 0.3	87	11	39	21+	0	0	52	68	15.40	11.40	3.60	11	11	0.0	0	2.5	15	43	NW	29	8	6	16	6.4	53
DEL RIO	1026	975.6	1011.2	84	57	71.0	- 0.6	95	12	44	6	6	0	53	60	4.36	3.00	3.32	6	6	0.0	0	5.1	11	24	33	17	10	7	13	5.9	
EL PASO	3918	879.8	1009.9	78	52	65.1	1.7	85	30+	34	6	0	0	29	31	1.08	0.79	1.08	2	2	0.0	0	3.8	25	45	SW	19	13	15	2	3.4	90
FORT WORTH	537	993.2	1013.6	74	53	63.8	- 1.0	86	11	39	5	0	0	52	68	10.74	7.14	2.91	13	13	0.0	0	1.6	13	52	34	29	11	3	16	6.0	
GALVESTON U	7			73	65	68.8	0.3	77	30+	55	5	0	0			5.41	2.82	3.20	8		0.0	0			41	W	18					45
HOUSTON U	41			78	63	70.7	1.4	86	1	50	5	0	0			6.80	3.38	3.52	10		0.0	0										
HOUSTON	50	1011.9	1014.0	79	62	70.6	2.1	86	1	46	6	0	0	61	75	7.98	4.74	5.18	9	6	0.0	0	6.5	16	38	16	17	3	5	22	8.1	43
LUBBOCK	3254	901.1	1011.6	73	47	60.4	0.9	91	10	34	20	1	0	35	46	3.03	1.88	1.92	6	6	0.0	0	1.0	8	38	5	1	11	7	12	5.2	
MIDLAND	2851	913.6	1010.9	75	49	61.9	- 3.0	90	27	41	15+	1	0	36	48	2.44	1.61	1.25	6	4	0.0	0	1.3	8	30	4	28	11	6	13	5.5	
PORT ARTHUR	16	1014.2	1014.8	79	61	69.9	1.7	87	1	43	6	0	0	62	80	5.86	1.92	2.10	9	4	0.0	0	7.2	16	60	NW	18	2	7	21	7.7	46
SAN ANGELO	1903	945.5	1011.5	79	53	66.3	- 0.8	95	27	40	6	6	0	46	56	2.16	0.15	1.06	7	6	0.0	0	2.0	16	41	18	17	11	7	12	5.0	
SAN ANTONIO	788	985.1	1012.7	79	58	68.6	0.4	89	12	34	6	0	0	58	73	3.20	0.38	2.11	8	4	0.0	0	4.8	12	31	NE	14	6	9	15	6.5	61
VICTORIA	104	1009.1	1013.4	80	63	71.5	1.5	90	3	46	6+	1	0	62	76	4.02	1.40	2.75	7	5	0.0	0	7.7	14	49Y	NW	17	3	6	21	8.0	
WACO	500	995.3	1013.3	76	55	65.6	- 1.0	94	12	35	5	1	0	52	66	9.37	5.49	2.72	10	9	0.0	0	3.4	16	30	20	11	8	6	16	6.4	
WICHITA FALLS	994	976.3	1012.9	75	48	61.7	- 2.3	93	27	34	21	2	0	45	59	7.97	5.44	3.24	9	8	0.0	0	1.8	4	43	16	10	10	6	14	5.7	
UTAH																																
MILFORD	5028			66	29	47.6	- 0.1	82	16	16	20	0	23			0.59	- 0.13	0.29	3		3.6	1						14	8	8	4.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90 F. or above	Temperature: No. of days: Min. 32 F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	870.6	1014.7	64	36	49.6	- 0.3	77	16	23	4	0	9	27	46	1.43	- 0.33	0.64	6	4	2.8	2	0.3	32	34	N	26+	10	9	11	5.3	87
WENDOVER	4237			62	39	50.7	- 0.9	77	25+	22	20	0	3			0.27	- 0.24	0.16	4		T	T						10	11	9	4.7	
VERMONT																																
BURLINGTON	332	1004.4	1017.0	51	32	41.5	0.1	69	21	23	27	0	20	28	62	0.93	- 1.70	0.29	11	0	4.9	1	1.0	23	38	SW	21	2	6	22	8.1	60
VIRGINIA																																
LYNCHBURG	916			63	42	52.2	- 4.0	86	24	26	10	0	5			1.70	- 1.44	0.79	11	0	0.0	0			34	W	1	3	9	18	7.3	48
NORFOLK	22	1016.6	1017.6	64	45	54.5	- 3.5	85	24	34	3	0	0	43	69	1.68	- 1.48	0.69	11	1	0.0	0	2.1	20	33	W	1	7	8	15	6.7	52
RICHMOND	162	1011.9	1017.7	64	42	52.8	- 5.3	86	24	26	11	0	3	40	65	2.18	- 0.97	0.77	6	0	0.0	0	1.3	26	34	W	1	4	9	17	7.4	50
ROANOKE	1149	974.9	1017.1	61	42	51.5	- 4.9	83	24	29	11	0	4	39	67	2.59	- 0.51	0.80	14	0	0.0	0	2.7	26	32	28	1	3	8	19	7.8	
WASHINGTON																																
OLYMPIA	195	1013.2	1020.5	61	38	49.1	- 0.9	77	4	26	19	0	6	38	69	1.71	- 1.25	0.74	7	0	0.1	0	3.1	24	26	27	25	6	5	19	6.9	
SEATTLE TACOMA	400	1003.7	1020.2	58	42	50.0	0.8	75	4	35	11	0	0	39	71	1.99	- 0.41	1.04	9	2	T	0	2.1	23	26	34	18	6	6	18	6.9	50
SPOKANE	2356	933.0	1017.2	59	34	46.0	- 1.3	72	8	17	19	0	13	28	53	0.13	- 0.78	0.06	4	0	T	T	3.7	22	29	SW	11	7	8	15	6.4	70
STAMPEDE PASS R	3958			43	31	36.7	0.2	60	5	23	12	0	19			3.88	- 1.72	0.99	16		19.7	100						3	6	21	7.8	
TATOOSH ISLAND R	101	1017.3	1020.4	52	43	47.6	0.1	63	4+	35	12+	0	0	41	80	2.40	- 2.83	0.88	16	0	0.4	T	3.3	22	47	E	4	8	5	17	6.6	59
WALLA WALLA U	949			64	43	53.8	0.0	78	6	27	19	0	2			0.19	- 1.21	0.11	3		0.0	0			25	NW	1	8	8	14	6.0	70
YAKIMA	1052	979.7	1018.3	67	37	52.0	1.5	79	6	27	13	0	8	31	47	T	- 0.47	T	0	0	0.0	0	3.8	29	35	30	1	7	13	10	5.7	
WEST INDIES																																
SAN JUAN P.R.	15	1014.2	1016.7	85	72	78.5	1.9	91	10+	68	27	4	0	69	74	5.62	1.90	2.91	14	0	0.0	0	8.8	8	29	NE	22	12	11	7	5.3	77
SWAN ISLAND	28			85	78	81.4	- 0.1	87	22+	73	23	0	0			1.46	0.62	0.53	5	1	0.0	0						1	18	11	6.9	
WEST VIRGINIA																																
BECKLEY	2504	927.5	1016.8	57	40	48.6		78	24	24	10	0	13	39	74	4.60		0.97	22	4	6.6	3	4.9	21	32	26	3	2	3	25	8.7	
CHARLESTON	939	981.7	1015.9	64	45	54.1	- 1.2	84	24+	28	10	0	3	43	70	5.06	1.38	1.49	19	2	T	0	2.8	24	32	27	28	1	5	24	8.5	
ELKINS	1970	945.1	1016.9	57	37	47.4	- 2.8	80	20	25	17	0	14	39	77	6.63	3.15	2.02	19	1	5.0	1	3.1	27	44	30	28	1	2	27	9.0	
HUNTINGTON	827	985.8	1016.0	61	44	52.5	- 3.2	82	18	25	10	0	4	40	68	6.56	2.89	1.91	18	2	T	0	2.4	22	30	31	28	1	6	23	8.4	
PARKERSBURG U	615			60	44	52.1	- 2.0	82	20	30	10	0	3			5.55	2.30	1.15	19		T	T			37	W	28					24
WISCONSIN																																
GREEN BAY	682	990.5	1016.6	51	32	41.6	- 1.6	69	24	25	4+	0	21	31	70	1.38	- 1.08	0.41	12	1	0.9	1	2.2	2	29	NE	26	7	8	15	6.8	45
LA CROSSE	651	992.2	1017.2	55	35	44.7	- 2.3	72	25	25	4	0	8	31	64	0.60	- 2.15	0.26	8	1	T	T	1.1	34	24	27	28	7	8	15	6.8	
MADISON	858	984.4	1016.2	53	31	42.0	- 2.4	72	25+	21	10	0	22	32	70	1.54	- 1.03	0.42	10	2	0.1	T	2.9	36	51	NW	1	4	10	16	7.2	43
MILWAUKEE	672	991.2	1017.0	50	34	42.3	- 1.3	73	24	24	10	0	13	34	74	2.67	0.14	0.80	14	1	1.3	1	2.7	2	36	W	1	8	9	13	6.5	55
WYOMING																																
CASPER	5338	835.8	1015.3	52	26	38.9	- 4.2	72	26	- 4	19	0	23	22	57	1.29	- 0.40	0.49	11	1	17.0	6	3.1	30	36	25	26	2	8	20	7.7	
CHEYENNE	6126	810.0	1014.8	54	26	39.6	- 3.0	74	26	- 2	20	0	21	21	53	0.48	- 1.40	0.21	7	0	3.6	3	6.2	32	58	W	2	3	14	13	6.7	65
LANDER	5563	827.3	1014.9	53	27	40.0	- 3.2	70	15+	1	20	0	24	23	56	2.19	- 0.26	1.28	9	0	34.3	20	2.2	27	45	W	26	2	12	16	7.6	71
SHERIDAN	3964	878.4	1017.5	50	27	38.5	- 5.1	69	9	3	20	0	23			2.25	0.09	0.72	14	1	12.9	4	4.7	32	56	NW	2	2	9	19	8.1	52

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No of days		Snow, Sleet		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb	Mb.	C.	C.	C	C	C		C.				C.	%	Mm.	Mm	Mm.			Mm	Mm	M.p.s.		M p.s.							%
ALABAMA																																
BIRMINGHAM	189	994.2	1016.6	23.3	10.0	16.8	-0.5	30.0	13	- 0.6	10	0	3	9.4	67	213	99	129	10	4	0	0	1.2	22	15.2	S	22+	8	6	16	6.5	58
HUNTSVILLE	183	993.2	1016.2	23.3	11.1	17.2	0.8	29.4	22	1.1	10+	0	0	8.3	58	103	1	28	12	7	0	0	1.2	19	13.0	16	18	6	7	17	6.6	
MOBILE	64	1009.1	1016.9	25.6	15.0	20.2	0.4	30.0	28+	5.0	5	0	0	14.4	74	60	-101	39	9	6	0	0	2.5	18	13.9	15	18	7	6	17	6.4	
MONTGOMERY	59	1009.5	1016.9	25.6	12.8	19.2	1.4	30.6	13	3.9	11+	0	0	11.1	64	31	- 93	23	5	4	0	0	1.7	21	10.7	W	8+	10	6	14	5.7	53
ALASKA												B																				
ANCHORAGE PRK STRIP	26			6.1	- 2.2	1.8	-0.3	11.7	30+	- 6.7	23+	0	24			12	1	4	6	0	76	152										
ANCHORAGE	43	1012.9	1017.8	5.6	- 2.2	1.8		11.7	30	- 7.8	1	0	22	- 5.0	63	18		6	7	0	155	356	0.4	26	9.4	15	27+	7	9	14	6.2	60
ANNETTE	34	1015.6	1019.7	10.0	1.7	6.0	-0.3	18.3	6	- 5.6	11	0	6	0.0	71	82	-150	21	11	0	58	25	0.4	25	13.0	34	9+	4	9	17	7.4	
BARROW	7	1028.4	1029.2	-16.7	-24.4	-20.6	-2.9	- 5.6	28	-31.7	22+	0	30	-23.3	79	7	4	7	2	0	74	483	3.4	9	13.9	33	9	9	11	10	5.5	
BARTER ISLAND	12	1026.8	1028.8	-16.7	-26.7	-21.6	-4.3	- 4.4	28	-36.7	8	0	30	-25.0	71	1	- 3	1	4	0	23	787	0.8	10	15.6	27	24	15	8	7	4.0	
BETHEL	38	1012.5	1018.5	0.0	-10.0	- 5.0	-1.6	10.0	29	-20.6	21+	0	28	- 7.8	80	4	- 10	4	2	0	8	406	2.8	1	13.4	32	10	6	9	15	6.7	
COLD BAY	29	1009.5	1013.4	3.3	- 0.6	1.3	0.6	7.8	29+	- 7.8	3	0	17	- 0.6	87	33	- 4	12	15	0	36	229	3.9	14	23.2	16	17				9.3	
FAIRBANKS	133	1003.1	1020.7	3.3	- 8.9	- 2.7	-1.3	12.2	30	-17.2	21	0	28	- 9.4	62	8	2	6	4	0	38	559	0.4	31	10.7	21	20	10	11	9	5.2	
JUNEAU	4	1019.0	1019.7	8.3	- 1.7	3.4	0.1	15.6	8	- 8.3	12	0	22	- 0.6	81	53	- 20	11	13	0	38	25	1.7	11	14.3	12	21	8	3	19	7.0	41
KING SALMON	13	1014.2	1016.4	2.8	- 5.0	- 1.1	-1.5	9.4	30	-15.6	1	0	24	- 3.9	79	12	- 4	5	9	0	20	330	1.5	6	13.0	33	11+	4	7	19	7.4	
KOTZEBUE	3	1023.0	1023.7	- 7.8	-17.8	-12.7	-2.3	5.6	30	-28.9	24	0	30	-16.1	76	4	- 4	2	4	0	117	864	0.8	5	16.1	31	11	8	6	16	6.5	
MC GRATH	106	1006.8	1019.8	1.7	-11.7	- 4.9	-2.5	9.4	29	-22.8	21+	0	30	-12.2	56	8	- 4	4	4	0	20	483	1.1	35	9.4	28	20+	9	10	11	5.7	
NOME	4	1020.7	1021.3	- 4.4	-14.4	- 9.3	-3.3	6.1	30	-26.1	20	0	30	-12.8	75	15	- 5	10	6	0	157	787	3.1	4	19.7	31	11+	11	8	11	5.5	48
ST. PAUL ISLAND	7	1013.2	1014.2	- 0.6	- 3.9	- 2.3	-0.3	5.6	30	-10.0	13	0	26	- 4.4	86	53	29	25	18	0	363	533	6.2	5	20.6	1	17+	1	3	26	9.2	
SHEMYA	37	1002.7	1006.4	3.3	- 1.1	1.0	-0.9	5.0	21+	- 5.0	1	0	25	- 1.1	84	54	2	18	18	0	64	T	1.6	7	19.2	7	18	1	3	26	8.8	
YAKUTAT	9	1017.6	1018.6	5.0	- 3.9	0.7	-2.1	12.2	30+	-10.0	11	0	30	- 2.2	83	204	21	100	12	0	470	610	0.8	12	9.4	12	2	8	4	18	7.0	
ARIZONA																																
FLAGSTAFF	2131	785.6	1013.2	16.7	- 2.8	7.1	0.8	22.8	1	-13.3	20	0	25	- 7.8	38	7	- 23	7	2	1	130	127	1.4	21	10.7	21	18+	13	9	8	4.4	
PHOENIX	340	971.6	1010.1	31.1	11.1	21.0	1.4	35.6	1	6.1	22	15	0	0.0	27	T	- 8	T	0	1	0	0	0.6	16	17.9Y	SW	18+	13	13	4	3.8	92
TUCSON	788	923.5	1010.5	27.8	10.6	19.3	0.5	31.7	27+	6.1	22+	0	0	- 1.1	28	3	- 4	3	1	3	0	0	1.5	22	18.8	SW	18	18	4	8	3.4	93
WINSLOW	1492	849.6	1012.6	22.8	2.8	12.9	-0.2	30.0	2	- 7.8	5	0	5	- 7.8	27	3	- 8	3	1	1	23	T	2.7	23	21.5	21	18	20	6	4	3.2	
YUMA	59	1003.1	1010.3	31.7	14.4	23.1	1.7	36.1	1	8.9	21+	17	0	2.2	29	T	- 2	T	0	0	0	0	1.0	24	13.4	NW	18	18	7	5	3.2	96
ARKANSAS																																
FORT SMITH	137	997.3	1014.0	22.8	8.9	15.8	-0.7	30.6	27	- 1.7	6	0	1	7.8	64	216	108	45	15	8	0	0	0.4	4	20.1	W	20	10	4	16	6.6	51
LITTLE ROCK	78	1005.4	1014.9	22.8	11.1	16.9	0.0	28.9	27	1.7	5	0	0	9.4	65	185	60	67	11	7	0	0	0.3	19	14.3	NW	20	7	6	17	6.8	47
TEXARKANA	113	1001.0	1014.2	24.4	11.7	17.9	0.2	31.1	12	2.2	5	0	0	11.1	68	423	288	130	12	12	0	0	1.5	18				10	6	14	5.9	
CALIFORNIA																																
BAKERSFIELD	151	996.6	1014.3	27.2	12.2	19.6	2.4	33.3	16	6.7	20	3	0	5.0	42	0	- 21	0	0	0	0	0	1.8	34	11.2	31	17	17	8	5	3.3	
BISHOP	1252			25.0	3.3	14.1	1.3	32.2	1	- 5.6	20	1	2			T	- 12	T	0		0	0						16	10	4	3.5	
BLUE CANYON	1609			15.6	5.6	10.7	3.1	21.7	15+	- 2.2	19	0	5			90	- 33	40	6		224	483			12.5	7	22	13	8	9	4.5	
BURBANK	221	988.8	1013.9	25.0	11.1	17.9	1.7	36.1	15	6.7	21	2	0	8.9	65	T	- 30	T	1	0	0	0	1.9	16	10.3	29	11	11	12	7	4.7	
EUREKA U	13			12.8	7.2	10.2	0.0	25.6	3	2.8	13	0	0			34	- 34	13	4		0	0			17.0	NW	26	8	8	14	6.3	64
FRESNO	100	1002.4	1014.2	27.8	9.4	18.6	2.3	33.9	25+	3.9	19	6	0	6.7	52	4	- 25	3	3	0	0	0	1.7	31	11.6	NW	17	18	7	5	3.1	92
LONG BEACH	10	1013.5	1014.9	22.2	12.2	17.1	1.6	37.2	15	8.3	20	2	0	9.4	67	T	- 20	T	0	0	0	0	1.4	23	8.0	28	18	8	13	9	5.3	
LOS ANGELES	30	1010.8	1014.5	20.6	12.2	16.5	1.3	35.0	15	10.0	20	1	0	10.6	72	T	- 26	T	1	0	0	0	2.2	25	13.9Y	W	18	9	13	8	5.0	
LOS ANGELES U	82			23.3	12.8	18.0	1.4	37.2	15	10.0	20	2	0			0	- 30	0	0		0	0			9.8	SW	18	10	14	6	4.5	61
MT SHASTA R	1080			18.3	2.2	10.3	1.7	25.6	24	- 6.1	19	0	7			12	- 58	6	3		0	0										
OAKLAND	2	1015.6	1016.0	20.0	11.7	16.0	2.3	31.1	23	8.9	13	0	0	9.4	69	10	- 25	6	3	0	0	0	2.8	28	10.7	27	17	13	8	9	4.8	
RED BLUFF	104	1002.0	1014.7	25.6	9.4	17.4	1.6	31.7	24+	1.1	20	0	0	3.3	47	17	- 29	10	3	1	0	0	1.4	35	13.4	N	26+	11	8	11	5.2	91
SACRAMENTO	5	1013.5	1014.5	25.6	8.9	17.2	2.5	31.7	24	4.4	21+	0	0	7.2	60	12	- 24	7	3	0	0	0	1.3	25	16.1	SW	17	16	8	6	3.8	92
SANDBERG R	1377			18.9	8.3	13.7	3.2	27.8	1	0.6	19	0	0			0	- 25	0	0	0	0	0			17.4	35	2				3.7	
SAN DIEGO	4	1013.5	1014.7	19.4	12.8	16.3	-0.1	27.2	14	10.0	20	0	0	10.6	73	T	- 20	T	0	0	0	0	1.7	25	8.9	NW	13	10	10	10	5.4	66
SAN FRANCISCO	2	1015.6	1016.4	19.4	8.9	14.4	1.2	28.9	23	5.6	20	0	0	7.2	70	10	- 23	6	3	0	0	0	3.3	29	11.6	WNW	30+	15	5	10	4.4	
SAN FRANCISCO U	16			18.3	10.6	14.4	1.2	28.9	23+	8.3	1	0	0			9	- 27	5	3		0	0			11.6	NW	20					77
SANTA CATALINA	478			19.4	11.1	15.4	1.7	32.2	15	8.3	20	1	0			1	- 30	1	2	0	0	0						11	10	9	4.9	
SANTA MARIA	72			21.1	7.2	14.1	1.0	35.0	15	2.2	21	2	0			1	- 29	1	2		0	0						13	9	8	4.3	
STOCKTON	7	1014.2	1015.3	26.1	8.9	17.5	2.1	32.2	24+	3.3	20	2	0	6.1	54	7	- 22	5	4	0	0	0	2.7	30	13.0	25	17	15	7	8	3.9	
COLORADO																																
ALAMOSA	2297			15.6	- 5.0	5.2	-0.2	20.6	29+	-12.8	5	0	27			4	- 14	2	6		91	25						10	17	3	4.4	
COLORADO SPRINGS	1873	808.7	1014.0	15.0	- 1.1	6.9	-0.7	25.0	26	-10.6	20	0	18	- 5.0	51	20	- 13	7	10	2	104	51	0.8	3	15.6	31	2	4	14	12	6.3	
DENVER	1610	834.1	1013.0	15.6	- 1.1	7.0	-1.0	26.1	26	-10.6	20	0	20	- 3.3	56	37	- 17	16	11	2	163	127	0.4	4	20.1	NW	2	7	12	11	6.1	73
GRAND JUNCTION	1480	849.6	1011.5	20.0	3.9	12.0	0.7	28.3	26	- 3.9	5	0	5	- 5.0	34	21	2	15	4	1	20	T	0.2	29	17.9	SW	26	13	8	9	4.7	80
PUEBLO	1428	853.4	1012.4	20.0	0.6	10.2	-0.2	28.9	26	- 7.2	5	0	12	- 2.8	47	6	- 24	2	6	2	33	25	0.8	6	21.9	N	7	8	14	8	5.3	77

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station O	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M	Mb.	Mb	C	C.	C	C	C		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
CONNECTICUT																																
BRIDGEPORT	2	1018.0	1018.6	10.6	1.7	6.3	-2.6	20.6	25	- 3.3	1	0	11	1.1	73	57	- 39	18	13	0	T	T	0.3	8	14.8	8	13	1	14	15	7.4	
HARTFORD	52	1010.8	1017.5	14.4	2.2	8.3	-0.9	21.7	25	- 1.7	12+	0	11	0.0	63	35	- 60	19	10	0	T	T	0.4	32	11.6	NW	25	1	12	17	7.6	49
NEW HAVEN	2			11.7	2.2	6.8	-1.4	21.7	25	- 2.8	1	0	8			51	- 48	16	11		T	T			10.7	NW	25	1	14	15	7.3	51
DELAWARE																																
WILMINGTON	24	1014.9	1017.9	13.9	3.9	8.8	-2.3	23.9	21	- 2.8	5	0	6	2.2	68	80	- 4	23	12	1	T	T	0.4	36	10.3	5	27+	1	12	17	7.7	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.2	1017.7	16.7	6.7	11.5	-1.7	30.0	24	1.7	3	0	0	3.9	64	85	5	31	11	0	0	0	0.7	1	13.4	NW	2	1	10	19	7.9	30
FLORIDA																																
APALACHICOLA U	4			23.9	16.7	20.3	0.6	27.2	30+	10.0	10+	0	0			55	- 55	50	5	0	0	0			11.2	W	1	14	8	8	4.4	72
DAYTONA BEACH	9	1017.6	1019.0	26.1	13.9	20.1	-0.4	29.4	27+	7.2	11+	0	0	13.3	69	65	- 10	65	1	0	0	0	1.5	14	11.2	35	10	9	14	7	5.2	
FORT MYERS	5	1018.0	1018.2	28.9	16.1	22.4	-0.2	32.2	30	10.6	8+	1	0	16.1	73	77	10	37	7	2	0	0	1.2	10	11.6	11	22+	11	13	6	4.7	
JACKSONVILLE	6	1017.6	1018.5	26.1	13.9	20.1	-0.3	31.7	13	5.6	11+	0	0	13.3	70	57	- 33	24	6	1	0	0	1.4	19	13.4	SW	1	12	9	9	4.8	82
KEY WEST	1	1016.6	1017.1	26.1	21.7	23.9	-0.4	27.8	28+	17.2	1	0	0	18.3	72	55	- 8	18	7	3	0	0	4.7	10	13.4	SE	21+	8	12	10	5.6	73
LAKELAND U	65			26.7	15.6	21.2	-0.7	30.6	14	10.6	6+	0	0			47	- 42	41	5		0	0						8	16	6	5.1	78
MIAMI	2	1017.6	1018.0	26.7	18.9	22.7	-0.8	31.7	4	13.9	7+	0	0	16.1	71	46	- 53	36	7	2	0	0	3.0	11	11.6	11	22+	4	17	9	6.4	
ORLANDO	33	1014.6	1018.7	27.2	15.6	21.4	-0.4	31.1	27	9.4	7	0	0	13.3	66	49	- 38	47	3	1	0	0	1.3	14	11.2	29	4	8	15	7	5.1	
PENSACOLA	34	1013.5	1017.5	24.4	15.6	19.8	-0.2	27.2	30	5.6	5	0	0	13.9	72	70	- 63	64	6		0	0	2.1	17	25.5	SE	18					70
TALLAHASSEE	17	1015.9	1018.1	26.1	11.7	19.0	-0.7	30.0	29+	2.8	11	0	0	12.2	70	56	- 62	24	7	2	0	0	1.4	19	10.7	16	18	9	14	7	5.2	
TAMPA	6	1018.0	1018.2	26.7	14.4	20.7	-1.2	31.7	29	7.2	11	0	0	13.3	67	40	- 32	39	3	2	0	0	0.9	14	13.9	27	4	8	14	8	5.3	74
WEST PALM BEACH	5	1017.6	1018.4	27.2	18.3	22.8	-0.5	32.2	4	11.7	3+	1	0	15.6	68	69	- 41	39	8	1	0	0	2.7	12	17.4	27	9	6	15	9	5.8	
GEORGIA																																
ATHENS	244	988.5	1017.5	22.8	9.4	16.1	-0.1	29.4	13	1.1	5	0	0	8.9	68	116	4	41	11	5	0	0	1.1	23	11.2	24	7	6	13	11	6.4	
ATLANTA	308	980.0	1016.9	21.7	10.0	15.9	0.2	28.9	13	- 0.6	5	0	2	8.3	66	106	- 7	36	10	3	0	0	1.0	20	13.4	SW	8	8	9	13	6.2	52
AUGUSTA	44	1011.9	1017.2	24.4	8.9	16.8	-0.6	30.6	24+	0.0	3	0	1	8.3	63	60	- 30	41	8	4	0	0	1.2	21	11.2	26	7+	8	9	13	6.1	
COLUMBUS	117			25.6	11.1	18.4	0.8	30.0	13	1.7	6+	0	0	10.6	66	70	- 46	26	5		0	0	1.0	22	9.8	26	6	9	6	15	5.9	
MACON	108	1004.7	1017.6	25.6	10.6	18.3	-0.4	30.6	28+	1.7	11+	0	0	10.0	65	25	- 71	15	5	0	0	0	1.2	21	13.4	W	1	9	6	15	6.1	60
ROME	194			22.8	8.3	15.6	0.1	29.4	13	- 2.8	6	0	6			116	- 1	39	12		0	0										
SAVANNAH	14	1016.3	1018.2	25.6	11.1	18.2	-0.6	31.1	27+	0.6	3	0	0	10.6	67	48	- 46	14	7	3	0	0	1.6	20	15.2	W	7	10	11	9	5.4	63
HAWAII																																
HILO	9	1014.9	1016.0	26.1	17.8	22.1	0.1	29.4	12	15.0	21+	0	0	17.2	76	133	-170	55	18	0	0	0	1.4	35	11.6	1	19	0	13	17	7.9	26
HONOLULU	2	1015.6	1016.2	28.3	19.4	23.9	0.5	30.0	29+	15.6	20	0	0	15.6	62	12	- 22	5	5	1	0	0	2.9	4	11.6	N	19	8	16	6	5.5	83
KAHULUI	15	1013.9	1016.3	26.1	18.9	22.6	-0.4	29.4	28+	16.1	19+	0	0			14	- 23	5	14	0	0	0	4.2	5	12.5	N	19	0	23	7	6.4	65
LIHUE	31	1012.2	1017.5	25.0	17.2	21.0	-1.5	26.7	28+	13.9	22	0	0	16.1	74	41	- 43	22	16	0	0	0	3.4	4	9.8	NE	19	2	20	8	6.2	69
IDAHO																																
BOISE	865	916.0	1016.6	17.2	2.2	9.6	-0.7	27.8	1	- 5.6	19	0	11	- 2.8	46	15	- 14	8	5	0	T	T	1.1	31	14.8	NW	18	10	8	12	5.5	89
IDAHO FALLS 42NW R	1460			14.4	- 5.0	4.6	-1.6	23.3	1	-15.6	20	0	28			2	- 10	2	2				0.9	29	15.2	SW	26+					
IDAHO FALLS 46W R	1503			13.9	- 3.9	5.0	-1.3	22.2	1	-11.1	20	0	25			8	- 5	7	4	1	10	T	1.4	26	17.9	SW	26					
LEWISTON	431			17.2	3.3	10.4	-0.1	24.4	7	- 6.7	19	0	4			8	- 21	4	4		0	0						7	8	15	6.4	
POCATELLO	1358	862.2	1015.9	15.6	- 1.7	6.8	-1.3	23.3	25	- 7.8	4	0	22	- 6.1	44	8	- 19	5	4	0	33	T	3.2	24	20.1	SW	26	6	9	15	6.6	66
ILLINOIS																																
CAIRO U	96			18.9	8.9	13.8	-1.4	26.1	20	1.7	10+	0	0			240	137	45	16		0	0			12.5	NE	26	3	6	21	7.8	51
CHICAGO O HARE	201	991.2	1016.1	12.8	1.7	7.3	-1.1	24.4	18	- 4.4	10	0	9	1.1	66	160	85	46	14	5	T	T	0.8	1	14.8	27	1	4	11	15	7.3	
CHICAGO MIDWAY	185	993.2		13.3	4.4	8.7	-0.7	24.4	18	- 0.6	4	0	4	1.1	63	130	53	31	15	4	T	T	0.9	1	14.3	E	27	4	10	16	7.5	38
MOLINE	177	993.9	1015.8	13.9	2.8	8.3	-1.7	23.9	26+	- 5.6	10	0	6	2.2	67	101	20	25	16	5	T	T	0.6	35	21.5	SW	19	3	9	18	7.3	43
PEORIA	199	991.5	1015.8	14.4	3.3	8.9	-1.5	24.4	18	- 3.3	10	0	8	2.8	69	101		31	13	5	T	T	0.7	36	17.9	NW	1	2	11	17	7.8	44
ROCKFORD	221	988.2	1015.7	12.2	1.7	6.7	-2.1	21.1	24	- 5.0	10	0	11	0.6	68	126	49	36	12	2	T	0	1.0	1	13.0	22	19	5	10	15	6.9	
SPRINGFIELD	179	992.9	1015.3	14.4	5.0	9.7	-2.2	23.3	19	- 2.2	9	0	5	4.4	71	146	55	49	16	7	T	T	0.5	36	17.0	W	1	2	11	17	7.8	40
INDIANA																																
EVANSVILLE	116	1001.7	1015.8	17.2	6.1	11.8	-2.4	26.7	18	- 4.4	10	0	5	6.1	71	135	34	42	14	5	T	T	0.4	29	17.0	SW	20	3	8	19	7.8	45
FORT WAYNE	241	985.4	1015.8	12.8	2.8	7.7	-1.9	25.6	18	- 3.9	8	0	11	2.8	74	63	- 17	12	16	4	51	T	0.5	31	17.0	W	1	2	5	23	8.5	42
INDIANAPOLIS	241	986.1	1015.5	16.1	5.6	10.7	0.3	26.7	18	- 2.8	10	0	4	2.8	62	84	- 11	24	14	1	T	T	0.4	32	15.2	SW	6+	2	6	22	8.3	35
SOUTH BEND	236	987.1	1015.5	12.2	2.2	7.4	-1.2	24.4	18	- 3.9	4	0	8	0.6	65	145	54	42	17	3	137	76	0.4	33	13.0	29	20	1	9	20	8.1	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb	Mb.	C	C	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s		M.p.s							%
IOWA																																
BURLINGTON	212			13.9	3.3	8.8	-1.7	25.0	19	- 2.8	9	0	7	3.3	69	85	- 2		13	5	T		1.3	1	11.6	31	6+	4	9	17	7.3	
DES MOINES	286	981.0	1016.4	13.3	2.2	7.8	-1.5	25.0	26+	- 4.4	21	0	14	1.1	66	44	- 20	22	10	2	T	T	1.4	2	16.5	NW	19	5	7	18	7.4	47
DUBUQUE	325			12.2	1.7	7.1	-1.2	22.2	24	- 1.7	21+	0	11			73	- 5	29	15		T	T						3	10	17	7.4	
SIOUX CITY	334	976.3	1016.6	13.3	2.2	7.7	-1.7	27.2	26+	- 5.0	21+	0	12	0.0	61	17	- 40	6	6	2	T	T	1.2	36	17.0	NW	1	6	5	19	7.2	48
WATERLOO	265	983.7	1016.1	12.2	0.6	6.5	-2.0	22.8	25	- 3.3	21+	0	16	1.1	72	99	30	29	11	2	10	T	1.0	1	16.1	33	1	4	8	18	7.2	
KANSAS																																
CONCORDIA	448	962.1	1015.4	16.1	2.8	9.3	-2.2	27.2	25+	- 4.4	21	0	9	1.1	63	21	- 33	9	7	4	T	0	1.6	3	16.1	NW	1	6	6	18	6.9	48
DODGE CITY	787	923.1	1014.3	17.8	3.3	10.7	-1.3	29.4	16	- 4.4	5	0	10	1.7	61	55	9	34	5	3	T	0	1.0	4	21.5	NE	8	5	13	12	6.6	64
GOODLAND	1111	887.2	1014.6	16.1	0.6	8.3	-0.7	25.6	16	- 6.1	20	0	13	0.0	62	14	- 26	8	7	3	23	T	0.3	36	17.9	31	27+	9	12	9	5.9	
TOPEKA	267	983.4	1015.5	17.2	3.3	10.4	-2.0	28.3	17	- 4.4	21+	0	10	2.8	62	50	- 33	19	10	6	T	T	1.2	3	16.1	NW	27+	4	8	18	7.2	53
WICHITA	403	966.8	1014.7	18.9	5.0	11.9	-1.8	29.4	16	- 2.8	5	0	6	3.9	63	56	- 2	18	6	6	0	0	1.5	4	16.1	NW	27	4	11	15	6.9	55
KENTUCKY																																
COVINGTON	265	984.1	1015.8	14.4	5.6	10.1	-1.2	24.4	18	- 3.3	10	0	8	4.4	70	137	55	27	17	1	T	0	0.8	23	12.1	24	24+	0	5	25	8.8	
LEXINGTON	294	980.7	1016.3	16.1	7.2	11.4	-1.0	25.6	18	- 1.7	10	0	5	5.0	69	182	79	44	16	1	T	T	1.3	19	12.5	25	1	1	6	23	8.4	
LOUISVILLE	144	998.0	1015.7	16.7	7.2	11.9	-0.8	25.6	18	- 2.2	10	0	1	6.1	71	243	146	65	19	3	10	T	0.6	23	16.5	NW	1	0	8	22	8.2	43
LOUISIANA																																
ALEXANDRIA	28	1011.2	1015.3	25.6	12.8	19.1	0.3	29.4	27+	1.7	6	0	0	13.9	75	224	80	81	11	9	0	0	1.4	18	10.3	19	11+	9	4	17	6.4	
BATON ROUGE	20	1013.2	1016.1	25.6	14.4	19.9	-0.2	29.4	30+	5.0	5	0	0	13.9	72	202	81	82	11	8	0	0	1.9	16	10.3	20	26+	3	10	17	7.1	
LAKE CHARLES	4	1014.2	1015.3	26.1	16.1	21.0	1.1	29.4	30+	6.7	6	0	0	15.6	76	218	107	77	12	9	0	0	2.5	16	19.7	15	21	3	10	17	7.2	
NEW ORLEANS	1	1015.2	1015.9	25.6	15.6	20.4	0.4	30.0	30	4.4	6+	0	0	15.0	74	125	9	47	8	6	0	0	2.0	16	13.4	5	21	6	13	11	6.2	
SHREVEPORT	77	1004.7	1014.1	25.0	13.3	19.0	0.5	30.6	28+	2.8	5	0	0	11.7	68	204	88	52	13	12	0	0	1.9	18	15.6	34	30	7	10	13	6.5	47
MAINE																																
CARIBOU	190			7.8	- 1.7	3.1	0.7	15.0	30+	- 8.3	27	0	25			19	- 48	9	6		71	203						4	8	18	7.1	
PORTLAND	19	1014.9	1017.4	9.4	- 0.6	4.4	-1.4	19.4	25	- 4.4	7+	0	21	- 1.7	69	25	- 69	12	10	0	18	T	0.8	25	14.8	NW	26	5	11	14	6.8	55
MARYLAND																																
BALTIMORE	45	1012.2	1017.8	15.0	4.4	9.7	-2.6	26.7	24+	- 1.1	11+	0	7	1.7	63	112	20	47	15	0	T	0	0.6	36	15.2	S	7	1	11	18	7.8	34
MASSACHUSETTS																																
BLUE HILL OBS R	192			11.1	1.1	6.1	-1.5	19.4	25	- 3.3	1	0	12			35	- 67	13	11		T	T			15.2	WNW	25					50
BOSTON	5	1016.6	1017.8	11.1	3.9	7.7	-1.1	21.1	25	1.1	1	0	0	0.0	62	31	- 64	14	13	0	T	T	0.1	18	13.4	W	26+	3	9	18	7.3	54
NANTUCKET	13	1017.3	1017.5	9.4	0.0	4.8	-2.1	14.4	26+	- 3.3	17	0	18	1.1	80	38	- 57	11	11	0	T	0	0.3	23	12.5	E	13	11	6	13	5.9	62
PITTSFIELD	357			10.6	- 0.6	4.9	-1.2	19.4	23	- 5.0	1	0	23			46	- 52	21	14		28	T										
WORCESTER	301	979.7	1017.4	10.6	0.6	5.6	-1.4	18.3	22	- 3.9	1	0	19	- 1.7	66	41	- 59	19	7	0	20	T	1.5	27	12.1	31	11	3	11	16	7.1	
MICHIGAN																																
ALPENA	210	990.9	1016.7	9.4	- 1.7	3.8	-0.2	20.6	24	- 6.7	3	0	22	- 3.3	65	41	- 26	9	14	3	122	51	0.4	6	17.0	E	27	5	10	15	7.0	50
DETROIT	189	993.2	1016.2	12.2	3.3	7.9	-0.7	25.0	20	- 0.6	9+	0	6	0.0	61	73	- 4	25	10	2	18	T	0.6	33	15.6	27	21	2	7	21	7.8	45
DETROIT M WAYNE CO	193	991.5	1016.0	12.2	1.7	6.9	-1.6	23.9	20+	- 3.9	8	0	16	1.7	72	67	- 10	25	14	2	46	T	0.3	31				3	6	21	7.9	
DETROIT WILLOW RUN	217	987.8	1016.3	12.2	1.1	6.7	-2.1	24.4	18	- 3.9	12+	0	17	0.0	65	64	- 13	21	13	2	56	25	0.3	32	13.9	9	27	2	6	22	8.0	
FLINT	235	987.5	1015.9	11.1	1.7	6.4	-0.1	23.9	20	- 2.8	9	0	14	0.0	67	46	- 21	13	12	2	66	T	0.2	23	12.5	9	27+	2	9	19	8.0	
GRAND RAPIDS	239	986.1	1015.8	12.2	1.1	6.6	-1.1	21.7	20	- 3.9	8	0	18	1.7	74	117	43	29	15	3	71	25	0.4	33	13.4	NE	27+	2	12	16	7.5	45
HOUGHTON LAKE	351	973.9	1016.6	8.9	- 1.1	4.1		18.3	24	- 5.6	3	0	23	- 1.1	73	53		15	14	1	180	102	0.4	31	10.3	9	27	6	7	17	7.3	
LANSING	256	983.7	1015.8	11.7	0.6	6.1	-1.5	23.9	20	- 6.1	8	0	19	1.1	73	76	4	18	13	3	51	T	0.6	25	15.2	W	1	2	10	18	8.0	44
MARQUETTE U	206			7.2	- 0.6	3.2	-0.8	17.2	17	- 3.9	14+	0	22			40	- 28	12	15		315	254			16.1	SE	27	7	8	15	6.4	58
MUSKEGON	191	992.9	1016.1	11.7	1.1	6.4	-0.9	19.4	20	- 2.2	17+	0	15	1.1	73	88	23	21	15	3	94	T	0.4	34	14.8	9	27	5	8	17	7.2	
SAULT STE MARIE	220	989.5	1016.5	7.2	- 1.1	3.2	-0.1	14.4	24+	- 3.9	27+	0	23	- 2.2	72	43	- 12	13	13	2	127	51	1.3	32	18.8	SE	28	3	11	16	7.4	57
MINNESOTA																																
DULUTH	435	965.1	1017.8	5.0	- 2.2	1.5	-1.3	16.7	22	- 7.2	3	0	26	- 3.9	69	51	- 9	18	13	0	259	279	1.0	2	21.9	E	27	3	6	21	7.8	54
INTERNATIONAL FALLS	359	973.9	1018.3	5.6	- 2.8	1.4	-1.6	14.4	23+	-11.7	21	0	27	- 6.1	59	33	- 7	10	10	1	267	229	1.1	35	17.0	12	27	3	8	19	7.5	
MINNEAPOLIS	254	986.1	1017.1	10.6	1.1	5.7	-1.2	20.0	25	- 5.6	21	0	13	- 1.1	65	23	- 24	6	9	0	10	T	1.2	36	14.8	N	1	3	8	19	7.6	41
ROCHESTER	395	968.2	1016.7	9.4	0.6	4.9	-1.7	20.0	25	- 4.4	21	0	17	- 0.6	70	27	- 28	9	10	0	10	T	0.9	35	15.6	33	1	4	8	18	7.4	
ST CLOUD	315	978.3	1017.0	8.9	- 1.1	3.9	-2.1	18.3	16	- 6.1	30	0	22		66	42	- 9	18	9		41	25						2	6	22	8.3	
MISSISSIPPI																																
JACKSON	94	1004.1	1016.1	25.0	11.7	18.2	-0.1	30.6	13	1.7	10+	0	0	11.7	70	146	22	70	10	7	0	0	1.8	16	14.3	SE	21	8	8	14	6.2	57
MERIDIAN	88	1005.4	1016.4	25.0	10.6	17.9	-0.1	31.1	13	0.0	5	0	1	11.1	70	110	- 26	34	10	9	0	0	1.5	19	11.2	14	18	9	5	16	6.1	
VICKSBURG U	71			23.9	13.3	18.7	0.0	29.4	20	5.6	5	0	0			315	190	154	11		0	0			13.9	SE	21+	11	4	15	5.9	63

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm	Mm			Mm	Mm	M.p.s		M.p.s							%
MISSOURI																																
COLUMBIA	237	986.5	1014.9	16.1	5.6	10.8	-1.7	27.8	19	-1.7	5	0	4	2.8	63	105	21	36	14	4	T	0	0.8	3	20.1	NW	1	3	7	20	7.7	61
KANSAS CITY	226	988.2	1015.1	17.8	5.6	11.6	-1.6	27.8	17	-0.6	21+	0	4	2.8	59	77	-13	25	12	6	T	T	1.0	2	13.0	NW	27+	4	8	18	7.5	50
SAINT JOSEPH	247			20.0	3.9	11.9	-0.1	29.4	25	-6.7	21	0	10			27	-53	8	9	5	T	0	1.4	36	13.0	32	27+	4	7	19	7.0	
ST LOUIS	163	994.9	1015.6	16.7	5.6	10.9	-1.8	26.1	19	-1.1	10+	0	4	4.4	67	153	59	56	16	6	T	0	0.3	33	15.2	NW	1	2	5	23	8.2	46
SPRINGFIELD	386	969.5	1014.9	18.3	4.4	11.2	-1.9	28.3	27	-3.9	5	0	8	4.4	68	123	19	53	11	9	T	0	0.4	8	16.1	SW	19	8	5	17	6.9	47
MONTANA																																
BILLINGS	1087	891.3	1017.2	10.6	-1.7	4.5	-3.3	21.1	25	-10.6	19	0	22	-3.9	61	28	-5	8	9	3	64	25	1.6	32	21.0	NW	2	1	9	20	8.2	51
GLASGOW	696			9.4	-2.8	3.2	-3.1	19.4	15	-12.2	29	0	20			15	-11	5	9		43	51						3	7	20	7.7	
GREAT FALLS	1116	888.6	1017.9	10.6	-1.7	4.6	-1.9	21.1	1	-9.4	29+	0	20	-4.4	56	19	-6	8	7	0	152	25	2.2	27	16.1	NW	2	0	5	25	8.7	54
HAVRE	787			11.1	-2.8	3.9	-2.2	19.4	11+	-11.7	19	0	23			10	-14	6	6		150	76			17.9	NW	2	3	8	19	7.8	56
HELENA	1167	881.1	1018.0	13.3	-1.7	5.8	-0.4	23.9	1	-8.9	19	0	23	-3.9	54	13	-8	5	9	2	48	25	2.6	29	17.9	W	2+	0	8	22	8.5	56
KALISPELL	904	912.0	1018.0	11.7	-1.1	5.4	-1.1	19.4	6	-8.9	19	0	18	-2.2	63	17	-10	7	7	0	23	T	0.6	13	14.3	1	7	3	5	22	7.9	
MILES CITY	801	922.8	1017.3	11.7	-1.7	5.1	-2.6	20.6	25	-7.2	29+	0	19	-2.8	60	22	-5		11	0	23		1.7	32								
MISSOULA	972	905.5	1018.7	13.3	-0.6	6.5	-0.3	21.7	1	-8.9	19	0	18	-2.8	58	17	-8	7	10	1	145	76	1.2	31	13.0	W	1	4	8	18	7.2	60
NEBRASKA																																
GRAND ISLAND	561	949.5	1016.6	14.4	0.6	7.5	-2.3	27.2	25	-5.6	6	0	12	0.0	65	30	-27	17	9	1	10	T	1.0	36	14.3	34	1	7	5	18	6.8	
LINCOLN U	351			13.9	2.8	8.2	-2.8	26.7	25	-3.3	9	0	11			17	-45	7	9		T	T			15.2	SE	2	6	6	18	7.1	46
NORFOLK	471			12.8	0.6	6.7	-2.4	26.1	25	-6.7	9	0	16			24	-31	16	5		T	T						7	5	18	7.3	
NORTH PLATTE	846	916.7	1015.4	13.9	-0.6	6.6	-2.2	26.7	25	-7.2	20+	0	17	-0.6	65	27	-24	15	6	2	127	51	0.7	2	16.5	NW	2	5	9	16	6.9	59
OMAHA	298	980.7	1016.4	15.6	2.8	9.0	-1.9	28.9	25	-6.1	9	0	11	0.6	58	21	-44	9	8	2	T	T	1.2	2	16.5	NW	1	7	5	18	7.1	54
SCOTTSBLUFF	1206	878.1	1015.3	13.9	-2.2	5.8	-2.3	27.2	26	-19.4	20	0	18	-2.2	61	28	-18	12	6	2	142	102	1.5	35	17.0	32	2	4	10	16	6.9	
VALENTINE	789			12.8	-2.2	5.3	-2.3	27.2	26	-14.4	20	0	20			27	-23	8	10		157	152			15.6	SW	26	5	10	15	7.0	56
NEVADA																																
ELKO	1539	844.9	1016.4	17.2	-3.9	6.8	0.0	26.1	1	-11.1	20	0	27	-6.1	44	16	-5	14	4	0	51	T	1.4	26	13.0	26	21+	10	9	11	5.4	
ELY	1906	807.7	1014.3	16.1	-4.4	5.9	0.0	23.3	16	-14.4	20	0	27	-8.9	40	4	-20	3	3	1	36	25	0.7	30	13.9	NW	26	13	4	13	5.1	83
LAS VEGAS	659	935.3	1011.2	27.8	10.6	19.1	1.1	35.0	2	1.1	20	6	0	-9.4	16	T	-6	T	1	0	0	0	1.3	25	21.5	NW	18	17	7	6	3.3	94
RENO	1342	865.9	1015.4	21.7	-1.1	10.1	1.2	31.1	1	-7.2	27+	0	23	-5.0	37	1	-13	1	3	0	T	0	0.8	30	16.1	S	9	11	14	5	4.4	98
WINNEMUCCA	1310	867.9	1016.1	18.9	-2.2	8.1	0.4	28.9	1	-11.1	20	0	22	-7.8	35	11	-10	7	3	1	0	0	1.5	31	15.2	NW	26+	8	13	9	5.4	70
NEW HAMPSHIRE																																
CONCORD	104	1004.7	1017.6	13.3	-1.7	5.7	-0.9	22.2	25	-7.2	15	0	21	-3.3	57	29	-55	12	11	0	T	0	0.6	30	13.9	NW	26	5	8	17	7.1	56
MT WASHINGTON OBS	1909			-3.3	-10.0	-6.6	-1.6	4.4	21	-18.9	27	0	30			92	-58	22	20	0	572	406			38.9Y	W	26	3	8	19	7.7	32
NEW JERSEY																																
ATLANTIC CITY	20	1015.9	1018.2	13.9	2.8	8.4	-2.1	24.4	24	-3.3	1	0	10	1.7	66	66	-21	23	10	0	0	0	0.3	9	11.6	9	28+	1	12	17	7.7	27
ATLANTIC CITY U	3			12.2	6.1	9.0	-0.9	22.2	25	1.7	11	0	0			66	-20	20	10						17.4	WNW	2					
NEWARK	3	1016.9	1018.0	13.3	4.4	9.0	-2.3	22.2	26+	0.0	1	0	1	1.1	61	76	-13	25	13	0	0	0	0.2	32	10.7	31	25+	2	15	13	7.3	
TRENTON U	17			13.3	4.4	9.0	-1.9	25.6	21	1.1	5+	0	0			71	-11	21	13		0	0			11.6	NW	2	1	13	16	7.6	46
NEW MEXICO																																
ALBUQUERQUE	1618	835.8	1011.1	21.1	3.9	12.6	-0.6	27.8	2	-2.8	5	0	6	-6.7	31	1	-11	1	1	0	T	0	0.8	26	20.6	W	19	17	8	5	3.7	88
CLAYTON	1515			18.3	1.7	9.9	-0.5	26.7	26	-6.7	20	0	9			11	-19	7	3		T	T						11	10	9	5.3	
RATON	1944			18.3	-1.7	8.4	0.1	25.6	2	-12.8	5	0	18			17	-10	8	8		91	25						7	14	9	5.7	
ROSWELL	1102			25.0	6.1	15.4	0.4	32.2	2	-1.1	6	1	2			50	31	49	5	2	0	0			17.4	N	3	17	6	7	4.0	77
SILVER CITY	1638			22.2	5.6	13.8	0.2	25.6	29+	0.6	6	0	0			2	-5	2	2		0	0						16	12	2	3.7	
NEW YORK																																
ALBANY	84	1006.8	1017.7	12.8	0.6	6.7	-1.2	20.6	23	-5.6	12	0	17	-2.2	56	37	-33	20	11	0	T	0	1.1	26	14.8	SW	21	1	7	22	8.0	41
BINGHAMTON	485	957.3	1017.2	10.0	0.6	5.3	-1.1	21.1	21	-3.9	12+	0	14	-0.6	70	64	-11	21	14	1	51	25	0.7	25	11.6	NW	25	1	5	24	8.4	43
BUFFALO	215	990.5	1016.5	10.6	2.2	6.3	-0.1	23.3	20	-2.2	12	0	8	1.1	72	52	-24	24	19	0	81	25	2.1	22	13.9	E	27	2	6	22	8.0	39
NEW YORK U	40	1013.9	1017.1	14.4	5.6	9.8	-0.9	22.8	26+	1.1	1	0	0	-0.6	54	68	-19	26	13	0	0	0	0.4	1	12.5	NE	13	3	14	13	6.9	43
J.F. KENNEDY	5	1017.3	1017.9	12.8	4.4	8.6	-0.8	23.3	25	0.6	1	0	0	1.7	68	82	-6	31	12	0	T	0	0.5	16	10.3	19	21+	2	13	15	7.0	
NEW YORK LA GUARDIA	3	1016.3	1018.0	12.8	5.6	9.2	-1.4	21.7	25	2.2	1	0	0	1.7	64	59	-32	24	14	0	T	0	0.3	5	11.6	NE	13	3	14	13	7.2	
ROCHESTER	167	997.0	1017.5	12.2	1.7	6.9	-0.4	23.9	21	-2.8	12	0	13	0.6	67	52	-16	14	13	0	23	T	1.3	25	15.2	NW	21	6	4	20	7.5	46
SYRACUSE	125	1001.7	1016.9	11.1	0.6	5.9	-1.9	23.9	21	-4.4	1	0	17	-1.1	64	77	-1	30	11	0	13	T	0.6	27	15.2	NW	21	4	3	23	7.5	53
NORTH CAROLINA																																
ASHEVILLE	652	940.4	1016.9	17.2	5.0	11.1	-1.4	25.0	24	-4.4	11	0	10	5.6	76	139	37	55	14	2	T	0	0.2	22	13.0	34	10+	5	8	17	7.2	54
CAPE HATTERAS R	2	1017.6	1018.0	18.3	9.4	13.8	-1.4	25.0	28+	-0.6	11	0	2	8.9	72	31	-45	12	7	3	0	0	0.9	25	17.4	SSW	1	6	13	11	6.0	63
CHARLOTTE	224	989.5	1017.0	21.1	8.3	14.8	-0.9	28.3	24	0.6	6	0	0	7.2	64	44	-45	17	10	3	0	0	0.8	22	13.0	SW	7	9	7	14	6.4	64

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

APRIL 1966

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear 0-3	Partly cloudy, 4-7	Cloudy 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
NORTH CAROLINA																																
GREENSBORO	273	985.8	1017.5	20.0	6.7	13.3	-0.8	28.9	24	- 1.1	6	0	3	6.7	70	25	- 62	7	13	0	0	0	0.7	25	13.4	W	2	2	10	18	7.4	39
RALEIGH	132	1001.4	1017.4	20.6	7.2	13.9	-1.3	30.0	24	0.0	17+	0	2	5.6	62	51	- 38	26	12	4	0	0	1.0	23	13.0	25	7+	8	7	15	6.5	48
WILMINGTON	9	1016.9	1018.2	22.8	10.6	16.8	-0.2	28.9	25+	1.7	11+	0	0	9.4	66	38	- 35	20	9	5	0	0	1.4	21	14.3	SW	1	10	7	13	5.8	75
NORTH DAKOTA																																
BISMARCK	502	957.0	1018.0	8.9	- 2.2	3.3	-3.1	20.6	23	- 8.3	20+	0	19	- 3.9	63	31		19	8	0	124	51	1.6	36	14.3	NW	28	3	11	16	7.5	52
FARGO	273	984.8	1018.3	7.8	- 1.7	2.9	-2.7	21.1	16	-11.7	20	0	24	- 2.8	69	45	2	19	8	1	127	51	1.5	36	17.9	SE	27	3	7	20	8.0	35
WILLISTON	579			8.3	- 3.3	2.7	-3.1	21.1	15	-11.7	20	0	24			24	0	11	8		157	102			16.1	E	26+	1	11	18	8.0	52
OHIO																																
AKRON	368	971.2	1016.2	12.8	2.8	7.8	-1.5	25.6	18	- 3.3	11	0	16	2.8	74	84	- 1	25	16	3	122	T	0.4	23	11.2	26	1	2	4	24	8.3	
CINCINNATI OBS	232			15.6	6.7	11.2	-1.2	26.7	18	- 1.1	10	0	2			145	53	33	18		T	T			15.2	W	1					24
CLEVELAND	237	986.5	1016.1	12.2	3.3	7.9	-0.2	26.1	20	- 3.3	8	0	9	1.7	69	92	5	40	16	2	64	T	0.5	24	15.6	W	1	3	6	21	8.1	37
COLUMBUS	247	986.1	1016.2	14.4	5.0	9.7	-0.8	26.7	18	- 3.9	8	0	9	3.9	71	124	36	35	16	2	18	T	0.4	23	16.1	W	1	0	6	24	8.8	39
DAYTON	305	979.3	1015.9	15.0	5.0	9.8	-0.6	26.7	18	- 3.9	5	0	9	5.0	75	67	- 18	21	17	2	43	25	0.7	22	15.2	W	1	1	5	24	8.7	37
MANSFIELD	395			12.2	3.3	7.5	-0.8	24.4	18	- 3.3	8	0	13			69	- 15	18	17	2	69	25						3	3	24	8.4	
TOLEDO	206	990.9	1016.4	12.8	2.2	7.6	-0.7	26.7	18	- 5.0	8	0	14	1.7	70	71	1	29	13	2	28	T	0.4	31	14.3	NW	1	1	5	24	8.3	42
YOUNGSTOWN	359	972.9	1016.4	11.7	2.2	7.0	-1.3	25.0	20	- 2.8	17+	0	15	1.7	73	110	16	36	17	4	183	25	0.4	22	17.9	27	1	3	3	24	8.2	
OKLAHOMA																																
OKLAHOMA CITY	390	967.2	1013.6	21.1	7.8	14.3	-1.2	31.1	19	0.6	20+	0	0	5.6	61	93	14	34	8	5	0	0	1.7	3	16.1	SW	2	10	6	14	6.0	62
TULSA	198	989.8	1014.0	21.7	7.2	14.4	-0.6	33.3	27	0.0	21+	1	2	5.6	61	123	21	31	10	8	0	0	0.8	1	17.0	S	10	8	7	15	6.3	58
OREGON																																
ASTORIA	2	1020.3	1021.0	13.9	5.0	9.4	0.0	25.6	4	- 1.1	19	0	4	5.0	77	74	- 58	32	12	0	T	0	1.6	29	9.8	26	12	7	3	20	7.3	
BURNS U	1265	873.7	1017.5	16.1	- 0.6	7.7	-0.1	25.6	1	- 7.2	20	0	18	- 5.0	45	4	- 15	4	2		T	T	2.1	32				10	8	12	5.4	
EUGENE	109	1006.8	1020.2	17.8	5.0	11.4	0.9	23.9	5+	1.1	29	0	0	6.1	75	13	- 47	7	3	0	0	0	0.8	32	10.3	36	3	7	9	14	6.6	
MEACHAM	1234			10.0	0.0	5.1	0.2	18.9	8	- 7.8	19	0	17			23	- 48	10	8		99	102						6	7	17	6.8	
MEDFORD	396	970.9	1018.9	21.1	2.8	11.8	1.5	27.8	5+	- 2.8	19	0	7	2.8	59	11	- 15	9	4	0	0	0	1.1	32	8.9	35	28+	9	10	11	5.5	
PENDLETON	452	964.8	1018.6	17.8	4.4	11.1	0.0	25.0	6	- 5.0	19	0	4	- 0.6	47	2	- 26	1	2	0	T	0	2.1	27	15.6	26	25	8	10	12	5.7	
PORTLAND	6	1019.0	1020.3	16.1	4.4	10.3	-0.7	23.9	5	0.0	19	0	1	5.0	73	22	- 31	5	10	0	0	0	0.7	30	13.4	E	4+	6	8	16	7.1	61
SALEM	60	1012.9	1020.2	17.8	2.8	10.3	-0.3	26.1	4	- 2.2	19	0	4	5.0	71	27	- 32	10	6	0	0	0	0.8	29	10.3	20	11	8	8	14	6.2	
SEXTON SUMMIT R	1169	885.2	1018.0	14.4	2.8	8.7	1.6	22.8	6	- 3.9	26	0	13			29	- 18	17	4		T	T			14.8	33	27+	12	10	8	5.0	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.8	0.2	32.8	12	23.3	2	7	0			106	14	78	12	0	0	0						1	12	17	7.7	
ENIWETOK	4	1009.8	1010.3	30.0	25.0	27.4	-0.4	31.1	3	22.8	1	0	0	23.3	78	47	15	12	10		0	0	7.5	6								
TAGUAC GUAM R	110			30.0	23.3	26.7	0.1	31.1	19	22.2	25+	0	0			33	- 44	8	15		0	0			11.6	SE	9+					55
JOHNSTON	2	1014.2	1014.8	27.2	22.8	25.1	-0.5	27.8	28+	20.6	1	0	0	18.9	69	8	- 50	4	10	0	0	0	7.1	8	13.4	E	25+	7	16	7	5.8	66
KOROR R	29	1005.8	1009.4	31.1	24.4	27.7	0.3	32.2	11	22.8	30	1	0	23.9	83	388	124	135	23	3	0	0	2.6	8	10.7	SE	28	0	0	30	10.0	63
KWAJALEIN	2	1008.8	1009.5	30.0	25.0	27.4	0.3	31.1	29	22.8	10+	0	0	23.3	81	296	168	89	18	0	0	0	7.5	7	13.4	7	17	1	2	27	9.2	
MAJURO	3	1009.1	1009.5	28.9	25.0	27.1	0.1	30.6	24	22.8	9	0	0	23.9	83	407	94	83	20	1	0	0	5.5	8	13.4	E	30	0	8	22	8.8	48
MARCUS ISLAND	6	1014.9	1016.6	27.2	21.1	23.9	-0.3	29.4	30	17.2	1	0	0	20.0	79	24	- 25	6	10	1	0	0	2.8	9	15.6	N	2	7	16	7	5.6	73
PAGO PAGO	4	1009.8	1010.0	31.1	24.4	27.6		33.3	6	22.2	18+	8	0	23.9	83	265		69	22	1	0	0	2.4	10	12.1	SE	23	2	10	18	8.0	43
PONAPE R	37	1004.6	1005.7	30.6	24.4	27.6	0.7	31.7	7	22.8	7	0	0	23.9	81	154	-355	25	20	0	0	0	3.5	7	8.0	NE	29+	0	4	26	9.1	59
TRUK MOEN ISLAND	2	1008.5	1008.9	30.0	25.6	27.8	0.7	31.7	7	23.3	11+	0	0	23.9	79	191	-122	93	16	0	0	0	4.6	8	12.5	NE	9	0	7	23	8.6	79
WAKE	3	1014.9	1015.2	28.3	22.8	25.6	-0.2	29.4	19	20.6	12	0	0	21.1	79	33	- 14	19	12	0	0	0	6.1	5	11.6	4	8	10	15	5	5.2	
YAP R	19	1007.5	1009.3	30.6	25.0	27.8	0.2	31.7	30+	22.8	9	0	0	23.9	81	47	-115	18	14	0	0	0	4.2	5	11.2	NE	20	0	2	28	9.7	37
PENNSYLVANIA																																
ALLENTOWN	118	1003.7	1017.9	12.8	2.2	7.6	-2.0	21.1	26+	- 2.8	1	0	10	1.1	68	95		31	13	0	0	0	0.5	30	12.5	29	2	1	11	18	7.8	
ERIE	223	989.5	1016.7	11.1	2.8	6.9	-0.6	25.6	20	- 2.2	14	0	8	2.2	76	108	18	33	16	2	122	25	1.1	23	13.4	16	28	4	7	19	7.2	
HARRISBURG	103	1004.7	1017.8	14.4	4.4	9.4	-1.6	24.4	25	- 1.7	5	0	3	3.3	68	87	11	25	15	0	T	0	0.4	30	11.6	NW	2	2	6	22	8.1	43
PHILADELPHIA	2	1016.9	1017.9	13.9	3.9	8.8	-2.3	25.6	21	- 2.2	11	0	5	1.1	62	110	24	46	13	1	T	0	0.4	36	11.2	NE	13+	1	10	19	7.9	42
PITTSBURGH	347	971.9	1016.4	13.3	3.9	8.8	-0.6	25.6	20	- 2.2	17+	0	8	2.8	70	95	17	27	15	4	69	T	0.5	30	19.7	28	1	0	6	24	8.6	29
READING U	81			13.3	5.0	9.3	-2.2	23.3	21	0.6	5	0	0			104	17	23	14		T	T			16.5	NW	1	1	12	17	7.8	37
SCRANTON	283	983.1	1017.7	12.8	2.8	7.8	-1.3	20.6	23	- 2.2	1	0	7	0.6	65	74	- 9	20	13	2	18	T	0.4	23	10.3	NW	25+	1	6	23	8.1	46
WILLIAMSPORT	161	998.0	1017.5	13.9	2.2	8.1	-1.6	22.2	26	- 2.2	15+	0	11	1.1	66	72	- 18	21	17	0	T	T	0.3	29	10.3	25	6	2	4	24	8.1	
RHODE ISLAND																																
BLOCK ISLAND	34			8.9	2.2	5.7	-1.3	16.1	26+	- 1.7	10	0	5			34	- 58	13	7		0	0						10	5	15	6.1	
PROVIDENCE	16	1015.6	1017.9	12.2	1.1	6.6	-1.9	21.7	25	- 2.8	6	0	12	- 0.6	65	38	- 58	14	10	0	T	0	0.6	24	13.0	30	25	3	11	16	7.3	44

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C.	C.	C	C		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1016.3	1017.9	23.9	10.6	17.3	-0.9	29.4	13	1.7	11	0	0	10.6	68	72	- 1	43	6	4	0	0	1.5	19	19.7Y	W	2	9	10	11	5.6	51
CHARLESTON U	3			22.2	14.4	18.2	-0.4	27.2	28	7.8	5	0	0			68	4	49	9		0	0			17.0	W	2					
COLUMBIA	66	1009.1	1017.2	24.4	10.0	17.3	-0.3	31.1	1	0.6	11	0	0	8.9	62	91	- 11	33	8	5	0	0	1.3	22	14.3	26	7	11	5	14	5.9	52
GNVLE SPARTANBURG	292	982.4	1017.0	21.7	8.3	15.1	-1.0	27.8	1	0.0	6	0	1	7.2	66	64	- 36	15	14	2	0	0	1.0	24	13.0	SW	1	8	9	13	6.4	52
SOUTH DAKOTA																																
ABERDEEN	395	969.9	1017.6	10.6	- 2.8	3.8	-3.3	22.8	16	-15.0	30	0	22	- 2.8	64	23	- 28	9	9	0	183	76	1.3	2	14.3	4	26	5	6	19	7.3	
HURON	391	969.5	1017.1	11.7	- 1.1	5.2	-2.1	24.4	25	- 9.4	20	0	18	- 1.1	68	50	3	19	11	0	160	102	0.8	36	15.2	NW	1	5	7	18	7.3	54
RAPID CITY	965	903.8	1016.9	10.0	- 2.8	3.7	-3.2	23.9	25	-16.7	20	0	23	- 3.9	63	64	21	16	13	1	254	178	3.1	34	18.8	NW	2	2	9	19	7.5	48
SIOUX FALLS	432	964.8	1017.0	11.1	- 1.1	5.1	-2.7	23.3	25	- 7.8	9	0	21	- 1.7	65	43	- 15	22	7	0	23	25	1.1	2	11.6	32	1	4	7	19	7.3	
TENNESSEE																																
BRISTOL	459	962.4	1016.7	18.3	6.7	12.7	-0.9	26.7	23	- 3.3	10	0	4	6.1	68	128	48	53	16	3	T	0	1.0	27	12.5	31	1	1	9	20	8.0	
CHATTANOOGA	204	991.5	1016.4	21.1	8.3	14.6	-1.4	27.2	13	- 2.2	6	0	6	7.8	69	74	- 35	25	11	7	0	0	0.9	21	13.4	NW	8	2	9	19	7.6	47
KNOXVILLE	299	981.7	1016.8	20.6	9.4	14.9	0.0	28.3	18	0.0	10	0	1	7.2	64	73	- 21	17	14	5	0	0	1.3	25	21.9	W	30	3	5	22	7.8	36
MEMPHIS	78	1005.4	1015.6	21.7	10.6	15.9	-0.4	28.3	20	0.0	6	0	1	8.3	64	138	20	36	11	7	0	0	1.0	21	15.6	SE	18+	6	6	18	6.8	57
NASHVILLE	180	993.9	1015.5	20.6	9.4	14.9	-0.4	26.7	23+	- 1.7	10	0	3	7.8	66	129	34	37	15	6	0	0	1.0	22	12.1	SE	18	3	7	20	7.6	42
OAK RIDGE	276			19.4	8.3	13.9	-0.4	27.2	24+	- 2.2	10	0	2			140	33	70	13		0	0			13.0Y	N	13+	4	3	23	8.2	
TEXAS																																
ABILENE	537	951.6	1012.4	24.4	10.6	17.3	-0.6	32.8	27	3.9	15	5	0	6.7	58	173	115	59	8	8	0	0	0.5	14	15.2	NW	29	13	5	12	5.2	70
AMARILLO	1098	888.9	1011.9	20.6	4.4	12.5	-1.7	30.6	2	- 3.9	20+	0	4	0.6	53	22	- 11	17	3	2	0	0	0.6	13	17.0	N	8	11	10	9	5.1	70
AUSTIN	182	990.9	1012.7	26.1	15.0	20.6	0.8	32.2	27	5.6	6	1	0	13.3	68	95	5	52	4	5	0	0	1.6	15	12.1	W	17	7	8	15	6.5	40
BROWNSVILLE	5	1011.5	1011.9	27.2	19.4	23.4	0.1	32.2	18	11.7	6	1	0	18.9	82	20	- 19	10	6	3	0	0	5.1	14	14.3	SE	24	3	12	15	7.0	57
CORPUS CHRISTI	12	1010.8	1012.5	26.7	17.8	22.2	0.1	32.8	3	6.1	6	1	0	17.8	81	128	73	96	7	4	0	0	4.5	14	20.1	S	14	3	7	20	7.7	26
DALLAS	147	996.3	1013.4	23.9	12.8	18.2	-0.2	30.6	11	3.9	21+	0	0	11.1	68	391	290	91	11	11	0	0	1.1	15	19.2	NW	29	8	6	16	6.4	53
DEL RIO	313	975.6	1011.2	28.9	15.0	21.7	-0.3	35.0	12	6.7	6	6	0	11.7	60	111	76	84	6	6	0	0	2.3	11	10.7	33	17	10	7	13	5.9	
EL PASO	1194	879.8	1009.9	25.6	11.1	18.4	0.9	29.4	30+	1.1	6	0	0	- 1.7	31	27	20	27	2	2	0	0	1.7	25	20.1	SW	19	13	15	2	3.4	90
FORT WORTH	164	993.2	1013.6	23.3	11.7	17.7	-0.6	30.0	11	3.9	5	0	0	11.1	68	273	181	74	13	13	0	0	0.7	13	23.2	34	29	11	3	16	6.0	
GALVESTON U	2			22.8	18.3	20.4	0.2	25.0	30+	12.8	5	0	0			137	72	81	8		0	0			18.3	W	18					45
HOUSTON U	12			25.6	17.2	21.5	0.8	30.0	1	10.0	5	0	0			173	86	89	10		0	0										
HOUSTON	15	1011.9	1014.0	26.1	16.7	21.4	1.2	30.0	1	7.8	6	0	0	16.1	75	203	120	132	9	6	0	0	2.9	16	17.0	16	17	3	5	22	8.1	43
LUBBOCK	992	901.1	1011.6	22.8	8.3	15.8	0.5	32.8	10	1.1	20	1	0	1.7	46	77	48	49	6	6	0	0	0.4	8	17.0	5	1	11	7	12	5.2	
MIDLAND	869	913.6	1010.9	23.9	9.4	16.6	-1.7	32.2	27	5.0	15+	1	0	2.2	48	62	41	32	6	4	0	0	0.6	8	13.4	4	28	11	6	13	5.5	
PORT ARTHUR	5	1014.2	1014.8	26.1	16.1	21.1	0.9	30.6	1	6.1	6	0	0	16.7	80	149	49	53	9	4	0	0	3.2	16	26.8	NW	18	2	7	21	7.7	46
SAN ANGELO	580	945.5	1011.5	26.1	11.7	19.1	-0.4	35.0	27	4.4	6	6	0	7.8	56	55	4	27	7	6	0	0	0.9	16	18.3	18	17	11	7	12	5.0	
SAN ANTONIO	240	985.1	1012.7	26.1	14.4	20.3	0.2	31.7	12	1.1	6	0	0	14.4	73	81	10	54	8	4	0	0	2.1	12	13.9	NE	14	6	9	15	6.5	61
VICTORIA	32	1009.1	1013.4	26.7	17.2	21.9	0.8	32.2	3	7.8	6+	1	0	16.7	76	102	36	70	7	5	0	0	3.4	14	21.9Y	NW	17	3	6	21	8.0	
WACO	152	995.3	1013.3	24.4	12.8	18.7	-0.6	34.4	12	1.7	5	1	0	11.1	66	238	139	69	10	9	0	0	1.5	16	13.4	20	11	8	6	16	6.4	
WICHITA FALLS	303	976.3	1012.9	23.9	8.9	16.5	-1.3	33.9	27	1.1	21	2	0	7.2	59	202	138	82	9	8	0	0	0.8	4	19.2	16	10	10	6	14	5.7	
UTAH																																
MILFORD	1533			18.9	- 1.7	8.7	-0.1	27.8	16	- 8.9	20	0	23			15	- 3	7	3		91	25						14	8	8	4.3	
SALT LAKE CITY	1286	870.6	1014.7	17.8	2.2	9.8	-0.2	25.0	16	- 5.0	4	0	9	- 2.8	46	36	- 8	16	6	4	71	51	0.1	32	15.2	N	26+	10	9	11	5.3	87
WENDOVER	1291			16.7	3.9	10.4	-0.5	25.0	25+	- 5.6	20	0	3			7	- 6	4	4		T	T						10	11	9	4.7	
VERMONT																																
BURLINGTON	101	1004.4	1017.0	10.6	0.0	5.2	0.1	20.6	21	- 5.0	27	0	20	- 2.2	62	24	- 43	7	11	0	124	25	0.4	23	17.0	SW	21	2	6	22	8.1	60
VIRGINIA																																
LYNCHBURG	279			17.2	5.6	11.2	-2.2	30.0	24	- 3.3	10	0	5			43	- 37	20	11	0	0	0			15.2	W	1	3	9	18	7.3	48
NORFOLK	7	1016.6	1017.6	17.8	7.2	12.5	-1.9	29.4	24	1.1	3	0	0	6.1	69	43	- 38	18	11	1	0	0	0.9	20	14.8	W	1	7	8	15	6.7	52
RICHMOND	49	1011.9	1017.7	17.8	5.6	11.6	-2.9	30.0	24	- 2.2	11	0	3	4.4	65	55	- 25	20	6	0	0	0	0.6	26	15.2	W	1	4	9	17	7.4	50
ROANOKE	350	974.9	1017.1	16.1	5.6	10.8	-2.7	28.3	24	- 1.7	11	0	4	3.9	67	66	- 13	20	14	0	0	0	1.2	26	14.3	28	1	3	8	19	7.8	
WASHINGTON																																
OLYMPIA	59	1013.2	1020.5	16.1	3.3	9.5	-0.5	25.0	4	- 3.3	19	0	6	3.3	69	43	- 32	19	7	0	T	0	1.4	24	11.6	27	25	6	5	19	6.9	
SEATTLE TACOMA	122	1003.7	1020.2	14.4	5.6	10.0	0.4	23.9	4	1.7	11	0	0	3.9	71	51	- 10	26	9	2	T	0	0.9	23	11.6	34	18	6	6	18	6.9	50
SPOKANE	718	933.0	1017.2	15.0	1.1	7.8	-0.7	22.2	8	- 8.3	19	0	13	- 2.2	53	3	- 20	2	4	0	T	T	1.7	22	13.0	SW	11	7	8	15	6.4	70
STAMPEDE PASS R	1206			6.1	- 0.6	2.6	0.1	15.6	5	- 5.0	12	0	19			99	- 44	25	16		500	2540						3	6	21	7.8	
TATOOSH ISLAND R	31	1017.3	1020.4	11.1	6.1	8.7	0.1	17.2	4+	1.7	12+	0	0	5.0	80	61	- 72	22	16	0	10	T	1.5	22	21.0	E	4	8	5	17	6.6	59
WALLA WALLA U	289			17.8	6.1	12.1	0.0	25.6	6	- 2.8	19	0	2			5	- 31	3	3		0	0			11.2	NW	1	8	8	14	6.0	70
YAKIMA	321	979.7	1018.3	19.4	2.8	11.1	0.8	26.1	6	- 2.8	13	0	8	- 0.6	47	T	- 12	T	0	0	0	0	1.7	29	15.6	30	1	7	13	10	5.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm			Mm.	Mm.	M.p.s.		M.p.s							%
WEST INDIES																																
SAN JUAN P.R.	5	1014.2	1016.7	29.4	22.2	25.8	1.1	32.8	10+	20.0	27	4	0	20.6	74	143	48	74	14	0	0	0	3.9	8	13.0	NE	22	12	11	7	5.3	77
SWAN ISLAND	9			29.4	25.6	27.4	-0.1	30.6	22+	22.8	23	0	0			37	16	13	5	1	0	0						1	18	11	6.9	
WEST VIRGINIA																																
BECKLEY	763	927.5	1016.8	13.9	4.4	9.2		25.6	24	- 4.4	10	0	13	3.9	74	117		25	22	4	168	76	2.2	21	14.3	26	3	2	3	25	8.7	
CHARLESTON	286	981.7	1015.9	17.8	7.2	12.3	-0.7	28.9	24+	- 2.2	10	0	3	6.1	70	129	35	38	19	2	T	0	1.3	24	14.3	27	28	1	5	24	8.5	
ELKINS	600	945.1	1016.9	13.9	2.8	8.6	-1.6	26.7	20	- 3.9	17	0	14	3.9	77	168	80	51	19	1	127	25	1.4	27	19.7	30	28	1	2	27	9.0	
HUNTINGTON	252	985.8	1016.0	16.1	6.7	11.4	-1.8	27.8	18	- 3.9	10	0	4	4.4	68	167	73	49	18	2	T	0	1.1	22	13.4	31	28	1	6	23	8.4	
PARKERSBURG U	187			15.6	6.7	11.2	-1.1	27.8	20	- 1.1	10	0	3			141	58	29	19		T	T			16.5	W	28					24
WISCONSIN																																
GREEN BAY	208	990.5	1016.6	10.6	0.0	5.3	-0.9	20.6	24	- 3.9	4+	0	21	- 0.6	70	35	- 27	10	12	1	23	25	1.0	2	13.0	NE	26	7	8	15	6.8	45
LA CROSSE	198	992.2	1017.2	12.8	1.7	7.1	-1.3	22.2	25	- 3.9	4	0	8	- 0.6	64	15	- 55	7	8	1	T	T	0.5	34	10.7	27	28	7	8	15	6.8	
MADISON	262	984.4	1016.2	11.7	- 0.6	5.6	-1.3	22.2	25+	- 6.1	10	0	22	0.0	70	39	- 26	11	10	2	T	T	1.3	36	22.8	NW	1	4	10	16	7.2	43
MILWAUKEE	205	991.2	1017.0	10.0	1.1	5.7	-0.7	22.8	24	- 4.4	10	0	13	1.1	74	68	4	20	14	1	33	25	1.2	2	16.1	W	1	8	9	13	6.5	55
WYOMING																																
CASPER	1627	835.8	1015.3	11.1	- 3.3	3.8	-2.3	22.2	26	-20.0	19	0	23	- 5.6	57	33	- 10	12	11	1	432	203	1.4	30	16.1	25	26	2	8	20	7.7	
CHEYENNE	1867	810.0	1014.8	12.2	- 3.3	4.2	-1.7	23.3	26	-18.9	20	0	21	- 6.1	53	12	- 36	5	7	0	91	76	2.8	32	25.9	W	2	3	14	13	6.7	65
LANDER	1696	827.3	1014.9	11.7	- 2.8	4.4	-1.8	21.1	15+	-17.2	20	0	24	- 5.0	56	56	- 7	33	9	0	871	508	1.0	27	20.1	W	26	2	12	16	7.6	71
SHERIDAN	1208	878.4	1017.5	10.0	- 2.8	3.6	-2.8	20.6	9	-16.1	20	0	23			57	2	18	14	1	328	102	2.1	32	25.0	NW	2	2	9	19	8.1	52

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	149	2974	2542
HUNTSVILLE	152	3013	3051
MOBILE	27	1610	1560
MONTGOMERY	69	2334	2291
ALASKA			
ANCHORAGE	882	10248	
ANNETTE	659	6366	6258
BARROW	2108	18210	17772
BARTER ISLAND	2160	18605	17565
BETHEL	1253	12490	11988
COLD BAY	914	8460	8498
FAIRBANKS	1132	15025	13502
JUNEAU	805	8617	8093
KING SALMON	1040	11170	10262
KOTZEBUE	1675	14874	14412
MC GRATH	1250	14739	13377
NOME	1488	13330	12668
ST. PAUL ISLAND	1111	9206	9537
SHEMYA	931	8180	8154
YAKUTAT	947	9643	8025
ARIZONA			
FLAGSTAFF	603	6555	6535
PHOENIX	12	1593	1765
TUCSON	26	1744	1794
WINSLOW	287	4723	4686
YUMA	3	1123	974
ARKANSAS			
FORT SMITH	152	3155	3270
LITTLE ROCK	115	2943	3210
TEXARKANA	82	2327	2533
CALIFORNIA			
BAKERSFIELD	46	2213	2103
BISHOP	223	3991	4048
BLUE CANYON	405	4974	4915
BURBANK	68	1379	1547
EUREKA U	433	3950	3986
FRESNO	60	2549	2436
LONG BEACH	83	1387	1603
LOS ANGELES	113	1469	1624
LOS ANGELES U	58	1072	1263
MT SHASTA R	428	5160	5216
OAKLAND	138	2312	2600
RED BLUFF	97	2733	2468
SACRAMENTO	96	2590	2665
SANDBERG U	260	3985	3888
SAN DIEGO	107	1368	1319
SAN FRANCISCO	214	2926	2675
SAN FRANCISCO U	217	2562	2582
SANTA CATALINA	201	1926	1755
SANTA MARIA	235	2631	2569
STOCKTON	80	2688	2642
COLORADO			
ALAMOSA	700	7980	7921
COLORADO SPRINGS	613	5924	6020
DENVER	604	5614	5929
GRAND JUNCTION	337	4927	5474
PUEBLO	433	5120	5273
CONNECTICUT			
BRIDGEPORT	643	5372	5382
HARTFORD	534	5806	5971
NEW HAVEN	613	5557	5607
DELAWARE			
WILMINGTON	507	5040	4812
DIST.OF COLUMBIA			
WASH NATL AP	374	4146	4150
FLORIDA			
APALACHICOLA U	23	1424	1308
DAYTONA BEACH	26	841	879
FORT MYERS	1	294	442
JACKSONVILLE	37	1333	1239
KEY WEST	0	58	108
LAKELAND U	8	630	661
MIAMI	0	143	214
ORLANDO	5	546	766
PENSACOLA	33	1655	1463
TALLAHASSEE	57	1583	1485
TAMPA	18	752	683
WEST PALM BEACH	0	226	253
GEORGIA			
ATHENS	159	3039	2907
ATLANTA	171	3231	2958
AUGUSTA	141	2683	2397
COLUMBUS	91	2453	2383
MACON	99	2623	2136
ROME	200	3447	3292
SAVANNAH	88	2131	1819
IDAHO			
BOISE	467	5248	5483
IDAHO FALLS 42NW R	733	7987	8180
IDAHO FALLS 46W R	715	7696	7892
LEWISTON	421	4687	5213
POCATELLO	618	6612	6573
ILLINOIS			
CAIRO U	253	3676	3774
CHICAGO O HARE	587	6143	6307
CHICAGO MIDWAY	511	5777	5896
MOLINE	533	6174	6180
PEORIA	502	5821	5809
ROCKFORD	620	6521	6534
SPRINGFIELD	459	5230	5275
INDIANA			
EVANSVILLE	356	4562	4367
FORT WAYNE	569	5787	5977
INDIANAPOLIS	412	5207	5483
SOUTH BEND	584	5982	6140
IOWA			
BURLINGTON	509	5660	5904
DES MOINES	565	6100	6558
DUBUQUE	602	6874	7038
SIOUX CITY	570	6464	6698
WATERLOO	632	6911	7037
KANSAS			
CONCORDIA	481	5109	5312
DODGE CITY	405	4735	4853
GOODLAND	535	5866	5863
TOPEKA	423	4768	5046
WICHITA	342	4248	4527
KENTUCKY			
COVINGTON	442	5184	5092
	442	5184	5092
LEXINGTON	373	4854	4578
LOUISVILLE	353	4534	4546
LOUISIANA			
ALEXANDRIA	75	2171	1921
BATON ROUGE	38	1765	1560
LAKE CHARLES	21	1457	1459
NEW ORLEANS	31	1630	1385
SHREVEPORT	62	2072	2184
MAINE			
CARIBOU	813	8894	9116
PORTLAND	745	7103	7028
MARYLAND			
BALTIMORE	460	4941	4564
MASSACHUSETTS			
BLUE HILL OBS R	651	6145	6032
BOSTON	566	5507	5390
NANTUCKET	726	5892	5378
PITTSFIELD	718	7254	7147
WORCESTER	685	6689	6587
MICHIGAN			
ALPENA	780	7707	7904
DETROIT	558	5843	5970
DETROIT M WAYNE CO	612	6255	5997
DETROIT WILLOW RUN	625	6453	5984
FLINT	645	6394	6968
GRAND RAPIDS	632	6381	6604
HOUGHTON LAKE	763	7683	
LANSING	656	6671	6567
MARQUETTE U	809	7771	7748
MUSKEGON	638	6312	6308
SAULT STE MARIE	806	8417	8370
MINNESOTA			
DULUTH	903	9467	9312
INTERNATIONAL FALLS	908	10290	9989
MINNEAPOLIS	678	7796	8013
ROCHESTER	717	7880	7901
ST CLOUD	769	8607	8448
MISSISSIPPI			
JACKSON	98	2483	2203
MERIDIAN	109	2571	2289
VICKSBURG U	71	2095	2041
MISSOURI			
COLUMBIA	403	4548	4913
KANSAS CITY	365	4229	4602
ST JOSEPH	345	4447	5336
ST LOUIS	397	4663	4764
SPRINGFIELD	375	4300	4450
MONTANA			
BILLINGS	742	7068	6662
GLASGOW	812	8865	8511
GREAT FALLS	736	7275	7180
HAVRE	769	8776	8200
HELENA	670	7167	7553
KALISPELL	693	7576	7587
MILES CITY	711	7995	7348
MISSOULA	631	7024	7515
NEBRASKA			
GRAND ISLAND	577	6090	6274
LINCOLN U	541	5648	5663
NORFOLK	625	6793	6698
NORTH PLATTE	628	6708	6379
OMAHA	501	5556	6024
SCOTTSBLUFF	667	6475	6313
VALENTINE	699	7233	7053
NEVADA			
ELKO	615	6989	6832
ELY	664	7187	7052
LAS VEGAS	54	2416	2703
RENO	439	5434	5786
WINNEMUCCA	548	5914	6245
NEW HAMPSHIRE			
CONCORD	681	7149	7010
MT WASHINGTON OBS	1339	12541	12284
NEW JERSEY			
ATLANTIC CITY	529	5291	4664
ATLANTIC CITY U	498	4689	4528
NEWARK	500	4982	4741
TRENTON U	498	4950	4847
NEW MEXICO			
ALBUQUERQUE	305	4516	4267
CLAYTON	450	4854	4954
RATON	528	5672	5864
ROSWELL	168	3675	3762
SILVER CITY	236	3808	3618
NEW YORK			
ALBANY	623	6544	6591
BINGHAMTON	696	7025	6874
BUFFALO	648	6467	6655
NEW YORK U	451	4572	4744
J.F. KENNEDY	521	4892	5040
NEW YORK LA GUARDIA	484	4712	4681
ROCHESTER	612	6268	6421
SYRACUSE	665	6735	6463
NORTH CAROLINA			
ASHEVILLE	383	4617	4346
CAPE HATTERAS R	253	2877	2587
CHARLOTTE	213	3438	3169
GREENSBORO	285	3838	3758
RALEIGH	263	3549	3359
WILMINGTON	147	2461	2347
NORTH DAKOTA			
BISMARCK	804	8847	8405
FARGO	829	9458	8795
WILLISTON	839	9115	8745
OHIO			
AKRON	568	5848	5796
CINCINNATI OBS	388	4780	4679
CLEVELAND	562	5875	6025
COLUMBUS	465	5422	5462
DAYTON	456	5468	5425
MANSFIELD	579	6204	6098
TOLEDO	579	6257	6192
YOUNGSTOWN	605	6138	6109
OKLAHOMA			
OKLAHOMA CITY	223	3221	3691
TULSA	227	3312	3813
OREGON			
ASTORIA	472	4456	4592
BURNS U	569	6465	6414
EUGENE	368	4015	4312
MEACHAM	708	6768	7008
MEDFORD	345	4236	4688
PENDLETON	382	4381	4859
PORTLAND	425	3990	4285
SALEM	425	4386	4337
SEXTON SUMMIT R	515	5550	5510
PENNSYLVANIA			
ALLENTOWN	573	5786	5619
ERIE	609	5973	6103
HARRISBURG	472	5228	5115
PHILADELPHIA	509	5120	4974
PITTSBURGH	510	5723	5753
PITTSBURGH U	482	5163	4917
READING U	483	4917	4840
SCRANTON	565	6001	6026
WILLIAMSPORT	548	5848	5733
RHODE ISLAND			
BLOCK ISLAND	675	5615	5361
PROVIDENCE	630	5670	5667
SOUTH CAROLINA			
CHARLESTON	119	2329	2033
CHARLESTON U	81	1959	1794
COLUMBIA	128	2783	2484
GNVLE-SPARTANBURG	194	3323	3021
SOUTH DAKOTA			
ABERDEEN	774	8533	8088
HURON	707	7866	7848
RAPID CITY	784	7131	6893
SIOUX FALLS	709	7679	7491
TENNESSEE			
BRISTOL	307	4342	4075
CHATTANOOGA	231	3705	3229
KNOXVILLE	217	3555	3451
MEMPHIS	175	3187	3210
NASHVILLE	234	3578	3538
OAK RIDGE	267	3936	3761
TEXAS			
ABILENE	122	2376	2624
AMARILLO	312	4086	3929
AUSTIN	24	1676	1711
BROWNSVILLE	1	730	600
CORPUS CHRISTI	12	1002	914
DALLAS	69	2195	2357
DEL RIO	8	1401	1504
EL PASO	59	2647	2700
FORT WORTH	84	2201	2405
GALVESTON U	9	1083	1235
HOUSTON U	13	1170	1278
HOUSTON	12	1263	1396
LUBBOCK	166	2998	3547
MIDLAND	124	2641	2591
PORT ARTHUR	19	1391	1447
SAN ANGELO	55	2197	2255
SAN ANTONIO	39	1683	1546
VICTORIA	16	1235	1173
WACO	75	2161	2030
WICHITA FALLS	139	2844	2826
UTAH			
MILFORD	516	6014	6131
SALT LAKE CITY	456	5429	5735
WENDOVER	423	5558	5550
VERMONT			
BURLINGTON	707	7618	7826
VIRGINIA			
LYNCHBURG	392	4378	4088
NORFOLK	330	3745	3384
RICHMOND	371	4241	3812
ROANOKE	409	4439	4085
WASHINGTON			
OLYMPIA	471	4708	4752
SEATTLE TACOMA	442	4107	4691
SPOKANE	561	6035	6232
STAMPEDE PASS R	842	7840	8146
TATOOSH ISLAND R	516	4835	4955
WALLA WALLA U	328	4061	4583
YAKIMA	385	5289	5652
WEST VIRGINIA			
BECKLEY	490	5427	
CHARLESTON	354	4643	4371
ELKINS	525	5696	5429
HUNTINGTON	384	4637	4335
PARKERSBURG U	390	4754	4633
WISCONSIN			
GREEN BAY	695	7442	7595
LA CROSSE	599	7218	7275
MADISON	684	7294	7451
MILWAUKEE	674	6800	7128
WYOMING			
CASPER	775	6951	6900
CHEYENNE	758	6495	6795
LANDER	745	7046	7336
SHERIDAN	787	7114	7167

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

APRIL 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS
Alabama	1	1	0	0	0																								
Alaska *																													
Arizona *																													
Arkansas	3	3	0	0	5	0	0	3	0	1	1	3	0	0	0	5	0												
California										0	0	4	0	0	0	3	0									0	0	3	0
Colorado	2	2	0	0	0																					0	0	4	6
Connecticut *																													
Delaware *																													
Florida	4	2	11	400+	7																								
Georgia																										0	0	R 4	0
Hawaii *																													
Idaho																										1	8	4	
Illinois	3	2	0	0	5									0	0	5	0									0	0	L°5	C
Indiana	3	1	0	0	3	0	0	2	0																				
Iowa	4	1	0	6	6	0	0	4	0	0	2	5	0																
Kansas	1	1	0	5	6	0	0	4	3	0	0	4	0	0	0	4	0									0	0	6	0
Kentucky *																													
Louisiana	1	1	0	1	?	0	0	?	C	0	0	?	0	0	0	4	0									0	0	?	C
Maine *																													
Maryland																		0	0	4	0								
Massachusetts *																													
Michigan	3	2	0	0	5					0	2	5	0													0	1	3	0
Minnesota																						0	0	4	0				
Mississippi	12	4	1	16	6	0	4	5	4	0	1	5	3	0	0	4	0												
Missouri	3	2	0	0	4					0	0	4	0	1	1	0	0												
Montana *																													
Nebraska *																													
Nevada *																													
New Hampshire										0	0	3	0																
New Jersey *																													
New Mexico *																													
New York *																													
North Carolina	1	1	0	0	3	0	0	0	4	0	0	4	0																
North Dakota																		1	0	4	0	0	0	4	0				
Ohio										0	4	6		0	0	5													
Oklahoma	8	3	0	9	5	0	0	6	5	0	0	5	0	0	1	0	0									0	0	5	4
Oregon *																													
Pacific Area *																													
Pennsylvania	3	2	0	0	4																								
Puerto Rico *																													
Rhode Island																										0	0	1	0
South Carolina	2	1	0	0	3	0	0	3	1	0	0	3	1	0	0	1	0												
South Dakota	2	2	0	0	3																								
Tennessee	2	2	0	0	3	0	0	6	C	0	1	5	C	0	0	4	0									0	0	3	0
Texas	21	9	0	8	6	0	0	5	4	5	2	6	0	0	0	5	0									34	6	7	6
Utah	1	1	0	0	4					0	0	4	0																
Vermont										0	0	3	0																
U. S. Virgin Is. *																													
Virginia *																													
Washington *																													
West Virginia														0	0	4	0												
Wisconsin	1	1	0	0	5					0	0	4	0																
Wyoming *																													

°	Includes crop damage
C	Crop damage
R	Rain
L	Local flooding

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

APRIL 1966

Elmer R. Nelson, Office of Hydrology

Near record to record crests occurred in the Red River of the North Basin during April. At Grand Forks, N. Dak., the main stem crested slightly higher than in 1965 but 4.6 feet lower than the record crest of 1897. At Drayton, N. Dak., the Red exceeded the previous record crest by 1.7 feet. The total damages from the near record to record spring flooding in the Red River of the North Basin has been estimated at nearly $8 million.

Severe flash flooding occurred in northeastern Texas in the Sabine and Trinity Basins during the latter part of April. The American Red Cross reported 27 deaths due to drowning in this area. Property damages were heavy.

The worst flooding since 1961 occurred in the White Basin in Arkansas. Severe flooding occurred in the Red Basin in Arkansas with the Ouachita and tributaries reaching its highest stage since 1958.

HUDSON BAY DRAINAGE

Red River of the North Basin.--The Sheyenne River at West Fargo, N. Dak., had risen to a stage of 19.6 feet by April 1, 3.6 feet above flood stage. It crested on April 3, at a stage of 20.4 feet. This was 0.4 foot below the record stage of 20.75 feet of April 1965. It receded back within its banks on the morning of April 12.

The Red Lake River near High Landing, Minn., crested at a stage of 12.4 feet on April 3. This was 0.3 foot higher than the 12.1 feet crest of April 1965 and 1 foot lower than the record 13.4 feet crest of May 1950. Farther downstream at Crookston, Minn., the Red Lake River reached a crest of 24.3 feet on April 3. This was 1.5 feet lower than the record crest of 1965.

The main stem of the Red River of the North was 6 to 10 feet above flood stage in the reach from Fargo, N. Dak., to Halstad, Minn., and receding on April 1. The crest of 30.10 feet at Fargo on March 23, 1966 was nearly 0.5 foot lower than the crest of 1965 and 10 feet lower than the record crest of 1897.

At Grand Forks, N. Dak., city officials had earlier made tentative plans to protect the city against high water. After the severe blizzard an expanded program for protection against expected high water was started immediately. Across the river at East Grand Forks, Minn., city officials had declared a "flood emergency" even before the severe blizzard of March 3-5, 1966. They were determined to avoid a repetition of the severe flooding of 1965 and had started the construction of a temporary clay dike. In both cities, the snow was scraped away from the areas in which dikes were to be built. Sand for filling burlap bags was hauled and stockpiled in the Riverside and Central Park Areas. A month later, sandbag dikes were higher than the snowdrifts. School children, University of North Dakota students, Air Force personnel, and citizens responded to pleas for volunteer labor to help build the dikes. Water spread across golf courses, parks, roads, and rich farmlands, but the dikes held in Greater Grand Forks and most other communities throughout the valley. Many families left their homes as a precaution against a sudden break in the emergency flood walls, but relatively few homes were flooded. The crest of 45.6 feet at Grand Forks, N. Dak., on April 4 was 1.7 feet higher than the 44.9 feet crest of 1965. It was the third highest crest of record and was 4.6 feet below the 50.2 feet record crest of 1897.

At Drayton, N. Dak., the Red River of the North reached a record crest of 42.15 feet on April 8, 1966. This was 1.7 feet higher than in 1965.

At Pembina, N. Dak., near the Canadian border, the main stem went above flood stage on April 2. It crested on the 11th and 12th at a stage of 51.3 feet, 9.3 feet above flood stage. This was nearly 4 feet above the flood level of 1965, but 1.6 feet below the record crest of 1950.

At town after town, volunteers turned out to build dikes to protect the towns from flood damage. At Alvarado, Minn., the Snake River overflowed its banks with such suddenness that emergency dikes could not be completed in time. Water several inches to several feet deep flowed around homes and business places throughout the village.

ATLANTIC SLOPE DRAINAGE

April was rather cool and dry through New England with precipitation amounts well below normal. The only substantial rains occurred during the latter part of the month, averaging 1 to 1 3/4 inches with lesser amounts in northern sections. Even though stream flows increased during March and April due to snowmelt, the Connecticut Basin at Hartford, Conn., averaged 5 feet below the 60-year mean. This was the 6th lowest April stage in 62 years.

The only flooding in the Atlantic Slope Drainage during April was on the Savannah River at Clyo, Ga., which went above flood stage on February 20. It receded within its banks on April 4.

EAST GULF OF MEXICO DRAINAGE

The Apalachicola River which went above flood stage at Blountstown, Fla., on March 29 receded within its banks on April 2. It crested on the 1st, 1.7 feet above flood stage. Heavy rain (1 to 1.5 inches) on the 3d-4th caused another rise to above flood stage on the 7th. It remained out of its banks at Blountstown until the 9th. The small extent of flooding was limited to wooded and unpopulated areas. No damages were reported.

The Coosa River at Gadsden, Ala., was rising and slightly above flood stage at the end of the month.

Heavy rain during the last 10 days of the month in Mississippi, Alabama, and Louisiana caused some tributary streams in the Tombigbee Basin and the main stem of the Pearl River to overflow. Tibbee Creek at Tibbee, Miss., was in flood from April 28 to May 2 and crested 2.5 feet above flood stage on April 30. Noxubee River at Macon, Miss., overflowed slightly on the 28th. The Black Warrior River at Tuscaloosa, Ala., crested nearly 4 feet above flood stage on the 28th. Farther downstream at Warrior Lock and Dam, Ala., the river was out of its banks from April 29 to May 2.

The Pearl River rose out of its banks at all points from Edinburg, Miss., to Pearl River, La., between the 23d and 30th and was still in flood at all points at the end of the month, but receding. The crests occurred between the 28th and 30th and ranged up to 11 feet above flood stage at Jackson, Miss. Losses in the Pearl Basin were mostly agricultural and to road construction. Preliminary estimates indicate that the losses will be less than $1/2 million.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--There was practically no snow or rain during the first 17 days of April in the Minnesota and Wisconsin portion of the upper Mississippi Basin. Temperatures were normal or below during this period. The cold weather during the first week in April retarded the snowmelt rise which started late in March.

The Minnesota River, near Savage, Minn., which went out of its banks on March 17, continued in flood until April 14. The crest on April 8 was slightly higher than the one on March 24, and exceeded flood stage by 2.4 feet. Further downstream at Mendota, Minn., the river approached within 0.4 foot of flood stage on March 24. The secondary crest on April 8 was about 1 foot lower.

Heavy rains from the 18th through the 23d in Illinois and Missouri caused rapid rises with the Sangamon at Riverton, Ill., and the Meramec River at Pacific, Mo., overflowing their banks beginning on the 22d. The Kaskaskia River in Illinois and the Bourbeuse at Union, Mo., rose above flood stage on the 23d. The Big Muddy River at Murphysboro, Ill., began overflowing on the 24th, cresting on the 30th, 9.1 feet above flood stage. It was still in flood at the end of the month but receding. The Illinois River went out of its banks at Meredosia, Ill., on the 23d. Additional rainfall on the 26th and 27th caused the Illinois River to rise above flood stage from Morris, Ill., to Beardstown, Ill. The stream was still in flood at the end of the month and rising. Damages from flooding in Missouri and Illinois are expected to be minor.

Snow fell over the upper Mississippi and the upper Minnesota Valleys late on the 17th and 18th. Eight to 11 inches of new snow with a water equivalent of 0.75 to 1.18 inches, was reported at Wadena and Park Rapids, Minn., on these dates. Additional precipitation, ranging from 0.5 to 1.5 inches, in the form of rain occurred over Minnesota and Wisconsin, from the 18th through the 20th. Below normal temperatures followed thereby holding runoff to a minimum. The Mississippi crested at Libby at a stage of 15.8 feet, 2.8 feet above flood stage on the 25th. The crest moved downstream to Aitkin, Minn., on the 30th and topped its banks by 1.7 feet. The Mississippi was still rising at Fort Ripley, Minn., on April 30, but crested on the following day, 1.4 feet above flood stage. The only other flooding along the main stem occurred 550 miles downstream at Keithsburg, Ill., from March 29 to April 8. Damage is expected to be light in the Libby-Aitkin, Minn., areas as the overflow area was mostly forested and/or agricultural land.

Missouri Basin.--The James River was overflowing its banks throughout most of the month from near La Moure, N. Dak., to Ashton, S. Dak. The highest overflow occurred at Columbia, S. Dak., where the crest on April 1-3 was 5.2 feet above flood stage. The crest reached Stratford, S. Dak., on the 11th, and was nearly 3 feet over its banks. The crest at Ashton, S. Dak., on the 14th and 15th was 2.2 feet above flood stage. Flooding was still occurring in this reach at the end of April. At Redfield, S. Dak., the James was out of its banks from the 12th to the 22d. The main loss from the flooding will be agricultural. The total damages, including loss of farm levees, flooding of some farm buildings, and damages to roads and bridges will range from $1/2 to $3/4 million. As much as 40,000 acres of land is estimated to have been flooded with some of the most widespread flooding from around Columbia downstream to Stratford, S. Dak.

Light flooding occurred on Lyon Creek at Woodbine, Kans., and on Marais Des Cygnes at Reading, Kans., from 1 to 2 inches of rain on the 11th and 12th. Rainfall of 3 inches was reported in the Randall area of north-central Kansas on the morning of the 11th. Locally heavy rain inundated the highway between Beloit and Jewell on this same date. Damages from the slight overflows were negligible.

Ohio Basin.--Minor flooding occurred on the lower Scioto at Piketon, Ohio, on the 29th. Other than slowing down progress in agricultural work, no damage resulted from this overflow.

Heavy rains on the 26th and 27th caused the Muscatatuck River at Austin, Ind., to rise a little above bankfull stage during the latter part of the month. No damage resulted.

There were two minor overflows along the Saline River at Harrisburg, Ill., during April. The first resulted from 1.5 to 2 inches of rain on the 12th and 13th. The second was due to 3 to 3.5 inches from the 23d to the 30th. This storm also caused minor flooding along the Skillet Fork and Little Wabash Rivers at Wayne City and Wilcox, Ill.

White Basin.--Moderate rains on the 18-20th followed by heavy rains on the 22d to the 23d caused the worst flooding in the White Basin in Arkansas since 1961. The Cache River at Patterson, Ark., went above flood stage on the 21st, cresting at a stage of 10.4 feet, 1.4 feet above flood stage, on the 30th. The Black River at Black Rock, Ark., went above flood stage on the 23d, cresting nearly 11 feet above flood stage on the 25th. The main stem of the White began overflowing on the 24th and crested in the reach from Batesville to Georgetown, Ark., from the 24th to the 30th, up to 3 feet above flood stage. It was still rising in the reach below by the end of the month. The damages from the flooding will total nearly $2 million.

Arkansas Basin.--Lowland flooding was experienced in the extreme eastern portion of Oklahoma, between the 24th and 27th. The Illinois River crested at Watts, Okla., 0.4 foot above flood stage on the 24th. The crest reached Tahlequah, Okla., on the 25th and exceeded bankfull stage by 1.2 feet. The Poteau River crested 4.6 feet above flood stage at Panama, Okla., on the 25th. This flooding was due to moderate to heavy precipitation.

Red Basin.--Severe flooding occurred on the Ouachita and tributaries in Arkansas from moderate rains, beginning on April 21. The heaviest rains occurred on the 24th, 26th, 29th, and 30th. The Ouachita and tributaries reached its highest stage since 1958 and was still rising at the end of the month. Smackover Creek at Smackover (below Camden), Ark., approached within 0.3 foot of the record stage. Ouchita County and surrounding counties were declared disaster areas. The Caddo at Glenwood, the Little Missouri at Broughton, Ark., and the Saline at Benton, Ark., overflowed briefly during the last week of April. The preliminary estimates of damages on the Ouachita were about $600,000.

Seven to 9 inches of rain from the 22d to the 26th caused the Sulphur to overflow at Hagansport, Ark., on the 24th and at Naples, Tex., on the 25th. The Cypress at Jefferson, Tex., went out of its banks on the 25th, cresting on the 27th, 3.5 feet above flood stage. Four to 5 inches of additional rain on the 29th and 30th caused the Little and Sulphur Rivers to continue rising at the end of the month.

Lower Mississippi Basin.--The St. Francis River at Fisk, Mo., and St. Francis, Ark., reached its highest level since March 1964. The crest at Fisk of 24.8 feet on the 30th and the one at St. Francis of 21.8 feet on May 1-3, were 0.2 foot below the 1964 flood. The amount of damage from this flood will depend upon the time it takes to recede. About 100,000 acres of farmland in the Fisk-St. Francis area was inundated. Much of the farmland had been plowed but very little had been seeded. This flooding was due to heavy rainfall on the 18th, 20th, 23d, and 26th. Twenty-four hour totals of 1 to over 2 inches were common on those days.

The heavy rain on the 20th and 21st caused the Big

Black River at Pickens and Bovina, Miss., to rise above flood stage on the 21st. It receded below flood stage at Bovina on the 22d and at Pickens on the 24th. Additional heavy rains caused the Big Black to overflow its banks again at Bovina on the 26th and at Pickens on the 29th. The stream was still in flood at the end of the month. Damages from the flooding, due to the time of the year, are expected to be moderate.

WEST GULF OF MEXICO DRAINAGE

Heavy rains caused the Mermentau River at Mermentau, La., to rise slightly above flood stage on the 23d-25th. The Calcasieu River exceeded flood stage at Hineston and Kinder, La., between the 27th and 29th.

Severe flash flooding occurred along the smaller tributaries of the Sabine River in Texas, beginning on the 24th, resulting in evacuations of residents from low-lying areas and at least 12 deaths. The main stem of the Sabine went over its banks at Edgewood and Gladewater, Tex., on the 24th. By the 25th, the Sabine was in flood from Quitman to Tatum, Tex. Crests on the 27th ranged up to nearly 12 feet above flood stage at Gladewater, Tex. Overflow began at Logansport, Tex., on the 28th and by the end of the month the river had risen to 8 feet above flood stage. Flooding continued at all points into May. This flooding was due to excessive rains from the 23d to the end of the month. Gladewater, Tex., reported 22.74 inches of rain in 60 hours. The greatest 24-hour amount reported was 9.65 inches at Gladewater on the 23d.

The Neches River near Alto, Tex., went out of its banks on the 25th, cresting on the 30th 7.4 feet above flood stage. It continued in flood into May. The Angelina River near Alto, Tex., went above flood stage on the 26th and continued above bankfull stage into May. It crested on the 28th, 2.4 feet above bankfull stage. These overflows were due to excessive rains from the 23d to the end of the month.

Flash flooding began on some of the smaller streams in the Trinity Basin in Texas on the 23d. The main stem at Dallas and below, and the East Fork, Chambers Creek, Cedar Creek, and Richland Creek began overflowing on the 24th. These streams remained above flood stage throughout the remainder of the month except for a brief fall below flood stage at Dallas, Tex., on the 27th. The excessive rains on the last 3 days of the month, falling on a basin with very wet soil and swollen streams, resulted in a total runoff comparable to the record floods of 1957 and 1908. Stages on the Trinity River did not reach the high marks of those floods because of flood control storage and improved floodways in the upper portion. The USGS reported that on the 28th, Joe's Creek in Dallas crested 2 feet higher than the highest flood since 1900. Bachman Branch, in Dallas, crested 5 feet higher than the highest known flood. Highest known floods were recorded at five gaging stations on small drainage areas in Dallas on that date. This severe flooding was due to heavy rains which began over the upper Trinity Basin on the 22d and continued into the 26th. These heavy rains were followed by periods of excessively heavy rain from the evening of the 27th which continued into May 1. During the early hours of the 28th, WBAS, Dallas, measured 2.51 inches of rain in a 1 hour period. In the northeast portion of Dallas, USGS indicated falls in excess of 6 inches per hour. During the 10-day period, precipitation in the Trinity Basin ranged from 6 to more than 20 inches. Damage was extensive and continued into May. Preliminary estimates of flood damage in the upper Trinity are in excess of $15 million, with a major portion of this occurring in the metropolitan areas of Dallas and Tarrant Counties. There was considerable damage in rural areas to roads, utilities, agricultural interests, and limited industrial interests. Fifteen deaths resulted from drownings during this storm period.

The Little and Navasota Rivers, tributaries of the Brazos, went above flood stage on the 25th and the Navasota River continued in flood near Bryan, Tex., through the 29th. The Little River crested at Cameron, Tex., on the 25th over 5 feet above flood stage. The Navasota River crested 6.3 feet above bankfull stage on the 26th and 4.2 feet above flood stage near Bryan, Tex., on the 28th. The only flooding along the Brazos River occurred in the lower portion at East Columbia, Tex., beginning on the 30th and was due to runoff from the Little and Navasota Rivers.

Minor flooding occurred on the Navidad River at Ganado, Tex., on the 26th-28th and on the Lavaca River at Edna, Tex., on the 26th and 27th. This flooding was due to 2 to 3 inches of rainfall on the 24th and 25th. Runoff was heavy as this storm was preceded by 1 to 2 inches of rain during the period from the 17th through the 22d. No damage was reported from the flooding.

The flooding on the lower Atascosa and the lower Frio Rivers in Texas between the 25th and 28th was due to 3 to 5 inches of rainfall on the 24th. The flooding on the Nueces River near Tilden, Tex., beginning on the 27th was due to 2 to 4 inches of rainfall in the upper portion. The Nueces continued in flood into May, cresting 4.6 feet above flood stage on May 7-8. Damage from the overflows were relatively minor.

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
HUDSON BAY DRAINAGE	*Ft.*			*Ft.*	
Sheyenne: West Fargo, N. Dak.	16	Mar. 17	12	(21.04 (20.4	Mar. 22 3
Red Lake: Crookston, Minn.	15	Mar. 31 29	18 May 5	24.3 15.6	3 May 3
Red River of the North: Wahpeton, N. Dak.	10	Mar. 14	Mar. 21	13.9	Mar. 16
Fargo, N. Dak.	17	Mar. 16	6	30.1	Mar. 23
Halstad, Minn.	24	Mar. 20	8	35.5	Mar. 27
Grand Forks, N. Dak.	28	Mar. 21	20	45.6	4
Drayton, N. Dak.	32	Mar. 29	May 10	42.15	8
Pembina, N. Dak.	42	2	30	51.3	11
ATLANTIC SLOPE DRAINAGE					
Savannah: Clyo, Ga.	11	Feb. 20	Apr. 4	17.1	Mar.11,12
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	Mar. 29 7	2 9	16.7 15.7	1 9
Coosa: Gadsden, Ala.	20	30	1/		
Tibbee Creek: Tibbee, Miss.	23	28	May 2	25.5	30
Noxubee: Macon, Miss.	26	28	28	26.3	28
Black Warrior: Oliver Lock & Dam, Tuscaloosa, Ala.	47	28	28	50.8	28
Warrior Lock & Dam, Ala.	30	29	May 2	32.1	30
Pearl: Edinburg, Miss.	20	27	1/	23.1	29
Jackson, Miss.	18	23	1/	29.0	30
Monticello, Miss.	19	27	1/	23.0	28
Columbia, Miss.	17	30	1/	17.5	30
Bogalusa, La.	15	23	1/	18.5	30
Pearl River, La.	12	26	1/	13.1	28
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Minnesota: Savage (nr), Minn.	698	Mar. 17	14	700.3 700.4	Mar. 24 8
Sangamon: Monticello, Ill.	11	23	1/	12.4	25
Riverton, Ill.	13	22	1/	19.3	25
Illinois: Morris, Ill.	13	29	29	13.3	29
Lasalle, Ill.	20	29	1/		
Havana, Ill.	14	30	1/		
Beardstown, Ill.	14	29	1/		
Meredosia, Ill.	10	23	1/		
Bourbeuse: Union, Mo.	15	23	23	17.0	23
Meramec: Steelville, Mo.	12	24	24	12.1	24
Sullivan, Mo.	15	24	24	15.2	24
Pacific, Mo.	11	22	26	(15.9 (15.8	24 26
Valley Park, Mo.	16	25	25	16.4	25
Kaskaskia: Vandalia, Ill.	18	23	27	19.4	26
Carlyle Dam, Ill.	21	24	1/		
Big Muddy: Plumfield, Ill.	16	28	1/		
Murphysboro, Ill.	16	24	1/	25.1	30
Mississippi: Libby, Minn.	13	4		13.7 15.8	7 25
Aitkin, Minn.	12	1 17	14 May 9	12.8 13.7	6 30
Fort Ripley, Minn.	10	1	May 9	11.4	May 1
Keithsburg, Ill.	12	Mar. 29	8	12.9	3
Missouri Basin					
James: Columbia, S. Dak.	11	Mar. -	May	16.2	1-3
Stratford, S. Dak.	14	Mar. -	May	16.75	11
Ashton, S. Dak.	13	9	May 1	15.2	14,15
Redfield, S. Dak.		12	22	13.8	17
Lyon Creek: Woodbine (nr), Kans.	17	11	11	17.6	11
Marais Des Cygnes: Reading (nr), Kans.	18	11	12	19.1	11

River and station	Flood stage	Above flood stages -dates		Crest*	
		From—	To—	Stage	Date
Ohio Basin	*Ft.*			*Ft.*	
Scioto: Piketon, Ohio	16	29	29	16.6	29
Muscatatuck: Austin, Ind.	16	(26 (28	26 30	16.9 19.1	26 29
Skillet Fork: Wayne City, Ill.	15	24 27	26 29	16.6 16.5	25 28
Little Wabash: Wilcox, Ill.	16	24	1/		
Saline: Harrisburg, Ill.	13	13 24	15 1/	18.6 20.9	13 28
White Basin					
Black: Pocahontas, Ark.	17	24	1/	21.8	28
Black Rock, Ark.	14	23	1/	24.8	25
Cache: Patterson, Ark.	9	21	1/	10.4	30
White: Batesville, Ark.	23	24	26	26.1	24
Newport, Ark.	26	26	1/	28.6	27
Augusta, Ark.	32	27	1/	33.0	28,29
Georgetown, Ark.	21	27	1/	24.2	30
Des Arc, Ark.	24	29	1/		
Clarendon, Ark.	26	29	1/		
Arkansas Basin					
Illinois: Watts, Okla.	13	24	24	13.4	24
Tahlequah, Okla.	11	24	25	12.2	25
Poteau: Panama, Okla.	24	24	27	28.6	25
Red Basin					
Caddo: Glenwood, Ark.	15	23 26	24	18.65 17.5	24 26
Little Missouri: Boughton, Ark.	20	26	28	21.95	27
Saline: Benton, Ark.	20	25	27	23.6	26
Ouachita: Arkadelphia, Ark.	17	24	28	24.95 21.4	27 25
Camden, Ark.	26	26	1/	39.15	30
Little: Horatio, Ark.	25	26	1/		
Sulphur: Hagansport, Ark.	38	24	1/		
Naples, Tex.	22	25	1/		
Cypress: Jefferson, Tex.	18	25	1/	21.5	27
Lower Mississippi Basin					
St. Francis: Fisk, Mo.	20	22	1/	24.8	30
St. Francis, Ark.	18	24	1/	21.8	May 1-3
Big Black: Pickens, Miss.	16	21 29	24 1/		
Bovina, Miss.	28	21 26	22 1/	34.6	30
WEST GULF OF MEXICO DRAINAGE					
Mermentau: Mermentau, La.	5	23	25	5.2	24
Calcasieu: Hineston, La.	12	27	30	12.5	28
Kinder, La.	16	28	29	16.6	29
Sabine: Quitman, Tex.	16	25	1/		
Edgewood, Tex.	12	24	1/		
Mineola, Tex.	14	25	1/	#19.7	27
Gladewater, Tex.	26	24	1/	E37.5	27
Tatum, Tex.	23	25	1/	E28.0	27
Logansport, Tex.	25	28	1/		
Angelina: Alto, Tex.	19	26	1/	21.4	28
Neches: Alto, Tex.	16	25	1/	23.4	30
Trinity: Carrollton, Tex.	6	29	30	7.4	30
Dallas, Tex.	30	24 28	27 1/	36.6 39.7	26 May 1
Rosser, Tex.	26	25	1/	33.7 36.9	27 May 1
Trinidad, Tex.	28	24	1/	(40.5 (42.6	29 May 3
Long Lake, Tex.	40	26	1/	46.1	29
Midway, Tex.	40	29	1/		

FLOOD STAGE DATA

(All dates in April unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
	Ft.			Ft.	
Trinity: Liberty, Tex.	24	25	1/		
Moss Bluff, Tex.	4	25	1/		
Little Cameron, Tex.	30	25	27	35.1	25
Navasota Easterly (nr), Tex.	14	25	28	20.3	26
Bryan (nr), Tex.	12	27	29	16.2	28
Brazos: East Columbia, Tex.	30	30	1/		
Navidad: Ganado, Tex.	21	26	28	22.8	26
Lavaca Edna, Tex.	21	26	27	21.4	27
Frio: Calliham, Tex.	12	25	27	20.6	26
Tilden, Tex.	12	28	28	12.25	28
Atascosa: Whitsett, Tex.	20	25	27	22.8	26
Nueces: Tilden, Tex.	14	27	1/	18.6	May 7-8

* Provisional
# Highest stage observed
E Estimated
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	86	1.9	81	205	1.2
1000	30	149			162	1.0
950	30	566	1.9	64	274	4.1
900	30	999	.2	63	294	7.2
850	30	1,456	-1.8	61	292	10.3
800	30	1,937	-4.0	61	280	13.8
750	30	2,445	-6.5	56	279	16.3
700	30	2,981	-9.2	54	279	19.2
650	30	3,547	-12.2	52	276	22.1
600	30	4,160	-15.5	48	276	24.9
550	30	4,808	-19.3	42	276	28.6
500	30	5,515	-24.1	39	277	32.2
450	30	6,271	-29.4	37	278	35.2
400	30	7,107	-35.1	36	278	41.2
350	30	8,026	-41.4	37	276	45.6
300	30	9,058	-47.2		278	51.7
250	30	10,252	-51.8		277	55.6
200	30	11,688	-54.5		280	54.4
175	30	12,542	-55.3		279	50.7
150	30	13,527	-54.3		276	44.3
125	30	14,695	-55.1		275	41.2
100	30	16,116	-56.3		275	35.2
80	30	17,531	-56.9		277	27.8
70	30	18,376	-56.8		279	26.0
60	30	19,354	-56.4		273	23.5
50	30	20,514	-55.2		271	21.2
40	30	21,943	-53.7		268	21.8
30	30	23,798	-51.8		264	27.2
25	30	24,983	-50.5		261	31.5
20	29	26,442	-49.6		261	39.2
15	27	28,333	-48.2		260	44.9
10	21	31,016	-46.6		265	55.4
7	12	33,398	-43.3			
5	6	35,676	-41.3			

ALBUQUERQUE, N. MEX.
836 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,619	6.2	45	124	2.3
1000	30	121				
950	30	551				
900	30	1,006				
850	30	1,482				
800	30	1,983	8.5	34	221	3.5
750	30	2,511	5.5	33	276	7.6
700	30	3,073	1.5	36	282	11.5
650	30	3,660	-3.1	40	282	15.0
600	30	4,293	-8.1	44	272	17.3
550	30	4,959	-12.8	40	266	21.6
500	30	5,683	-17.7	33	265	27.6
450	30	6,457	-23.1	29	268	29.9
400	30	7,316	-29.6	29	269	32.2
350	30	8,254	-36.8	27	266	33.4
300	30	9,303	-44.9		263	39.8
250	30	10,498	-53.4		266	42.2
200	30	11,916	-58.0		273	44.5
175	30	12,758	-57.6		272	46.2
150	30	13,732	-57.6		277	43.3
125	30	14,876	-60.3		275	40.4
100	30	16,259	-62.6		270	35.0
80	30	17,629	-63.3		270	30.5
70	30	18,450	-63.0		269	26.2
60	30	19,400	-62.2		268	18.5
50	29	20,529	-60.4		267	15.5
40	28	21,927	-57.2		269	14.4
30	28	23,762	-53.6		264	15.7
25	28	24,941	-50.7		264	18.6
20	27	26,400	-48.4		261	22.9
15	19	28,298	-45.7		258	27.0
10	5	30,951	-42.4			
7						
5						

AMARILLO, TEXAS
890 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,095	6.1	70	343	.8
1000	30	124				
950	30	555				
900	30	1,008				
850	30	1,472	7.5	62	227	4.7
800	30	1,971	7.4	50	246	6.2
750	30	2,501	4.7	46	261	10.3
700	30	3,060	1.6	42	266	12.6
650	30	3,653	-2.3	40	266	14.2
600	30	4,284	-7.0	40	266	16.5
550	30	4,956	-12.0	43	263	21.2
500	30	5,679	-17.4	39	263	26.6
450	30	6,453	-23.3	33	261	31.1
400	30	7,311	-29.6	32	263	34.8
350	30	8,249	-36.9	36	262	40.4
300	30	9,298	-44.8		260	45.1
250	30	10,493	-53.7		259	47.0
200	30	11,902	-59.4		261	49.5
175	30	12,740	-58.2		264	51.9
150	30	13,710	-58.3		265	47.6
125	30	14,853	-60.1		266	44.7
100	30	16,235	-62.9		267	37.1
80	30	17,606	-63.6		265	28.2
70	29	18,427	-63.4		262	26.2
60	27	19,378	-62.0		263	20.4
50	26	20,511	-59.8		267	15.7
40	26	21,915	-56.3		265	14.4
30	26	23,760	-52.4		260	17.1
25	25	24,935	-50.4		262	18.6
20	24	26,395	-48.1		258	21.6
15	22	28,301	-45.1		257	26.6
10	18	31,016	-41.6		259	34.8
7	11	33,431	-37.7		267	59.2
5	9	35,739	-35.7			

ANCHORAGE, ALASKA
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	29	-.3	69	269	1.2
1000	30	145			176	.4
950	30	556	-.5	59	73	1.9
900	30	987	-2.7	64	128	3.7
850	30	1,438	-5.1	65	147	4.7
800	30	1,912	-7.8	69	164	6.2
750	30	2,414	-10.4	65	185	7.6
700	30	2,940	-13.1	61	205	8.2
650	30	3,500	-16.1	59	219	10.3
600	30	4,101	-19.3	55	229	12.8
550	30	4,739	-23.4	53	227	15.2
500	30	5,434	-27.8	49	229	17.1
450	30	6,178	-33.1	43	236	20.2
400	30	7,002	-38.9	43	243	22.1
350	30	7,905	-45.2		242	25.4
300	30	8,920	-51.4		242	25.1
250	30	10,094	-54.1		246	27.0
200	30	11,530	-52.3		245	22.0
175	30	12,397	-50.5		249	19.2
150	30	13,403	-50.6		248	18.3
125	30	14,589	-51.4		250	14.6
100	30	16,034	-52.4		259	10.5
80	30	17,475	-52.8		265	6.4
70	30	18,335	-53.1		260	5.2
60	30	19,323	-53.6		262	2.1
50	30	20,496	-54.3		301	.8
40	30	21,927	-54.7		55	3.7
30	30	23,766	-55.1		55	8.5
25	29	24,928	-55.1		64	12.8
20	27	26,363	-55.1		64	16.5
15	22	28,197	-54.7		73	17.5
10	7	30,829	-53.0			
7						
5						

* ANNETTE, ALASKA
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	37	3.2	78	35	1.0
1000	30	158	3.6	73	340	2.3
950	30	572	1.3	75	296	1.4
900	30	1,007	-1.0	73	248	1.7
850	30	1,462	-3.3	67	244	4.9
800	30	1,940	-5.5	59	263	7.6
750	30	2,442	-8.0	57	273	9.9
700	30	2,979	-10.5	55	281	14.2
650	30	3,540	-13.7	55	293	15.7
600	30	4,151	-17.4	55	292	17.9
550	30	4,795	-21.4	52	297	20.4
500	30	5,496	-26.0	50	296	24.3
450	30	6,245	-31.2	51	295	28.6
400	30	7,078	-36.8	47	303	32.2
350	30	7,990	-42.8	57	302	34.4
300	30	9,016	-49.0		302	37.5
250	30	10,197	-54.2		305	41.8
200	30	11,621	-55.5		305	36.3
175	30	12,475	-53.7		302	33.8
150	30	13,466	-53.3		306	28.0
125	30	14,639	-53.9		304	24.1
100	30	16,066	-55.2		305	19.6
80	29	17,485	-56.1		316	14.0
70	29	18,332	-56.4		321	12.4
60	29	19,310	-57.2		334	10.9
50	29	20,462	-57.4		344	10.1
40	28	21,868	-58.1		360	9.9
30	27	23,683	-58.2		27	11.5
25	25	24,828	-58.3		32	11.5
20	22	26,233	-57.8		40	13.4
15	15	28,070	-56.1		50	15.9
10	14	30,679	-51.9		50	15.9
7	8	33,055	-45.0			
5						

ATHENS, GA.
989 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	246	10.8	86	173	1.2
1000	30	152				
950	30	583	12.3	69	223	9.1
900	30	1,034	10.8	60	250	15.0
850	30	1,509	8.2	62	264	15.7
800	30	2,008	5.5	59	264	17.7
750	30	2,536	2.6	57	264	20.4
700	30	3,089	-.7	55	269	24.9
650	30	3,676	-4.2	50	271	27.2
600	30	4,306	-7.4	42	271	32.6
550	30	4,975	-11.2	39	270	35.0
500	30	5,706	-15.9	32	266	42.2
450	30	6,485	-21.2	32	266	43.3
400	30	7,352	-27.3	29	267	49.5
350	30	8,299	-34.4	31	268	53.8
300	30	9,360	-42.3	34	267	57.1
250	30	10,569	-50.9		268	62.7
200	30	11,994	-57.9		269	71.1
175	30	12,834	-58.5		271	71.1
150	30	13,803	-58.5		271	66.8
125	30	14,943	-60.8		270	57.9
100	30	16,323	-63.4		267	50.5
80	30	17,692	-63.2		270	36.1
70	30	18,513	-62.9		268	28.6
60	30	19,465	-61.3		270	20.4
50	30	20,601	-58.8		270	15.7
40	30	22,015	-54.2		267	11.5
30	28	23,877	-51.0		303	2.9
25	27	25,067	-49.2		192	1.0
20	23	26,536	-46.5		347	2.1
15	11	28,435	-43.5		273	8.5
10	5	31,152	-41.5			
7						
5						

* BARROW, ALASKA
1028 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	8	-22.5	77	96	6.6
1000	30	212	-18.4	81	97	9.9
950	30	599	-15.6	79	99	11.1
900	30	1,006	-14.8	67	100	9.5
850	30	1,438	-15.2	64	104	7.6
800	30	1,895	-16.6	67	108	5.8
750	30	2,378	-18.7	68	110	3.7
700	30	2,890	-21.2	71	151	1.9
650	30	3,434	-23.9	64	209	2.7
600	30	4,015	-27.3	64	222	4.7
550	30	4,639	-31.0	59	233	6.6
500	30	5,307	-35.5	60	238	8.7
450	30	6,036	-40.1	55	242	11.1
400	30	6,830	-45.3		244	13.2
350	30	7,712	-50.0		249	15.3
300	30	8,712	-52.9		252	18.6
250	30	9,890	-51.4		257	18.5
200	30	11,349	-48.5		262	16.3
175	30	12,229	-47.7		265	15.5
150	30	13,247	-47.6		267	14.8
125	30	14,451	-47.7		265	12.0
100	30	15,922	-48.4		271	10.3
80	30	17,386	-49.4		266	8.5
70	30	18,260	-49.8		276	6.6
60	30	19,266	-50.1		292	5.6
50	30	20,455	-50.4		297	3.5
40	30	21,909	-50.7		349	3.3
30	30	23,781	-50.8		46	4.1
25	30	24,967	-51.0		44	7.2
20	29	26,416	-51.4		50	10.1
15	27	28,279	-51.5		60	14.4
10	22	30,957	-48.5		65	21.6
7	12	33,263	-48.3		60	30.7
5	5	35,409	-49.2			

BARTER IS., ALASKA
1027 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	15	-24.2	72	121	1.6
1000	30	208	-19.4	83	93	3.7
950	30	598	-15.0	76	92	4.3
900	30	1,003	-13.9	68	92	3.7
850	30	1,437	-14.5	64	344	.6
800	30	1,895	-16.0	57	302	2.7
750	30	2,377	-18.2	53	299	5.1
700	30	2,893	-20.5	55	303	5.8
650	30	3,437	-23.2	56	297	8.2
600	30	4,021	-26.3	52	298	11.7
550	30	4,643	-29.9	55	293	15.3
500	30	5,320	-34.1	59	288	19.4
450	30	6,046	-38.9	57	287	23.3
400	30	6,850	-44.0	53	280	26.0
350	30	7,735	-49.2		272	29.3
300	30	8,738	-52.5		273	32.2
250	30	9,916	-52.0		274	28.4
200	30	11,369	-49.1		279	22.7
175	30	12,248	-48.0		275	21.0
150	30	13,265	-47.7		280	20.2
125	30	14,468	-48.0		281	15.9
100	30	15,937	-48.8		281	15.3
80	30	17,400	-49.6		287	12.2
70	30	18,272	-50.1		292	11.5
60	30	19,278	-50.2		306	8.7
50	30	20,467	-50.8		319	7.2
40	30	21,920	-50.9		1	5.8
30	30	23,791	-51.4		30	8.5
25	27	24,969	-52.3		45	13.8
20	26	26,408	-53.2		48	18.5
15	20	28,278	-52.3		52	20.4
10	13	30,961	-48.2		54	29.5
7	6	33,309	-46.9			
5						

BETHEL, ALASKA
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	39	-6.8	81	4	5.2
1000	30	142	-4.0	67	13	6.0
950	30	544	-4.6	66	90	4.7
900	30	971	-6.4	67	135	4.1
850	30	1,417	-8.1	69	172	4.5
800	30	1,886	-10.2	64	190	6.0
750	30	2,380	-12.5	57	198	8.5
700	30	2,906	-15.0	47	208	7.4
650	30	3,460	-17.7	45	217	8.7
600	30	4,059	-21.2	49	223	11.7
550	30	4,694	-24.8	51	222	15.2
500	30	5,385	-29.4	50	221	18.1
450	30	6,125	-34.6	47	216	23.3
400	30	6,943	-40.1	44	208	28.7
350	30	7,843	-46.3		213	32.6
300	30	8,854	-51.8		217	35.7
250	30	10,030	-53.7		217	34.8
200	30	11,472	-50.9		218	28.7
175	30	12,345	-49.8		221	23.5
150	30	13,354	-49.9		217	20.8
125	30	14,546	-50.3		218	17.7
100	30	16,000	-51.0		212	13.0
80	30	17,451	-51.4		205	9.7
70	30	18,317	-51.9		192	7.2
60	29	19,317	-52.8		178	5.4
50	29	20,492	-53.3		154	4.9
40	28	21,927	-53.8		111	4.9
30	27	23,773	-54.4		85	7.2
25	27	24,940	-54.8		82	12.0
20	25	26,380	-54.5		76	16.3
15	18	28,242	-54.4		73	24.7
10	10	30,827	-53.2			
7						
5						

BISMARCK, N. DAK.
957 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	505	-.7	75	8	2.3
1000	30	152				
950	30	565	-.4	70	350	2.5
900	30	997	-1.0	64	318	5.6
850	30	1,451	-3.2	65	308	9.3
800	30	1,929	-5.7	64	306	12.6
750	30	2,431	-8.4	68	304	15.5
700	30	2,966	-11.0	62	299	17.1
650	30	3,529	-13.6	64	297	19.8
600	30	4,137	-16.8	61	289	22.9
550	30	4,780	-20.9	59	285	26.4
500	30	5,483	-25.5	55	285	32.1
450	30	6,232	-30.5	51	284	34.6
400	30	7,066	-36.5	46	284	40.2
350	30	7,978	-43.2		282	44.1
300	30	8,999	-50.6		280	43.7
250	30	10,170	-56.0		277	46.2
200	30	11,591	-54.6		278	37.9
175	30	12,448	-53.3		280	35.7
150	30	13,441	-53.4		280	32.4
125	30	14,611	-54.2		283	29.9
100	30	16,037	-55.8		283	24.3
80	30	17,452	-57.1		285	22.5
70	30	18,295	-57.5		289	19.6
60	30	19,269	-57.7		288	17.7
50	30	20,420	-57.4		284	14.4
40	30	21,830	-56.8		286	13.8
30	27	23,658	-56.0		280	14.6
25	27	24,819	-55.2		281	16.7
20	26	26,247	-54.2		277	22.5
15	25	28,105	-51.8		272	29.5
10	12	30,749	-48.4		271	44.9
7	6	33,085	-44.3			
5						

BOISE, IDAHO
917 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	868	3.8	64	156	2.3
1000	30	152				
950	30	575				
900	30	1,018	7.0	50	291	1.6
850	30	1,487	5.7	45	321	7.8
800	30	1,980	2.3	48	316	8.9
750	30	2,493	-1.4	53	308	12.0
700	30	3,045	-4.9	51	304	15.3
650	30	3,620	-8.5	50	299	19.0
600	29	4,241	-12.2	44	296	20.6
550	29	4,896	-16.3	41	296	23.5
500	29	5,612	-21.1	42	293	25.4
450	29	6,377	-26.6	41	294	29.9
400	29	7,223	-32.8	42	294	33.4
350	29	8,149	-40.0	41	295	36.7
300	29	9,184	-47.5		298	37.7
250	29	10,369	-54.9		297	39.6
200	28	11,775	-58.9		298	37.9
175	28	12,616	-57.2		296	38.5
150	28	13,593	-56.6		292	33.6
125	28	14,746	-57.9		293	31.7
100	27	16,150	-59.5		292	26.2
80	26	17,548	-59.9		295	18.3
70	26	18,381	-60.2		291	16.3
60	26	19,341	-60.1		293	14.8
50	26	20,479	-59.8		286	12.6
40	26	21,875	-58.7		288	11.7
30	25	23,683	-57.1		278	14.8
25	25	24,840	-55.6		272	18.5
20	22	26,269	-54.3		269	22.9
15	16	28,134	-50.4		270	32.6
10						
7						

* BOOTHVILLE, LA.
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	1	18.1	91	108	1.9
1000	29	136	18.9	83	123	4.9
950	29	579	17.3	64	177	10.3
900	29	1,037	15.1	54	198	8.2
850	29	1,519	12.5	54	221	8.5
800	29	2,026	10.1	50	234	12.0
750	29	2,557	7.6	40	252	13.8
700	29	3,125	4.2	39	256	16.3
650	29	3,723	.2	35	260	19.4
600	29	4,361	-4.0	34	267	24.1
550	29	5,039	-8.1	32	269	26.8
500	29	5,776	-12.8	31	271	29.5
450	29	6,567	-18.1	28	268	33.4
400	29	7,441	-24.4	30	269	37.7
350	29	8,401	-31.3	28	268	43.5
300	29	9,474	-39.5	31	270	49.5
250	29	10,697	-48.7		269	56.5
200	29	12,134	-57.3		271	67.6
175	29	12,971	-59.9		273	64.3
150	29	13,931	-61.4		268	62.0
125	29	15,054	-63.7		266	57.1
100	29	16,412	-66.6		268	45.1
80	28	17,757	-68.5		267	32.6
70	28	18,558	-67.3		265	25.6
60	28	19,491	-64.6		264	15.9
50	28	20,615	-60.0		269	11.3
40	28	22,019	-56.4		314	3.1
30	28	23,862	-52.3		57	7.2
25	28	25,046	-49.8		77	9.7
20	28	26,514	-46.9		82	12.0
15	25	28,443	-42.8		87	9.9
10	15	31,214	-37.8		87	5.2
7	6	33,676	-35.6			

* BROWNSVILLE, TEXAS
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	7	20.3	93	133	7.0
1000	30	101	20.4	91	140	9.9
950	30	546	19.2	80	164	18.3
900	30	1,010	18.7	57	170	17.7
850	30	1,500	16.9	52	180	13.2
800	30	2,015	14.6	43	198	10.5
750	30	2,558	11.5	39	216	11.7
700	30	3,131	7.5	41	232	12.8
650	30	3,732	3.0	47	250	14.0
600	30	4,379	-1.8	47	262	18.6
550	30	5,059	-7.1	48	264	19.2
500	30	5,802	-12.1	41	264	23.3
450	30	6,597	-17.4	36	265	28.6
400	30	7,474	-23.3	34	265	34.8
350	30	8,437	-30.4	38	265	42.0
300	30	9,515	-38.5	35	264	49.5
250	30	10,743	-47.7		261	58.9
200	29	12,182	-57.1		262	68.4
175	29	13,020	-60.3		260	67.4
150	29	13,975	-63.1		260	62.2
125	29	15,088	-66.0		257	53.8
100	29	16,430	-69.5		257	41.4
80	29	17,751	-71.8		258	27.0
70	29	18,540	-70.5		259	18.3
60	28	19,463	-67.3		251	10.9
50	28	20,575	-62.4		256	6.8
40	26	21,968	-58.0		62	1.2
30	26	23,797	-54.2		82	10.7
25	24	24,972	-51.6		79	13.4
20	22	26,430	-47.9		81	16.3
15	21	28,351	-43.1		83	16.7
10	16	31,116	-38.0			
7						

BUFFALO, N. Y.
990 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	218	3.4	79	193	2.9
1000	30	139				
950	30	556	3.7	67	213	4.5
900	30	993	1.6	64	253	7.6
850	30	1,452	-.8	66	259	12.0
800	30	1,934	-3.6	68	267	14.8
750	29	2,436	-6.7	67	268	18.1
700	29	2,972	-9.0	55	272	18.5
650	29	3,541	-12.1	53	273	20.4
600	29	4,152	-15.5	49	273	22.7
550	29	4,802	-19.5	44	271	27.4
500	29	5,506	-23.9	36	270	32.4
450	29	6,265	-29.0	34	273	36.7
400	29	7,102	-34.9	37	274	41.6
350	29	8,022	-41.2	38	274	47.2
300	29	9,054	-47.7		273	53.6
250	29	10,244	-52.3		270	58.7
200	29	11,679	-54.6		274	57.7
175	29	12,533	-54.7		277	48.2
150	29	13,520	-54.0		273	39.4
125	29	14,689	-54.6		274	35.9
100	29	16,111	-56.4		269	34.8
80	29	17,526	-56.8		271	30.3
70	28	18,366	-56.5		272	28.2
60	27	19,336	-56.3		269	24.3
50	26	20,489	-55.7		267	20.6
40	26	21,916	-54.1		264	19.4
30	25	23,767	-52.1		255	24.5
25	25	24,951	-50.7		256	32.1
20	23	26,409	-49.5		255	39.0
15	20	28,299	-48.0		260	44.1
10	9	30,910	-46.7			
7						

*CANTON IS., PACIFIC AREA
+ 1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	30.5	70	70	9.1
1000	30	77	28.7	69	71	10.1
950	30	519	23.0	71	74	11.8
900	30	1,000	20.6	63	83	14.0
850	30	1,493	18.7	55	91	13.8
800	30	2,011	16.1	52	91	13.0
750	30	2,554	13.8	46	92	11.8
700	30	3,137	10.7	46	90	10.5
650	30	3,746	7.4	42	93	8.7
600	30	4,406	3.7	42	95	8.0
550	30	5,104	-.1	39	103	6.0
500	30	5,864	-4.7	37	89	3.9
450	30	6,682	-9.3	31	83	6.2
400	30	7,589	-14.6	28	112	7.4
350	30	8,587	-21.4	26	124	8.5
300	30	9,705	-29.9	24	128	10.7
250	30	10,976	-40.3	24	143	16.9
200	30	12,458	-52.6		156	21.2
175	30	13,307	-59.6		156	20.2
150	30	14,254	-67.1		172	11.5
125	30	15,333	-74.8		217	10.5
100	30	16,605	-81.8		243	12.6
80	30	17,849	-82.0		131	4.3
70	30	18,604	-77.0		89	17.1
60	30	19,498	-71.6		88	28.4
50	30	20,590	-65.8		91	36.9
40	30	21,963	-58.9		90	29.3
30	29	23,803	-51.8		265	12.8
25	29	24,992	-49.2		272	24.3
20	28	26,[illegible]55	-45.7		267	26.0
15	24	28,398	-42.3		268	24.9
10	19	31,181	-37.9		262	23.3
7	8	33,640	-33.1			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• CAPE HATTERAS, N. C.
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	4	12.1	81	295	3.1
1000	30	147	13.0	69	266	5.4
950	30	574	10.9	63	271	10.1
900	30	1,026	8.6	60	275	13.0
850	30	1,497	6.1	57	268	15.9
800	30	1,992	3.0	57	267	17.9
750	30	2,510	.3	57	264	22.7
700	30	3,064	-2.4	54	261	26.8
650	30	3,645	-5.1	43	262	31.3
600	30	4,275	-8.6	41	265	37.7
550	30	4,938	-12.3	37	265	39.8
500	30	5,668	-16.7	35	264	41.6
450	30	6,443	-22.0	33	265	47.0
400	30	7,309	-28.2	31	268	53.0
350	30	8,254	-35.1	30	271	56.5
300	30	9,311	-42.8	31	272	59.2
250	30	10,519	-50.9		273	66.6
200	30	11,948	-57.3		279	65.1
175	30	12,790	-58.6		281	61.6
150	30	13,757	-58.9		277	60.4
125	30	14,900	-59.8		278	53.2
100	30	16,287	-61.4		278	46.0
80	29	17,673	-61.7		280	34.8
70	29	18,501	-61.0		281	28.0
60	29	19,459	-60.2		285	19.6
50	29	20,605	-56.7		282	15.7
40	27	22,027	-53.4		276	10.7
30	27	23,890	-50.7		265	7.2
25	26	25,081	-49.0		249	7.0
20	26	26,556	-46.2		259	7.0
15	23	28,481	-43.7		273	10.5
10	20	31,212	-41.1		266	23.7
7	7	33,616	-39.3			

• CARIBOU, ME.
994 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	191	-1.0	82	322	2.7
1000	30	139			334	3.5
950	30	549	-1.0	70	273	3.1
900	30	978	-2.9	70	299	5.2
850	30	1,429	-5.3	69	302	7.8
800	30	1,903	-7.6	64	310	9.1
750	30	2,400	-10.1	58	311	9.5
700	30	2,933	-13.1	56	302	9.9
650	30	3,492	-15.6	48	299	11.8
600	30	4,095	-19.0	48	293	14.2
550	30	4,733	-22.9	46	286	15.5
500	30	5,431	-27.2	41	282	16.7
450	30	6,181	-32.4	40	286	20.0
400	30	7,004	-38.1	35	287	22.7
350	30	7,911	-44.3	28	283	25.3
300	30	8,931	-49.5		279	28.9
250	30	10,117	-52.0		284	32.6
200	30	11,560	-52.3		280	33.4
175	30	12,424	-52.0		281	31.7
150	30	13,422	-52.1		278	29.3
125	30	14,599	-53.0		274	27.0
100	30	16,034	-54.0		273	24.1
80	30	17,462	-54.7		268	22.0
70	30	18,314	-54.7		270	20.2
60	30	19,300	-54.6		270	17.7
50	30	20,466	-54.4		264	17.5
40	30	21,897	-53.5		262	17.9
30	30	23,748	-52.8		254	21.8
25	30	24,926	-51.7		254	27.2
20	30	26,373	-51.3		258	33.0
15	26	28,259	-49.7		260	41.0
10	11	30,949	-44.9			
7						

CHARLESTON, S. C.
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	13	12.4	84	188	.4
1000	30	153	14.6	74	217	3.3
950	30	586	13.6	62	241	10.1
900	30	1,041	10.8	58	250	11.7
850	30	1,516	8.3	54	257	14.0
800	30	2,015	5.8	54	264	16.1
750	30	2,542	2.8	51	269	18.1
700	30	3,098	.2	46	268	22.3
650	30	3,685	-3.0	44	267	27.8
600	30	4,319	-6.4	38	266	31.1
550	30	4,989	-10.5	32	266	35.5
500	30	5,724	-15.3	34	266	39.8
450	30	6,506	-20.5	31	266	42.7
400	30	7,376	-26.4	30	266	47.6
350	30	8,327	-33.6	31	264	49.7
300	30	9,390	-41.9	34	268	53.0
250	30	10,602	-50.5		270	55.0
200	30	12,030	-57.5		271	65.7
175	30	12,870	-59.0		273	67.6
150	30	13,836	-59.4		271	63.7
125	30	14,971	-61.9		273	61.4
100	30	16,345	-63.9		273	48.6
80	30	17,706	-65.1		270	38.3
70	30	18,521	-63.9		272	29.5
60	30	19,469	-61.8		277	20.8
50	30	20,605	-58.8		275	12.4
40	30	22,018	-54.8		280	6.8
30	30	23,871	-51.5		307	1.7
25	30	25,059	-49.3		100	1.6
20	30	26,531	-46.4		67	2.3
15	24	28,465	-43.3		86	2.7
10	12	31,200	-39.8			
7						

CHIHUAHUA, MEXICO
855 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,428	12.8	43	219	2.7
1000	30	88				
950	30	527				
900	30	992				
850	30	1,479	13.3	41	235	3.7
800	30	1,989	12.7	46	278	6.0
750	30	2,523	9.5	36	279	6.2
700	30	3,095	5.8	37	255	7.2
650	30	3,693	1.6	36	244	11.1
600	30	4,335	-3.1	39	244	14.2
550	30	5,015	-8.1	36	252	16.3
500	30	5,749	-13.2	34	254	21.2
450	30	6,536	-19.0	36	258	25.1
400	30	7,408	-25.2	32	261	30.1
350	30	8,363	-32.5	35	261	35.2
300	30	9,449	-40.8	39	261	39.6
250	30	10,646	-49.1		264	51.1
200	30	12,081	-56.4		262	55.2
175	30	12,926	-57.9		262	52.4
150	29	13,897	-59.4		259	49.1
125	28	15,027	-62.7		258	42.7
100	26	16,395	-65.7		256	37.3
80	26	17,744	-67.6		261	28.9
70	26	18,546	-67.4		266	24.7
60	24	19,483	-65.0		268	18.1
50	23	20,607	-61.3		264	13.6
40	20	22,017	-56.3		267	7.8
30	19	23,859	-52.5		267	1.0
25	18	25,035	-50.5			
20	16	26,496	-48.1			
15	12	28,407	-43.7			
10						
7						

• COLD BAY, ALASKA
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	30	.3	88	148	8.4
1000	30	105	.0	86	148	7.4
950	30	516	-1.6	91	153	13.4
900	30	944	-2.7	84	155	13.0
850	30	1,397	-3.9	75	161	[illegible]
800	30	1,874	-5.4	66	174	[illegible]
750	30	2,375	-7.9	66	186	14.4
700	30	2,913	-10.8	61	192	13.4
650	30	3,474	-14.0	61	196	14.4
600	30	4,082	-17.6	58	199	16.9
550	30	4,725	-21.5	[illegible]	201	18.6
500	30	5,424	-26.3	[illegible]	201	20.8
450	30	6,173	-31.5	49	202	23.3
400	30	7,001	-37.5	48	203	26.2
350	30	7,909	-44.0	51	207	30.5
300	30	8,928	-50.9		212	33.0
250	30	10,101	-55.1		215	35.2
200	30	11,532	-52.5		216	28.2
175	30	12,398	-50.7		223	25.4
150	30	13,402	-50.9		218	20.4
125	29	14,590	-52.0		219	18.6
100	29	16,033	-52.6		215	16.7
80	29	17,472	-53.2		206	11.5
70	29	18,330	-53.6		200	8.7
60	29	19,318	-54.1		198	6.4
50	28	20,480	-54.2		195	7.0
40	27	21,908	-55.0		170	3.3
30	26	23,741	-56.1		73	4.3
25	26	24,898	-56.4		89	4.9
20	25	26,312	-56.6		71	9.1
15	25	28,139	-55.2		70	11.5
10	16	30,720	-53.2		72	13.0
7	8	33,134	-47.2			

COLUMBIA, MO.
986 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	238	7.0	76	18	1.7
1000	30	123				
950	30	544	7.1	68	357	2.5
900	30	989	5.6	62	308	4.9
850	30	1,456	3.8	62	282	9.5
800	30	1,946	1.5	61	282	13.8
750	30	2,459	-1.0	58	289	18.3
700	30	3,012	-4.0	59	291	22.0
650	30	3,589	-6.8	52	285	24.9
600	30	4,215	-10.2	42	287	30.1
550	30	4,873	-14.6	40	283	35.5
500	30	5,596	-19.4	40	280	39.0
450	30	6,361	-24.8	40	277	43.5
400	30	7,217	-31.1	38	274	46.0
350	30	8,150	-38.1	R34	271	49.7
300	30	9,195	-45.7		268	56.7
250	30	10,389	-53.1		264	63.3
200	30	11,806	-58.8		259	66.2
175	30	12,644	-58.6		265	66.0
150	30	13,616	-57.1		270	56.3
125	30	14,770	-57.6		269	44.3
100	30	16,171	-59.7		270	38.9
80	30	17,563	-60.4		270	32.4
70	30	18,394	-60.1		271	27.6
60	29	19,354	-59.8		275	24.7
50	29	20,498	-58.2		275	19.4
40	29	21,911	-55.8		274	19.4
30	29	23,755	-53.0		269	21.6
25	27	24,931	-50.9		265	28.4
20	26	26,387	-49.1		261	35.9
15	20	28,290	-47.0		262	44.3
10						
7						
5						

CORPUS CHRISTI, TEXAS
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	6	20.5	93	141	8.2
1000	26	99	20.1	92	149	10.7
950	26	541	18.1	85	168	15.5
900	26	1,005	17.0	69	174	14.6
850	26	1,493	16.4	62	188	12.4
800	26	2,007	13.6	59	204	10.7
750	26	2,548	10.5	56	226	9.3
700	26	3,121	6.7	54	249	11.7
650	26	3,717	2.4	54	265	13.8
600	26	4,367	-2.2	53	265	18.6
550	26	5,042	-7.1	52	264	24.7
500	26	5,789	-12.6	51	266	26.2
450	26	6,578	-17.9	50	264	27.2
400	26	7,458	-24.3	54	264	33.6
350	26	8,417	-31.5	52	263	39.8
300	26	9,489	-39.7	49	261	46.6
250	26	10,711	-48.9		261	53.8
200	26	12,147	-57.1		262	59.1
175	26	12,986	-59.8		261	60.8
150	26	13,946	-61.5		264	55.0
125	26	15,068	-64.4		263	48.4
100	26	16,422	-67.8		260	41.2
80	26	17,758	-69.5		261	31.5
70	26	18,556	-68.1		262	22.5
60	26	19,489	-65.3		261	13.6
50	25	20,611	-61.0		272	8.5
40	25	22,012	-56.9		283	6.4
30	25	23,852	-52.9			
25	24	25,038	-50.1			
20	24	26,507	-46.5			
15	24	28,437	-42.2			
10	23	31,205	-36.7			
7	16	33,683	-33.2			
5	5	36,029	-32.0			

DAYTON, OHIO
980 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	297	6.3	83	142	1.0
1000	30	130				
950	30	555	6.9	75	193	5.1
900	30	996	5.2	71	237	8.7
850	30	1,461	2.4	74	254	12.4
800	30	1,949	-.6	79	257	16.3
750	30	2,460	-2.9	66	258	20.0
700	30	3,007	-5.7	66	262	22.7
650	30	3,583	-8.9	61	263	25.3
600	30	4,202	-12.1	54	266	30.5
550	30	4,858	-16.2	51	268	31.5
500	30	5,575	-20.7	47	269	35.2
450	30	6,341	-26.0	41	268	39.2
400	30	7,190	-31.8	39	265	45.5
350	30	8,120	-38.7	40	268	51.3
300	30	9,161	-46.2		268	56.5
250	30	10,354	-53.0		264	61.0
200	30	11,777	-57.5		268	67.8
175	30	12,621	-57.0		269	64.1
150	30	13,599	-56.2		270	55.6
125	30	14,757	-56.9		268	45.5
100	30	16,163	-58.8		268	41.0
80	30	17,562	-59.0		269	36.5
70	30	18,398	-58.9		270	30.5
60	30	19,364	-58.6		275	26.6
50	30	20,513	-57.0		266	22.1
40	30	21,931	-55.0		269	20.0
30	30	23,780	-52.3		266	22.5
25	29	24,964	-50.5		261	30.3
20	28	26,425	-48.5		260	36.9
15	20	28,341	-46.8		264	46.2
10	14	31,058	-43.9		264	54.8
7						
5						

DEL RIO, TEXAS
976 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	314	17.1	77	107	4.7
1000	29	102				
950	29	540	17.6	75	139	8.0
900	29	1,004	16.6	67	171	12.6
850	29	1,490	15.2	58	192	10.7
800	29	2,001	12.5	55	209	10.5
750	29	2,535	9.7	44	229	10.7
700	29	3,110	6.4	36	250	12.4
650	29	3,707	1.8	36	265	15.5
600	29	4,353	-3.1	36	265	18.5
550	29	5,029	-8.2	34	255	21.6
500	29	5,768	-13.7	30	255	25.8
450	29	6,553	-19.6	35	259	30.7
400	29	7,426	-25.9	36	260	33.8
350	29	8,380	-32.9	35	258	39.8
300	29	9,446	-41.0	29	259	47.6
250	29	10,661	-50.2		258	57.3
200	29	12,090	-57.8		261	62.2
175	29	12,928	-59.4		261	62.2
150	29	13,891	-60.4		260	56.5
125	29	15,017	-64.1		261	48.6
100	29	16,375	-66.2		264	39.8
80	29	17,718	-69.1		266	28.7
70	29	18,517	-67.7		264	23.3
60	28	19,446	-65.5		264	17.3
50	28	20,565	-61.6		265	13.2
40	27	21,963	-57.1		262	10.9
30	27	23,802	-52.8		257	3.9
25	27	24,985	-50.1		261	1.4
20	27	26,452	-47.4		67	1.2
15	27	28,366	-44.2		138	3.3
10	19	31,109	-39.5		259	6.6
7						
5						

DENVER, COLO.
836 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,611	.9	76	183	1.2
1000	30	141				
950	30	561				
900	30	1,007				
850	30	1,474				
800	30	1,965	3.5	54	264	3.1
750	30	2,484	1.0	53	289	6.6
700	30	3,038	-2.2	53	296	9.3
650	30	3,619	-5.7	50	295	15.2
600	30	4,245	-10.2	49	292	19.6
550	30	4,905	-14.9	51	283	23.3
500	30	5,624	-19.9	47	279	25.4
450	30	6,390	-25.9	44	273	27.0
400	30	7,238	-32.6	40	272	29.9
350	30	8,164	-39.9	31	273	31.9
300	30	9,201	-47.2		272	38.3
250	30	10,389	-53.9		271	38.7
200	30	11,803	-58.8		271	42.2
175	30	12,642	-58.0		273	42.9
150	30	13,616	-56.5		275	42.9
125	30	14,772	-57.5		277	38.9
100	30	16,173	-59.4		277	30.9
80	30	17,565	-60.5		275	26.6
70	30	18,396	-60.4		274	23.9
60	29	19,360	-60.1		270	20.2
50	29	20,503	-59.1		270	15.7
40	28	21,912	-56.9		269	16.5
30	26	23,742	-54.0		264	22.7
25	26	24,916	-52.8		265	29.3
20	24	26,358	-50.2		268	35.9
15	21	28,271	-47.0		264	41.6
10	8	30,972	-46.3			
7						
5						

DODGE CITY, KANS.
923 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	792	5.2	78	324	1.4
1000	30	131				
950	30	554				
900	30	999	6.6	66	338	1.9
850	30	1,469	6.6	58	272	5.4
800	30	1,965	5.2	52	273	10.7
750	30	2,484	2.5	50	278	13.6
700	30	3,045	-.6	49	284	17.7
650	30	3,627	-4.3	49	277	18.5
600	30	4,259	-8.7	51	270	22.7
550	30	4,920	-13.8	52	268	25.4
500	30	5,644	-19.1	45	265	29.9
450	30	6,409	-24.9	42	265	34.2
400	30	7,265	-31.5	36	267	37.1
350	30	8,196	-38.8	33	264	41.2
300	30	9,238	-46.4		264	48.6
250	30	10,426	-54.5		262	53.2
200	30	11,834	-59.7		265	53.4
175	30	12,671	-58.3		267	52.1
150	30	13,643	-57.8		266	49.1
125	30	14,790	-59.2		269	45.3
100	30	16,182	-60.9		272	40.4
80	30	17,566	-61.6		271	29.1
70	29	18,388	-61.8		270	24.7
60	29	19,342	-61.2		270	19.4
50	29	20,478	-59.7		270	17.5
40	28	21,883	-57.0		272	15.2
30	28	23,718	-53.8		265	21.2
25	27	24,893	-51.1		264	26.4
20	26	26,343	-49.1		262	31.5
15	21	28,253	-47.1		259	37.7
10	6	30,994	-43.5			
7						
5						

EL PASO, TEXAS
881 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,193	12.8	39	257	2.7
1000	30	108				
950	30	547				
900	30	1,009				
850	30	1,493	13.7	38	275	6.0
800	30	2,001	10.8	38	276	10.3
750	30	2,531	7.2	38	275	13.4
700	30	3,099	3.1	38	271	13.4
650	30	3,689	-1.2	44	266	16.5
600	30	4,329	-5.8	45	262	17.1
550	30	4,997	-10.3	32	262	22.1
500	30	5,733	-15.4	30	262	24.9
450	30	6,512	-21.1	32	262	28.0
400	30	7,378	-27.9	37	260	29.9
350	30	8,324	-35.1	36	259	32.6
300	30	9,381	-43.2		262	39.0
250	30	10,586	-51.8		266	46.8
200	30	12,009	-57.8		265	55.4
175	30	12,851	-57.9		264	54.8
150	30	13,821	-58.7		265	53.6
125	30	14,959	-61.3		268	47.4
100	30	16,333	-64.3		268	39.4
80	30	17,691	-65.9		265	32.6
70	30	18,501	-65.8		268	26.2
60	30	19,440	-64.1		273	18.8
50	29	20,567	-61.1		263	11.3
40	27	21,963	-56.4		269	8.9
30	26	23,800	-52.8		252	7.4
25	25	24,985	-50.3		251	8.4
20	25	26,451	-47.2		267	8.4
15	22	28,378	-43.9		255	12.0
10	9	31,072	-39.0			
7						
5						

ELY, NEV.
808 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,908	-1.8	58	191	5.4
1000	30	169				
950	30	594				
900	30	1,037				
850	30	1,500				
800	30	1,988	2.9	44	197	4.3
750	30	2,516	2.3	37	341	4.5
700	30	3,065	-1.6	39	320	8.7
650	30	3,653	-5.6	39	310	14.6
600	30	4,274	-9.4	36	299	18.6
550	30	4,938	-13.9	35	293	21.4
500	30	5,659	-18.9	30	295	22.9
450	30	6,429	-24.7	31	296	25.8
400	30	7,281	-31.4	32	293	28.4
350	30	8,212	-39.0	29	293	29.5
300	30	9,251	-46.8		295	32.4
250	30	10,437	-54.8		295	39.2
200	29	11,840	-59.8		291	42.7
175	29	12,676	-58.8		286	40.6
150	29	13,647	-58.3		284	36.5
125	29	14,791	-59.6		285	36.5
100	29	16,179	-61.9		282	28.4
80	29	17,556	-62.4		281	22.7
70	29	18,379	-62.4		279	18.5
60	29	19,332	-61.4		280	13.6
50	28	20,465	-60.3		286	11.8
40	27	21,859	-59.0		267	13.4
30	27	23,679	-55.3		262	19.4
25	24	24,847	-54.0		261	22.5
20	24	26,287	-51.5		261	28.2
15	21	28,174	-47.6		264	41.8
10	15	30,905	-42.5		262	40.2
7	10	33,333	-38.7			
5	7	35,649	-35.4			

EMPALME, MEXICO
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	12	16.3	70	12	4.3
1000	30	107	20.0	61	14	4.3
950	30	547	20.7	41	75	.8
900	30	1,015	18.4	35	143	1.7
850	30	1,502	15.0	36	191	3.9
800	30	2,012	11.8	32	190	5.1
750	30	2,549	8.4	29	216	7.0
700	30	3,114	4.8	28	221	9.1
650	30	3,712	1.2	26	248	10.9
600	30	4,353	-3.1	31	254	13.8
550	30	5,030	-7.7	28	259	15.5
500	30	5,770	-13.2	28	268	19.8
450	30	6,558	-19.0	29	269	25.6
400	30	7,432	-25.3	29	267	31.3
350	30	8,387	-32.6	31	266	39.6
300	30	9,454	-40.8	39	268	46.0
250	30	10,671	-49.5		269	57.1
200	30	12,105	-57.1		265	66.0
175	30	12,947	-58.3		266	64.1
150	30	13,913	-60.2		268	53.8
125	30	15,042	-63.5		266	49.0
100	30	16,398	-66.8		269	39.0
80	30	17,740	-68.2		269	28.4
70	28	18,544	-67.6		277	19.6
60	28	19,475	-66.3		273	14.8
50	27	20,582	-62.6		283	9.7
40	26	21,972	-57.4		274	5.1
30	26	23,803	-53.8		90	2.3
25	23	24,980	-51.3		104	5.6
20	18	26,441	-47.8		108	6.2
15	12	28,382	-44.3		72	7.8
10						
7						
5						

• FAIRBANKS, ALASKA
1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	135	-5.7	64	334	1.9
1000	30	163			45	1.9
950	30	565	-3.8	47	96	2.9
900	30	993	-5.8	49	179	2.7
850	30	1,438	-8.2	51	210	4.7
800	30	1,907	-10.3	53	226	6.4
750	30	2,400	-12.8	57	231	7.6
700	30	2,925	-15.5	52	238	9.9
650	30	3,479	-18.4	52	243	11.6
600	30	4,076	-21.5	54	245	14.0
550	30	4,710	-25.0	53	247	18.1
500	30	5,399	-29.5	55	248	[illegible]
450	30	6,138	-34.9	55	248	24.7
400	30	6,956	-40.7	53	247	26.8
350	30	7,853	-46.9		247	31.5
300	30	8,862	-52.2		252	34.6
250	30	10,035	-54.4		257	30.3
200	30	11,472	-51.4		264	25.1
175	30	12,343	-49.6		267	23.9
150	29	13,342	-49.5		268	22.1
125	29	14,536	-49.7		266	19.4
100	29	15,993	-50.4		272	13.6
80	29	17,445	-51.3		276	8.4
70	29	18,310	-51.8		290	6.8
60	29	19,308	-52.1		294	5.6
50	29	20,485	-52.8		329	2.7
40	29	21,922	[illegible]		22	4.9
30	27	23,771	-53.6		43	9.7
25	27	24,941	-53.9		51	14.2
20	[illegible]	26,372	[illegible]		55	18.5
15	14	[illegible]	[illegible]		55	21.2
10	7	30,867	-52.1			
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

APRIL 196

FLINT, MICH.
987 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	234	3.0	74	174	1.9
1000	30	130				
950	30	545	3.0	70	211	1.9
900	30	984	1.5	69	258	8.0
850	30	1,443	-.9	70	262	12.8
800	30	1,925	-3.4	66	264	14.8
750	30	2,429	-6.2	63	267	15.3
700	30	2,971	-8.5	54	269	17.9
650	30	3,539	-11.2	50	268	20.8
600	30	4,153	-14.7	52	267	24.7
550	30	4,805	-18.5	49	269	27.6
500	30	5,513	-22.8	45	270	32.4
450	30	6,270	-28.1	44	269	36.3
400	30	7,112	-34.4	44	269	40.8
350	30	8,042	-41.1	46	270	46.2
300	30	9,065	-47.6		271	49.5
250	30	10,254	-52.8		271	57.1
200	30	11,684	-55.6		271	57.9
175	30	12,534	-55.1		275	52.3
150	30	13,521	-53.9		276	45.1
125	30	14,688	-55.0		274	38.5
100	30	16,109	-56.2		274	35.7
80	30	17,523	-57.0		274	30.3
70	30	18,368	-56.8		275	27.0
60	30	19,345	-56.5		277	23.3
50	30	20,502	-56.1		274	19.8
40	30	21,924	-54.8		273	20.0
30	30	23,774	-52.3		267	22.7
25	29	24,959	-51.0		261	28.7
20	27	26,420	-49.5		261	36.5
15	19	28,308	-46.6		264	49.3
10						
7						
5						

FORT WORTH, TEXAS
993 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	180	14.0	79	229	1.9
1000	30	116				
950	30	558	14.2	72	215	5.8
900	30	1,007	13.6	65	234	11.3
850	30	1,488	12.0	60	252	13.0
800	30	1,994	9.8	51	262	14.8
750	30	2,532	6.6	46	270	14.6
700	30	3,091	2.8	42	266	17.7
650	30	3,686	-1.2	40	269	21.2
600	30	4,321	-5.7	37	272	24.5
550	30	4,995	-10.6	36	268	24.7
500	30	5,724	-15.7	33	265	28.6
450	30	6,512	-21.0	29	263	34.0
400	30	7,371	-27.5	30	262	38.5
350	30	8,317	-35.0	32	262	43.7
300	30	9,375	-42.7		261	47.6
250	30	10,580	-52.1		258	53.4
200	30	11,997	-59.5		257	59.6
175	30	12,831	-59.5		258	62.4
150	30	13,796	-59.8		261	60.4
125	30	14,929	-62.1		263	54.0
100	29	16,301	-64.1		266	44.3
80	29	17,660	-65.3		266	30.9
70	29	18,473	-64.6		265	25.4
60	28	19,419	-63.1		264	18.6
50	28	20,548	-59.9		270	13.0
40	26	21,960	-55.8		275	9.5
30	26	23,808	-52.1		269	7.8
25	26	24,993	-50.0		270	8.4
20	26	26,457	-47.8		255	8.2
15	20	28,358	-44.2		243	11.5
10						
7						
5						

GLASGOW, MONT.
935 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	696	-1.2	75	35	2.7
1000	30	155				
950	30	565				
900	30	1,001	.1	61	333	4.9
850	30	1,458	-2.0	62	314	8.7
800	30	1,938	-4.6	63	313	11.8
750	30	2,440	-7.9	66	311	14.8
700	30	2,975	-11.5	68	305	16.7
650	30	3,535	-14.3	61	300	19.6
600	30	4,143	-17.6	56	301	23.1
550	30	4,785	-21.4	50	299	26.8
500	30	5,485	-26.0	44	296	30.3
450	30	6,232	-31.3	47	294	34.6
400	30	7,063	-37.4	42	289	37.3
350	30	7,972	-44.1		288	40.2
300	30	8,989	-51.5		290	43.5
250	30	10,158	-56.1		297	46.4
200	30	11,577	-55.0		295	38.1
175	30	12,433	-53.8		293	31.1
150	30	13,424	-53.6		289	29.9
125	30	14,594	-54.6		291	26.0
100	30	16,019	-55.7		294	22.7
80	30	17,435	-57.1		297	19.4
70	30	18,278	-57.7		293	16.5
60	29	19,251	-58.1		302	13.8
50	29	20,399	-58.0		302	12.4
40	28	21,806	-57.7		297	11.3
30	28	23,625	-56.8		298	11.8
25	28	24,781	-56.3		293	11.8
20	27	26,197	-55.2		287	14.2
15	26	28,039	-53.5		284	19.4
10	23	30,655	-48.7		282	28.4
7	13	32,955	-45.0		274	33.6
5	8	35,212	-40.6			

• GRAND JUNCTION, COLO.
850 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,474	6.2	47	116	3.5
1000	30	115				
950	30	545				
900	30	998				
850	30	1,474			121	4.1
800	30	1,973	6.6	38	150	3.1
750	30	2,493	3.0	40	266	4.9
700	30	3,054	-1.3	44	285	8.7
650	30	3,636	-5.9	48	288	12.6
600	30	4,262	-10.6	47	284	17.5
550	30	4,921	-15.3	47	280	21.6
500	30	5,640	-20.1	44	278	25.6
450	30	6,407	-25.8	41	279	28.2
400	30	7,256	-32.1	42	279	29.7
350	30	8,184	-39.4	39	281	33.8
300	30	9,222	-47.0		287	37.3
250	30	10,409	-54.4		288	40.2
200	29	11,826	-58.1		291	41.2
175	29	12,669	-56.8		286	39.2
150	29	13,646	-56.9		283	38.5
125	28	14,791	-58.7		283	35.2
100	28	16,184	-60.9		280	29.3
80	28	17,565	-62.1		279	25.1
70	28	18,390	-61.7		282	20.6
60	28	19,345	-61.2		276	15.9
50	27	20,474	-60.6		274	14.0
40	26	21,873	-58.2		273	16.7
30	24	23,692	-55.6		267	19.8
25	23	24,857	-54.1		263	25.8
20	22	26,305	-51.3		265	31.9
15	22	28,191	-47.3		262	37.3
10	16	30,923	-42.0		260	53.6
7	5	33,307	-41.0			
5						

• GREAT FALLS, MONT.
888 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,123	.2	72	259	4.7
1000	30	154				
950	30	572				
900	30	1,012				
850	30	1,472	.6	55	281	9.9
800	30	1,956	-2.5	59	299	10.5
750	30	2,461	-6.1	64	301	11.5
700	30	3,002	-9.6	69	303	15.2
650	30	3,567	-13.4	70	297	18.8
600	30	4,176	-16.7	65	298	23.1
550	30	4,822	-20.4	58	298	26.4
500	30	5,524	-25.2	58	297	29.9
450	30	6,275	-30.5	55	294	32.4
400	30	7,109	-36.6	47	292	35.5
350	30	8,022	-42.9	52	294	39.6
300	30	9,046	-49.8		296	43.9
250	30	10,222	-55.5		298	46.0
200	30	11,636	-56.7		296	42.9
175	30	12,487	-54.4		295	37.9
150	30	13,476	-54.2		295	32.8
125	30	14,642	-55.0		290	27.6
100	29	16,062	-56.7		295	23.9
80	29	17,473	-57.2		295	18.8
70	29	18,316	-57.8		295	15.3
60	29	19,286	-58.6		300	13.8
50	29	20,431	-58.4		296	11.8
40	29	21,834	-58.0		299	11.8
30	28	23,649	-57.0		293	9.3
25	28	24,805	-56.1		278	10.3
20	25	26,231	-54.6		278	13.6
15	23	28,078	-51.9		272	20.0
10	20	30,723	-46.2		271	30.5
7	10	33,083	-41.5			
5						

GREEN BAY, WIS.
990 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	210	1.4	84	337	2.1
1000	30	131				
950	30	548	1.7	71	311	3.3
900	30	979	-.4	71	303	5.4
850	30	1,434	-2.7	72	302	7.8
800	30	1,913	-5.2	72	301	9.9
750	30	2,418	-7.6	66	293	11.1
700	30	2,952	-10.3	61	288	14.6
650	30	3,516	-12.6	47	286	18.8
600	30	4,127	-15.8	44	282	22.7
550	30	4,776	-19.6	44	278	26.0
500	30	5,480	-24.0	44	276	30.5
450	30	6,235	-29.2	46	276	33.4
400	30	7,072	-35.3	45	273	38.5
350	30	7,989	-41.8	41	275	40.0
300	30	9,019	-48.4		274	47.2
250	30	10,204	-53.4		266	54.6
200	30	11,631	-55.9		266	55.0
175	30	12,483	-54.6		271	49.9
150	30	13,474	-53.2		273	42.2
125	30	14,645	-54.6		271	40.2
100	29	16,064	-56.1		275	33.8
80	29	17,478	-57.0		276	30.1
70	29	18,322	-56.7		279	26.4
60	27	19,299	-56.6		278	22.3
50	27	20,454	-56.6		280	18.8
40	26	21,875	-55.6		275	17.9
30	25	23,717	-54.3		274	21.4
25	25	24,889	-53.1		271	25.6
20	25	26,332	-51.4		267	32.2
15	22	28,206	-49.4		264	41.0
10	11	30,851	-45.7		267	57.1

GREENSBORO, N. C.
986 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	273	7.9	87	204	.4
1000	30	155				
950	30	578	9.4	70	236	7.6
900	30	1,028	7.9	65	256	13.0
850	30	1,499	5.2	65	265	15.3
800	30	1,992	2.5	61	268	17.3
750	30	2,514	.3	57	271	20.8
700	30	3,063	-2.8	51	274	24.5
650	30	3,646	-6.0	47	275	27.6
600	30	4,271	-9.4	44	273	32.2
550	30	4,934	-13.6	42	274	34.4
500	30	5,659	-18.2	40	271	39.2
450	30	6,436	-23.2	35	275	41.6
400	30	7,293	-29.0	32	272	47.6
350	30	8,235	-35.7	34	273	53.2
300	30	9,290	-43.4	27	272	59.4
250	30	10,495	-51.4		273	63.9
200	30	11,921	-57.9		275	67.4
175	30	12,761	-58.8		277	63.3
150	30	13,731	-58.5		276	56.3
125	30	14,872	-60.2		276	51.9
100	30	16,260	-61.2		275	45.6
80	30	17,642	-61.9		275	36.3
70	30	18,467	-62.0		277	30.5
60	30	19,424	-60.6		280	22.3
50	30	20,566	-57.8		278	17.1
40	30	21,984	-54.4		277	16.1
30	29	23,844	-50.9		268	14.2
25	29	25,035	-49.3		265	12.4
20	28	26,500	-47.6		271	15.2
15	24	28,412	-44.6		265	19.0
10	13	31,101	-41.8			

GUAM, MARIANA IS.
1000 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	111	25.1	83	84	8.9
1000	30	106			83	8.5
950	30	556	22.0	85	82	20.4
900	30	1,024	19.2	77	88	22.3
850	30	1,515	17.4	59	91	20.0
800	30	2,031	15.2	46	90	18.1
750	30	2,571	13.2	34	90	15.3
700	30	3,153	10.7	30	90	14.0
650	30	3,763	7.7	26	87	12.6
600	30	4,422	3.9	26	87	11.7
550	30	5,124	-.1	20	78	11.1
500	30	5,881	-4.7	21	68	9.3
450	30	6,697	-9.7	21	60	7.2
400	30	7,602	-15.6	23	55	4.1
350	30	8,595	-22.5	21	311	1.9
300	30	9,709	-30.6	22	288	5.8
250	30	10,977	-40.4	25	268	10.7
200	30	12,458	-52.6		257	12.4
175	30	13,306	-59.7		242	11.7
150	30	14,252	-67.4		237	10.1
125	30	15,330	-75.1		254	6.2
100	30	16,600	-81.7		37	2.9
80	27	17,843	-82.2		86	10.1
70	26	18,597	-77.7		88	14.0
60	25	19,499	-70.4		87	18.8
50	24	20,597	-64.9		91	25.3
40	23	21,974	-61.1		94	29.9
30	23	23,785	-54.6		88	27.0
25	23	24,961	-51.4		85	22.9
20	22	26,424	-47.4		79	17.3
15	15	28,326	-45.1		78	13.4
10						

HILO, HAWAII
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	11	20.1	83	287	3.7
1000	30	139	20.1	79	311	4.1
950	30	581	16.8	85	16	5.2
900	30	1,040	13.6	90	20	5.1
850	30	1,520	10.8	90	13	4.3
800	30	2,025	8.4	78	360	2.3
750	30	2,562	7.9	49	282	4.1
700	30	3,126	5.9	33	277	6.8
650	30	3,729	3.5	29	283	9.5
600	30	4,376	.2	23	287	11.3
550	30	5,063	-4.1	19	290	12.0
500	30	5,813	-9.1	18	287	15.0
450	30	6,616	-14.8	19	286	19.4
400	30	7,501	-21.5	18	284	24.3
350	30	8,471	-28.7	19	282	32.1
300	30	9,557	-36.3	22	277	45.8
250	30	10,798	-45.4		274	56.5
200	30	12,254	-54.9		274	76.0
175	29	13,098	-60.1		276	74.8
150	29	14,049	-65.1		276	68.8
125	29	15,146	-69.7		278	52.3
100	29	16,463	-73.4		275	34.8
80	29	17,771	-71.9		273	20.8
70	29	18,563	-69.0		247	7.6
60	29	19,490	-66.0		122	4.9
50	29	20,605	-62.8		88	11.3
40	29	21,988	-60.1		89	14.6
30	28	23,797	-55.3		84	15.5
25	28	24,967	-52.9		86	17.1
20	27	26,415	-49.7		85	16.5
15	17	28,310	-44.8		92	14.0
10	6	31,037	-42.5			

HUNTINGTON, W. VA.
987 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	246	7.7	79	196	1.7
1000	30	135				
950	30	563	9.0	66	227	6.2
900	30	1,007	6.8	69	244	11.5
850	30	1,475	4.1	72	257	15.7
800	30	1,966	.9	72	269	17.9
750	30	2,483	-1.5	65	266	20.4
700	30	3,030	-4.4	62	268	22.9
650	30	3,609	-7.7	62	270	26.8
600	30	4,230	-11.4	58	273	29.7
550	30	4,889	-15.0	49	272	32.4
500	30	5,608	-19.4	45	270	36.9
450	30	6,377	-24.6	43	270	42.7
400	30	7,229	-30.7	40	270	46.4
350	30	8,164	-37.5	39	269	51.9
300	30	9,212	-44.6		270	60.6
250	30	10,410	-52.1		270	64.3
200	30	11,835	-57.4		272	67.6
175	30	12,678	-57.3		272	65.3
150	30	13,655	-56.5		272	60.0
125	30	14,808	-57.7		272	49.3
100	30	16,210	-59.3		271	43.1
80	30	17,607	-59.4		273	35.7
70	30	18,442	-59.5		275	29.7
60	30	19,409	-58.4		275	23.5
50	30	20,558	-57.5		272	20.2
40	30	21,980	-53.8		270	19.8
30	30	23,842	-50.6		266	22.0
25	30	25,035	-49.1		265	24.1
20	29	26,505	-48.0		265	28.2
15	25	28,401	-45.9		266	37.3
10	12	31,086	-43.5			

• INTERNAT. FALLS, MINN.
974 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	360	-1.8	64	329	1.2
1000	30	145				
950	30	553	-1.4	66	231	2.1
900	30	983	-4.1	77	259	2.7
850	30	1,432	-6.7	79	285	2.9
800	30	1,904	-8.7	74	282	6.4
750	30	2,401	-10.6	65	281	9.9
700	30	2,932	-12.8	58	286	13.8
650	30	3,493	-15.2	58	284	14.6
600	30	4,096	-18.7	57	285	16.7
550	30	4,737	-22.6	56	290	18.1
500	30	5,435	-27.1	50	286	23.7
450	30	6,178	-32.4	42	282	27.4
400	30	7,010	-38.1	41	283	31.3
350	30	7,917	-44.3		283	36.7
300	30	8,935	-51.2		283	40.0
250	30	10,106	-55.5		284	36.5
200	30	11,533	-53.3		276	33.2
175	30	12,396	-52.2		278	30.5
150	30	13,394	-52.3		275	29.5
125	30	14,570	-53.7		280	24.5
100	30	15,998	-55.1		283	24.3
80	29	17,419	-56.1		284	18.1
70	29	18,267	-56.5		287	16.7
60	29	19,246	-56.6		287	16.5
50	29	20,402	-56.5		287	15.3
40	29	21,819	-56.3		285	12.6
30	29	23,649	-55.8		274	12.8
25	29	24,812	-55.2		278	14.8
20	28	26,236	-54.2		272	16.3
15	25	28,083	-51.9		272	19.8
10	12	30,757	-47.0			
7						

JACKSON, MISS.
1005 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	94	14.1	88	171	1.6
1000	30	133			159	2.5
950	30	565	14.3	72	204	9.1
900	30	1,024	12.8	61	224	12.6
850	30	1,502	10.5	58	240	15.0
800	30	2,005	8.0	51	249	15.9
750	30	2,533	5.0	48	260	18.3
700	30	3,095	1.4	48	265	18.8
650	30	3,681	-2.6	47	270	21.0
600	30	4,318	-6.5	43	274	24.7
550	30	4,986	-10.7	40	268	29.5
500	30	5,720	-14.9	37	268	33.4
450	30	6,500	-20.5	34	268	36.1
400	30	7,370	-26.7	33	266	41.4
350	30	8,320	-33.8	36	267	46.6
300	30	9,382	-42.0	43	265	51.7
250	30	10,591	-51.2		264	61.6
200	30	12,012	-59.5		265	68.2
175	30	12,844	-60.2		267	70.7
150	28	13,810	-59.7		271	68.4
125	28	14,942	-62.1		267	58.5
100	28	16,311	-65.2		267	47.8
80	28	17,665	-66.0		264	33.4
70	28	18,476	-64.9		264	24.9
60	28	19,419	-63.3		270	20.2
50	28	20,548	-59.5		275	14.2
40	27	21,956	-56.0		277	9.7
30	25	23,804	-52.3		277	3.5
25	24	24,986	-50.0		319	2.5
20	23	26,446	-47.9		44	.4
15	21	28,358	-43.8		170	2.5
10	10	31,088	-41.2			
7						

• JACKSONVILLE, FLA.
1019 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	14.8	87	220	2.1
1000	30	164	16.5	74	193	4.5
950	30	598	15.1	63	225	8.2
900	30	1,056	12.5	59	238	8.2
850	30	1,534	10.0	55	255	8.2
800	30	2,036	7.8	47	268	10.3
750	30	2,567	5.5	41	273	12.4
700	30	3,127	2.6	38	271	16.1
650	30	3,720	-1.0	39	267	19.0
600	30	4,357	-4.5	37	266	24.3
550	30	5,031	-8.7	36	267	28.6
500	30	5,768	-13.8	36	265	30.3
450	30	6,555	-19.2	34	263	33.4
400	30	7,426	-25.3	34	265	39.4
350	30	8,382	-32.2	33	265	45.3
300	30	9,452	-40.2	29	270	47.8
250	30	10,671	-49.1		274	53.8
200	30	12,106	-57.4		271	59.8
175	30	12,946	-58.9		270	63.3
150	30	13,911	-60.1		269	64.7
125	30	15,039	-63.5		270	56.1
100	30	16,400	-66.6		273	49.0
80	29	17,742	-67.3		268	28.7
70	29	18,548	-66.2		263	25.4
60	29	19,487	-63.7		272	17.9
50	29	20,615	-60.0		272	8.7
40	29	22,022	-55.9		272	4.9
30	26	23,865	-51.9		72	4.5
25	26	25,051	-49.9		84	7.2
20	26	26,520	-46.7		82	10.1
15	25	28,442	-42.8		116	6.6
10	15	31,183	-39.5		228	2.1
7	5	33,666	-34.9			

JOHN F. KENNEDY INT. ARPT.N.Y.
1018 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	5.9	70	349	2.5
1000	30	152	5.5	67	12	4.5
950	30	574	4.7	60	329	2.9
900	30	1,011	2.7	63	290	6.4
850	30	1,472	.7	66	279	10.5
800	30	1,957	-2.1	70	278	16.3
750	30	2,470	-4.9	67	281	20.2
700	30	3,008	-7.7	62	280	22.7
650	30	3,584	-10.5	58	276	25.8
600	30	4,194	-13.8	55	274	29.1
550	30	4,850	-17.8	51	273	32.6
500	30	5,557	-22.3	43	275	36.5
450	30	6,324	-27.5	39	276	41.2
400	30	7,162	-33.1	39	277	48.8
350	30	8,088	-39.6	38	276	56.5
300	30	9,129	-45.7		278	64.1
250	30	10,328	-51.5		280	64.9
200	29	11,769	-55.5		282	63.3
175	29	12,618	-56.5		279	58.9
150	29	13,597	-55.8		278	53.4
125	28	14,763	-56.7		279	45.5
100	28	16,175	-57.6		277	38.3
80	27	17,582	-57.9		279	31.9
70	27	18,423	-57.7		279	27.4
60	27	19,399	-56.7		277	24.5
50	27	20,559	-55.2		277	22.1
40	26	21,979	-53.5		272	21.2
30	26	23,843	-50.5		267	22.3
25	26	25,035	-49.5		268	27.4
20	24	26,502	-48.0		268	32.8
15	17	28,400	-47.6		268	37.9
10						
7						

JOHNSTON IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	24.0	72	77	14.0
1000	30	136	22.9	74	73	15.5
950	30	583	19.0	83	73	17.5
900	30	1,045	16.0	77	77	15.9
850	30	1,529	12.9	72	83	12.6
800	30	2,037	11.2	53	82	9.7
750	30	2,577	11.2	32	74	7.8
700	30	3,149	8.6	25	67	5.8
650	30	3,756	5.7	21	64	5.8
600	30	4,409	1.8	20	25	3.9
550	30	5,100	-2.8	21	2	3.3
500	30	5,853	-7.5	21	309	6.2
450	30	6,663	-13.0	22	296	10.5
400	30	7,552	-19.2	22	281	16.7
350	30	8,533	-25.5	23	279	26.8
300	30	9,635	-33.0	26	276	40.2
250	30	10,894	-42.0		269	55.8
200	30	12,368	-53.3		267	62.5
175	30	13,216	-59.7		269	62.9
150	30	14,163	-66.6		274	57.1
125	30	15,248	-73.1		280	46.2
100	29	16,535	-77.5		279	30.3
80	28	17,815	-76.7		283	9.9
70	28	18,590	-72.6		269	2.3
60	28	19,504	-68.0		90	7.8
50	28	20,612	-63.9		93	15.2
40	28	21,993	-60.1		89	19.4
30	28	23,806	-56.2		86	23.6
25	28	24,974	-52.9		85	18.6
20	27	26,428	-49.0		76	17.9
15	22	28,334	-44.4		85	19.0
10	5	31,076	-41.1			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

[illegible]

KEY WEST, FLORIDA
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	3	22.4	79	82	7.2
1000	26	144	21.2	79	94	8.0
950	26	587	17.7	81	113	7.2
900	26	1.049	15.0	73	130	4.1
850	26	1.531	13.0	61	194	3.3
800	26	2.039	11.2	42	223	6.2
750	26	2.572	9.5	32	247	7.0
700	26	3.146	6.1	31	249	8.9
650	26	3.744	2.5	31	264	13.8
600	26	4.393	- 1.2	31	262	15.9
550	26	5.074	- 5.4	28	263	18.8
500	26	5.824	-10.0	28	263	25.3
450	26	6.624	-15.5	27	263	29.3
400	26	7.509	-21.8	29	262	33.8
350	26	8.478	-29.0	27	266	41.4
300	26	9.563	-37.2	26	268	48.0
250	26	10.798	-46.7		272	55.8
200	26	12.246	-56.4		267	59.2
175	26	13.085	-60.8		266	57.1
150	26	14.035	-65.0		267	55.0
125	26	15.138	-68.1		267	46.8
100	26	16.464	-72.4		270	39.0
80	26	17.774	-72.7		266	32.8
70	25	18.558	-71.1		264	27.0
60	25	19.482	-66.6		257	17.1
50	25	20.599	-62.2		237	4.5
40	25	21.993	-58.1		112	1.9
30	25	23.825	-53.8		72	10.9
25	24	25.004	-50.5		93	15.0
20	24	26.472	-46.9		95	17.5
15	22	28.386	-42.7		99	16.3
10	19	31.160	-37.4		82	15.3
7						

KING SALMON, ALASKA
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	15	- 2.6	84	57	2.9
1000	30	129	- 1.2	75	51	2.9
950	30	539	- 2.0	69	114	4.3
900	30	966	- 4.0	70	147	5.6
850	30	1.416	- 5.4	68	173	6.0
800	30	1.890	- 7.5	61	192	6.8
750	30	2.393	- 9.9	61	206	8.7
700	30	2.920	-12.9	59	219	9.9
650	30	3.482	-15.9	55	229	12.2
600	30	4.082	-19.4	50	237	13.6
550	30	4.722	-23.1	43	238	14.8
500	30	5.417	-27.3	41	233	17.5
450	30	6.162	-32.5	43	235	18.5
400	30	6.989	-38.4	48	237	23.5
350	30	7.895	-44.5	42	239	23.5
300	30	8.914	-50.4		238	23.7
250	30	10.090	-54.3		233	24.5
200	30	11.523	-52.2		232	21.2
175	30	12.391	-50.7		234	19.6
150	30	13.395	-50.5		232	18.6
125	30	14.581	-51.4		234	16.1
100	30	16.026	-52.2		230	12.0
80	29	17.469	-52.6		228	9.7
70	29	18.330	-53.0		231	6.6
60	29	19.323	-53.5		221	3.1
50	29	20.494	-54.0		155	1.6
40	29	21.924	-54.8		100	3.5
30	29	23.760	-55.4		87	7.6
25	25	24.920	-55.3		81	9.9
20	22	26.356	-55.5		74	14.2
15	21	28.193	-54.8		80	20.0
10	14	30.768	-53.4			
7						

KOROR, CAROLINE IS.
+ 1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	30	28.0	79	68	6.4
1000	30	89	27.1	76	70	7.8
950	30	537	23.0	77	73	13.8
900	30	1.011	20.3	72	81	13.4
850	30	1.504	17.8	68	86	11.8
800	30	2.022	15.7	60	84	11.3
750	30	2.566	13.2	52	84	11.5
700	30	3.146	10.3	41	81	10.1
650	30	3.757	7.2	35	85	10.5
600	30	4.414	3.3	36	85	11.3
550	30	5.111	- .7	33	90	11.5
500	30	5.870	- 4.7	31	90	11.5
450	30	6.690	- 9.4	27	95	11.1
400	30	7.593	-15.1	25	91	11.1
350	30	8.590	-21.7	24	92	11.3
300	30	9.707	-30.1	24	94	10.5
250	30	10.977	-40.4	27	113	12.4
200	30	12.458	-52.7		116	14.4
175	30	13.307	-59.8		118	12.4
150	30	14.253	-67.3		109	10.1
125	30	15.330	-75.0		76	5.1
100	30	16.603	-81.7		78	8.4
80	29	17.847	-82.4		82	18.1
70	29	18.603	-75.8		86	23.5
60	29	19.507	-69.4		88	27.0
50	29	20.606	-65.1		91	38.7
40	29	21.985	-58.9		89	37.7
30	26	23.821	-53.6		87	16.9
25	24	25.003	-49.3		97	8.9
20	21	26.480	-45.6		206	2.9
15	9	28.416	-42.8			
10						
7						

KOTZEBUE, ALASKA
1023 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	-14.5	74	48	[illegible]
1000	30	177	-11.7	67	68	4.1
950	30	570	-11.6	72	[illegible]	[illegible]
900	30	985	-12.1	72	134	[illegible]
850	30	1.421	-13.1	73	[illegible]	[illegible]
800	30	1.882	-14.8	68	[illegible]	3.7
750	30	2.366	-16.9	[illegible]	250	4.5
700	30	2.884	-19.5	63	246	[illegible]
650	30	3.429	-22.5	64	245	8.7
600	30	4.015	-25.9	64	245	9.9
550	30	4.639	-29.7	59	247	11.8
500	30	[illegible]	[illegible]	58	246	15.0
450	30	6.143	-38.4	57	244	17.5
400	30	6.848	-43.6	52	240	21.4
350	30	7.736	-48.3		243	26.0
300	30	8.743	-51.7		241	28.6
250	30	9.925	-51.8		242	26.0
200	30	11.378	-49.4		243	19.8
175	30	12.256	-48.4		244	18.5
150	30	13.271	-48.4		244	14.8
125	30	14.470	-48.7		242	12.4
100	30	15.934	-49.4		236	9.1
80	30	17.394	-50.0		241	6.2
70	30	18.265	-50.5		236	4.5
60	30	19.270	-50.9		240	1.7
50	30	20.454	-51.7		91	1.6
40	29	21.900	-52.0		78	4.5
30	29	23.762	-52.3		79	9.5
25	29	24.941	-52.6		75	13.2
20	27	26.394	-52.8		78	19.2
15	21	28.248	-52.8		75	22.7
10	9	30.810	-53.4			
7						

KWAJALEIN, MARSHALL IS.
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	4	26.5	84	73	15.0
1000	29	96	25.8	82	75	[illegible]
950	29	547	22.5	[illegible]	78	[illegible]
900	29	1.016	19.8	[illegible]	[illegible]	19.8
850	29	1.509	17.3	[illegible]	[illegible]	[illegible]
800	29	2.024	[illegible]	72	[illegible]	12.8
750	29	2.571	13.2	[illegible]	95	[illegible]
700	29	3.150	10.3	[illegible]	[illegible]	9.9
650	29	3.760	7.1	48	92	8.4
600	29	4.414	3.3	41	100	6.8
550	29	5.113	- .7	[illegible]	101	4.7
500	29	5.873	- 5.0	46	[illegible]	2.7
450	29	6.689	- 9.7	30	78	2.9
400	29	7.595	-15.3	27	63	2.5
350	29	8.585	-22.2	[illegible]	314	1.2
300	[illegible]	9.705	-30.6	[illegible]	229	4.7
250	29	[illegible]	-40.8	31	208	9.7
200	29	12.450	-53.4		216	11.7
175	29	13.289	-60.4		243	[illegible]
150	29	14.238	-68.3		271	[illegible]
125	29	15.305	-75.6		274	6.2
100	26	16.573	-83.2		300	3.3
80	21	17.808	-82.7		63	7.0
70	18	18.563	-76.8		84	15.0
60	17	19.464	-70.3		87	25.3
50	15	20.565	-66.2		88	33.8
40	13	21.919	-60.9		86	41.2
30	12	23.749	-53.8		91	19.8
25	12	24.926	-51.0		101	3.9
20	10	26.381	-48.0		47	2.9
15	9	28.289	-43.8			
10	8	31.036	-39.4			
7	5	33.485	-36.4			

LAKE CHARLES, LA.
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	[illegible]	17.1	88	141	2.5
1000	30	127	17.7	80	154	5.2
950	30	567	15.9	74	185	10.9
900	30	1.024	14.0	68	206	12.2
850	30	1.505	12.0	58	219	14.0
800	30	2.011	9.8	49	236	15.2
750	30	2.545	7.2	41	253	15.5
700	30	3.110	3.7	38	261	17.7
650	30	3.708	.1	36	265	21.4
600	30	4.345	- 4.0	36	266	24.1
550	30	5.022	- 8.4	36	264	27.4
500	30	5.759	-13.6	36	264	29.5
450	30	6.549	-19.0	34	263	32.6
400	30	7.421	-25.4	30	263	36.1
350	30	8.376	-32.4	32	261	41.0
300	30	9.445	-40.6	35	260	45.3
250	30	10.662	-49.7		258	53.8
200	30	12.092	-58.1		261	65.7
175	30	12.928	-59.9		260	69.7
150	30	13.889	-61.1		264	64.9
125	29	15.015	-63.2		263	55.2
100	29	16.377	-65.8		264	45.6
80	28	17.725	-67.3		265	32.6
70	28	18.529	-67.1		265	25.1
60	28	19.465	-64.4		263	17.7
50	28	20.590	-60.0		266	12.6
40	28	21.997	-55.8		266	9.3
30	27	23.842	-52.4		261	2.5
25	26	25.024	-50.0		109	1.6
20	25	26.488	-47.0		72	3.7
15	23	28.401	-43.6		141	3.1
10	15	31.137	-38.8			
7						
5						
4						

LANDER, WYO.
827 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1.696	- .1	65	259	2.5
1000	30	147				
950	30	566				
900	30	1.010				
850	30	1.477				
800	30	1.965	1.4	54	306	2.7
750	30	2.477	- 1.3	52	315	5.8
700	30	3.030	- 4.8	51	300	12.0
650	30	3.602	- 8.8	51	300	16.1
600	30	4.226	-12.2	46	295	21.6
550	30	4.880	-17.0	45	289	23.7
500	30	5.595	-22.2	43	282	28.4
450	30	6.355	-28.1	46	284	28.4
400	30	7.198	-34.5	39	283	30.9
350	30	8.119	-41.1	38	290	32.2
300	30	9.151	-48.0		293	38.5
250	30	10.334	-54.8		292	43.7
200	30	11.749	-57.8		291	42.2
175	30	12.593	-56.6		290	41.0
150	30	13.574	-55.4		285	38.1
125	30	14.735	-56.5		282	30.9
100	30	16.144	-58.9		278	26.4
80	30	17.542	-59.4		284	22.0
70	30	18.377	-59.8		284	20.6
60	30	19.340	-59.9		282	17.7
50	30	20.480	-59.3		282	15.7
40	30	21.883	-58.1		278	13.4
30	27	23.702	-56.0		271	17.7
25	25	24.873	-54.2		267	23.7
20	23	26.327	-51.6		266	31.1
15	21	28.219	-48.6		268	37.3
10	9	30.916	-44.6			
7						
5						
4						

LAS VEGAS, NEV.
936 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	660	13.6	23	244	4.1
1000	30	96				
950	30	534				
900	30	993	16.6	21	330	4.3
850	30	1.477	13.7	21	338	6.8
800	30	1.984	10.1	22	333	6.8
750	30	2.515	6.8	23	332	5.6
700	30	3.077	2.3	25	322	5.2
650	30	3.663	- 2.3	27	309	7.6
600	30	4.301	- 6.5	26	296	9.9
550	30	4.965	-11.3	27	296	12.8
500	30	5.699	-16.6	24	294	16.9
450	30	6.472	-22.5	27	290	21.4
400	30	7.335	-29.1	29	288	26.4
350	30	8.274	-36.7	33	291	28.9
300	30	9.322	-45.0		288	32.2
250	29	10.509	-53.7		289	35.2
200	28	11.925	-58.8		284	41.8
175	27	12.765	-57.3		283	40.6
150	27	13.740	-57.6		278	39.2
125	27	14.887	-59.7		279	35.5
100	27	16.270	-62.8		278	30.7
80	27	17.642	-63.5		279	26.4
70	26	18.462	-62.9		278	20.6
60	26	19.411	-62.2		274	18.1
50	25	20.544	-60.2		276	12.8
40	25	21.943	-57.8		270	13.4
30	24	23.767	-54.6		264	15.3
25	22	24.941	-52.4		264	18.8
20	20	26.393	-49.4		260	23.9
15	18	28.282	-46.0		264	31.7
10						
7						
5						
4						

* LIHUE, HAWAII
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	36	19.2	80	24	6.2
1000	30	152	19.9	73	28	8.0
950	30	590	16.4	82	41	11.5
900	30	1.051	12.9	84	43	9.9
850	30	1.529	9.9	84	44	7.6
800	30	2.032	8.8	46	28	4.5
750	30	2.565	8.5	25	325	4.1
700	30	3.135	6.5	23	311	6.0
650	30	3.734	3.9	19	312	9.3
600	30	4.386	.3	19	309	11.3
550	30	5.068	- 4.2	20	299	12.6
500	30	5.822	- 9.4	19	293	15.7
450	30	6.619	-15.3	19	290	19.0
400	30	7.506	-21.8	20	284	22.9
350	30	8.473	-29.4	22	284	26.4
300	30	9.554	-38.0	24	283	32.1
250	30	10.785	-46.8		280	42.7
200	30	12.232	-56.3		276	58.1
175	30	13.072	-60.2		276	61.6
150	30	14.023	-64.2		278	60.8
125	28	15.131	-68.6		282	48.6
100	28	16.455	-71.9		279	33.6
80	27	17.773	-71.1		276	19.0
70	26	18.570	-67.4		278	11.1
60	24	19.504	-64.4		242	2.9
50	24	20.625	-62.0		97	4.9
40	23	22.009	-60.1		80	9.3
30	23	23.823	-55.4		84	14.0
25	23	24.993	-52.6		79	15.3
20	23	26.447	-48.8		87	15.2
15	23	28.358	-44.6		94	15.2
10	21	31.101	-39.5		91	15.7
7	17	[illegible]	-35.6		91	18.8
5	9	35.914	-31.8			
4	5	[illegible]	-30.5			

LITTLE ROCK, ARK.
1005 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	79	12.7	76	121	.6
1000	30	124			61	1.2
950	30	555	12.2	69	235	2.9
900	30	1.008	11.0	65	251	10.3
850	30	1.484	9.1	61	256	16.7
800	30	1.985	6.5	57	259	20.2
750	30	2.511	4.0	52	265	21.0
700	30	3.071	.7	51	273	22.5
650	30	3.658	- 3.1	51	276	26.2
600	30	4.292	- 7.3	51	278	29.1
550	30	4.958	-11.6	42	276	31.7
500	30	5.689	-16.6	40	277	33.0
450	30	6.463	-21.9	39	275	37.7
400	30	7.331	-27.8	39	273	44.9
350	30	8.276	-34.9	37	266	47.8
300	30	9.334	-42.9	46	263	50.7
250	30	10.539	-51.9		260	59.2
200	30	11.957	-59.9		257	68.0
175	30	12.789	-59.7		259	69.0
150	30	13.756	-58.9		264	64.1
125	30	14.894	-60.8		263	56.1
100	30	16.275	-62.8		266	49.0
80	30	17.647	-63.3		267	[illegible]
70	30	18.468	-63.0		264	[illegible]
60	29	19.415	-61.7		269	18.1
50	29	20.550	-59.1		272	15.0
40	29	21.961	-55.2		270	11.3
30	29	23.813	-51.2		264	11.7
25	29	25.002	-49.4		267	10.5
20	28	26.467	-47.5		269	10.1
15	20	28.383	-44.9			
10	5	31.081	-42.1			
7						
5						
4						

MCGRATH, ALASKA
1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	103	- 6.4	66	329	1.2
1000	30	154			3	1.9
950	30	556	- 4.8	59	58	3.9
900	30	983	- 6.1	62	133	2.5
850	30	1.429	- 7.7	62	191	3.3
800	30	1.900	- 9.6	59	211	5.8
750	30	2.389	-12.2	58	203	7.6
700	30	2.921	-15.1	59	209	8.9
650	30	3.472	-18.1	56	214	10.7
600	30	4.072	-21.4	53	221	13.2
550	30	4.701	-25.2	53	224	15.9
500	30	5.396	-29.6	49	226	17.9
450	30	6.131	-34.6	43	229	22.7
400	30	6.955	-40.2	44	231	25.4
350	30	7.855	-45.9		232	28.4
300	30	8.869	-50.8		234	31.7
250	30	10.048	-53.4		237	31.5
200	30	11.493	-50.3		239	23.5
175	30	12.367	-49.4		238	21.8
150	29	13.382	-49.5		237	18.3
125	29	14.575	-50.2		236	16.3
100	29	16.030	-50.6		233	10.1
80	29	17.482	-51.4		238	6.2
70	29	18.347	-51.9		242	4.5
60	29	19.345	-52.5		235	1.6
50	29	20.522	-52.9		94	1.7
40	28	21.962	-53.2		70	4.7
30	28	23.812	-53.7		66	8.4
25	25	24.987	-54.0		66	11.5
20	24	26.419	-54.2		68	15.3
15	20	28.257	-54.2		65	18.5
10	10	30.856	-52.4			
7						

MAJURO, MARSHALL IS.
+ 1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	3	28.0	81	76	11.5
1000	30	92	26.8	77	75	13.8
950	30	540	22.8	74	79	18.8
900	30	1.014	20.1	72	84	18.5
850	30	1.507	17.9	69	90	14.8
800	30	2.025	15.7	62	100	11.5
750	30	2.569	13.2	58	103	9.5
700	30	3.150	10.3	55	113	8.0
650	30	3.760	7.1	51	122	7.2
600	30	4.419	3.5	46	125	5.6
550	30	5.113	- .3	45	114	5.6
500	30	5.878	- 4.4	40	133	3.9
450	30	6.698	- 9.0	38	150	3.9
400	30	7.607	-14.4	33	103	2.5
350	30	8.607	-21.0	31	151	2.1
300	30	9.729	-29.1	30	209	6.2
250	30	11.006	-39.1	30	200	9.7
200	29	12.495	-51.8		203	10.5
175	28	13.346	-59.1		213	9.9
150	28	14.296	-66.8		236	5.8
125	28	15.376	-74.9		275	3.1
100	27	16.647	-81.9		336	3.5
80	27	17.894	-81.6		79	10.1
70	27	18.651	-76.2		89	17.7
60	26	19.554	-70.3		91	24.1
50	20	20.652	-64.1		93	37.7
40	20	22.033	-58.6		94	35.5
30	17	23.880	-51.5		85	10.9
25	13	25.067	-49.2		118	3.9
20	7	26.540	-46.7			
15	5	28.470	-43.2			
10						
7						

MARCUS IS., N. PACIFIC
+ 1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	9	24.8	76	103	6.4
1000	30	146	22.8	72	104	7.6
950	30	590	18.7	68	121	7.2
900	30	1.053	16.1	63	138	5.1
850	30	1.538	14.2	53	177	4.3
800	30	2.049	12.6	44	225	3.9
750	30	2.585	10.1	40	256	5.1
700	30	3.160	7.2	35	269	7.8
650	30	3.761	4.2	31	277	10.3
600	30	4.413	.6	29	278	13.8
550	30	5.098	- 3.7	27	281	17.9
500	30	5.853	- 8.3	27	279	20.6
450	30	6.656	-13.4	28	281	22.0
400	30	7.551	-19.3	25	285	25.6
350	30	8.530	-26.3	23	288	28.9
300	30	9.627	-34.5	22	289	35.2
250	30	10.876	-43.9		281	40.4
200	30	12.340	-54.1		282	49.3
175	30	13.187	-58.9		280	53.0
150	29	14.138	-64.4		280	50.3
125	29	15.239	-69.4		277	41.8
100	29	16.554	-74.1		279	31.3
80	29	17.852	-73.7		283	17.5
70	29	18.636	-71.1		293	10.5
60	29	19.557	-66.8		302	4.7
50	29	20.674	-61.5		52	2.3
40	28	22.078	-56.8		164	5.8
30	26	23.916	-53.2		105	8.0
25	21	25.092	-50.5		103	6.4
20	14	26.543	-47.6		114	7.0
15						
10						
7						

* MEDFORD, OREG.
972 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	401	4.2	80	232	.6
1000	30	168				
950	30	594	8.1	65	304	1.0
900	30	1.036	7.1	59	11	.6
850	30	1.504	4.9	54	201	.6
800	30	1.997	3.2	42	347	2.7
750	30	2.519	.6	39	320	6.2
700	30	3.069	- 2.8	40	305	[illegible]
650	30	3.653	- 5.9	34	304	12.6
600	30	4.277	- 9.6	31	304	16.3
550	30	4.941	-13.3	34	304	21.6
500	30	5.664	-18.4	33	301	25.8
450	30	6.433	-24.4	37	297	27.4
400	30	7.289	-30.8	43	298	30.1
350	30	8.222	-38.1	40	300	[illegible]
300	30	9.266	-46.1		304	35.7
250	30	10.455	-54.7		295	38.1
200	30	11.858	-61.3		290	39.8
175	30	12.687	-60.2		285	39.8
150	30	13.654	-58.2		283	35.5
125	30	14.800	-59.1		287	31.1
100	30	16.192	-61.2		287	25.3
80	30	17.576	-60.9		291	20.0
70	30	18.406	-60.6		295	15.7
60	30	19.364	-60.8		291	12.6
50	29	20.499	-60.8		297	10.5
40	29	21.891	-59.2		[illegible]	9.7
30	28	23.703	-57.4		285	13.2
25	26	24.861	-55.8		275	17.7
20	24	26.291	-53.3		269	[illegible]
15	19	28.178	-49.8		[illegible]	35.7
10	16	[illegible]	-44.6		267	49.9
7	9	33.288	-40.2			

MERIDA, MEXICO
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	11	21.7	[illegible]	98	6.4
1000	30	[illegible]	22.4	[illegible]	112	11.8
950	30	577	21.0	[illegible]	132	18.8
900	30	1.045	19.4	68	138	15.3
850	30	1.537	17.7	56	138	10.1
800	30	2.053	14.9	52	[illegible]	[illegible]
750	30	2.593	11.9	[illegible]	235	1.9
700	30	3.171	8.5	40	269	3.7
650	30	3.773	4.8	37	283	7.0
600	30	4.428	.8	35	290	10.1
550	30	5.111	- 3.3	30	287	13.0
500	[illegible]	5.869	- 8.1	[illegible]	274	16.7
450	30	6.677	-13.2	[illegible]	274	20.8
400	30	7.570	-19.4	[illegible]	271	28.2
350	30	8.548	-26.4	[illegible]	267	33.8
300	30	9.643	-34.8	[illegible]	[illegible]	39.2
250	30	10.889	-44.3		[illegible]	46.4
200	30	12.347	-55.4		267	52.4
175	30	13.186	-60.6		268	50.7
150	30	14.135	-65.2		264	46.4
125	30	15.233	-68.8		268	36.7
100	[illegible]	16.552	-73.4		267	23.9
80	[illegible]	[illegible]	-74.9		263	4.3
70	29	18.630	-72.7		139	3.1
60	29	19.544	-68.6		102	8.9
50	29	20.652	-62.7		96	12.6
40	29	22.042	-58.3		90	[illegible]
30	29	[illegible]	-53.4		86	20.4
25	28	25.051	-50.8		86	21.4
20	26	26.515	-46.7		87	20.8
15	[illegible]	28.441	-44.0		96	[illegible]
10	[illegible]	31.181	-39.6			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

APRIL 1966

*** MIAMI, FLA. 1017 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	4	19.7	82	98	3.5
1000	30	152	20.2	73	102	6.0
950	30	592	17.4	71	111	8.2
900	30	1,054	14.6	66	130	6.8
850	30	1,536	12.0	63	182	5.1
800	30	2,043	10.9	40	230	5.2
750	30	2,577	8.5	32	257	5.8
700	30	3,147	5.5	31	269	9.7
650	30	3,743	1.8	32	268	13.6
600	30	4,390	-1.9	31	264	17.3
550	30	5,070	-5.9	30	265	21.4
500	30	5,818	-10.4	28	264	24.5
450	30	6,618	-15.9	27	262	29.1
400	30	7,499	-22.4	30	265	33.2
350	30	8,467	-29.4	26	267	39.8
300	30	9,549	-37.5	25	268	46.6
250	30	10,783	-46.6		270	54.6
200	30	12,231	-56.1		271	65.1
175	30	13,072	-59.7		269	64.9
150	30	14,028	-63.2		269	61.0
125	30	15,139	-66.8		270	51.9
100	30	16,473	-71.0		273	44.5
80	30	17,791	-71.6		275	27.4
70	30	18,580	-70.8		275	17.3
60	30	19,502	-67.0		270	11.3
50	30	20,615	-62.2		275	4.1
40	30	22,005	-58.5		56	2.5
30	30	23,834	-53.8		76	12.0
25	29	25,006	-51.5		81	14.0
20	29	26,466	-48.0		90	17.1
15	27	28,388	-42.9		94	19.4
10	11	31,146	-38.7			
7						

*** MIDLAND, TEXAS 913 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	874	11.4	62	71	1.4
1000	30	103				
950	30	541				
900	30	995	13.2	56	139	2.1
850	30	1,477	13.7	45	236	6.4
800	30	1,986	11.1	45	255	11.5
750	30	2,519	8.0	42	254	12.6
700	30	3,088	4.0	43	253	14.2
650	30	3,683	-.5	40	255	16.1
600	30	4,321	-5.1	42	257	17.9
550	30	4,993	-10.2	36	258	21.6
500	30	5,726	-15.2	33	256	26.0
450	30	6,505	-21.1	35	257	30.9
400	30	7,372	-27.5	33	261	36.7
350	30	8,319	-34.7	34	258	42.9
300	30	9,376	-42.9		259	46.4
250	30	10,580	-52.1		259	49.9
200	30	12,000	-58.7		262	61.6
175	30	12,838	-58.5		263	59.4
150	30	13,804	-59.6		262	57.1
125	30	14,937	-62.0		263	52.6
100	30	16,308	-64.8		264	40.4
80	30	17,665	-65.9		268	31.1
70	30	18,475	-65.7		270	24.1
60	30	19,414	-64.4		264	17.3
50	30	20,538	-60.3		267	13.8
40	30	21,942	-56.2		269	9.7
30	30	23,788	-51.7		266	6.4
25	30	24,976	-49.9		248	6.0
20	29	26,444	-47.6		248	6.2
15	29	28,363	-43.4		239	4.1
10	27	31,105	-39.8		251	11.8
7	10	33,535	-37.9			

MONTERREY, MEXICO 962 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	423	18.2	86	8	1.7
1000	30	88				
950	30	534	18.3	82	31	1.9
900	30	995	17.3	74	139	1.9
850	30	1,483	16.2	58	174	6.2
800	30	1,998	14.4	47	205	6.8
750	30	2,540	11.8	38	250	8.2
700	30	3,115	8.0	36	257	11.7
650	30	3,717	3.3	41	257	14.6
600	30	4,365	-1.8	46	249	19.4
550	30	5,043	-7.0	45	250	21.6
500	29	5,788	-11.7	35	254	25.3
450	29	6,582	-17.6	30	255	29.9
400	29	7,460	-23.7	31	254	32.1
350	29	8,422	-30.8	29	256	42.5
300	29	9,497	-39.2	31	255	49.0
250	29	10,722	-48.4		254	61.2
200	29	12,160	-57.2		256	69.2
175	29	12,998	-60.1		256	71.5
150	29	13,953	-63.2		253	64.3
125	29	15,065	-66.5		254	53.4
100	29	16,403	-70.2		257	41.4
80	28	17,729	-70.8		254	26.0
70	27	18,521	-70.7		252	17.9
60	27	19,444	-66.7		252	10.3
50	27	20,559	-62.2		252	6.6
40	27	21,952	-57.8		266	1.2
30	27	23,784	-53.8		70	5.8
25	26	24,966	-51.4		73	10.3
20	22	26,423	-47.9		70	10.3
15	16	28,316	-44.6			
10						
7						

MONTGOMERY, ALA. 1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	61	14.2	81	190	1.2
1000	30	148	14.8	77	186	3.3
950	30	584	14.7	65	224	9.3
900	30	1,039	12.4	61	238	11.7
850	30	1,516	9.8	62	247	13.2
800	30	2,018	7.2	55	255	14.6
750	30	2,546	4.5	51	260	16.5
700	30	3,106	1.3	47	262	18.6
650	30	3,696	-2.1	43	268	22.0
600	30	4,331	-5.8	39	269	25.4
550	30	5,002	-9.7	33	267	28.0
500	30	5,738	-14.2	28	266	30.1
450	30	6,525	-19.5	26	268	35.0
400	30	7,394	-25.7	26	268	39.4
350	30	8,347	-33.1	27	267	43.5
300	30	9,412	-41.3	29	265	47.2
250	30	10,625	-50.1		266	53.8
200	29	12,048	-57.6		268	65.1
175	29	12,888	-58.6		267	65.3
150	29	13,856	-58.7		269	61.8
125	29	14,995	-61.0		268	54.6
100	29	16,371	-64.1		267	45.5
80	29	17,731	-64.9		268	35.7
70	28	18,543	-63.8		270	28.6
60	28	19,492	-62.1		268	21.8
50	28	20,629	-58.3		274	15.3
40	28	22,047	-54.0		267	12.0
30	28	23,907	-50.5		283	4.3
25	28	25,102	-48.2		283	1.7
20	27	26,574	-45.8		311	2.3
15	23	28,495	-42.5		256	3.3
10	7	31,237	-37.4			
7						

*** NANTUCKET, MASS. 1017 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	14	4.2	86	5	1.4
1000	29	149	4.3	70	92	.6
950	29	563	3.1	61	328	2.7
900	29	1,002	1.3	58	314	5.6
850	29	1,461	-.5	57	294	10.1
800	29	1,944	-2.6	59	288	15.0
750	29	2,451	-5.5	64	288	20.0
700	29	2,993	-8.2	56	288	20.8
650	29	3,560	-11.3	49	286	23.9
600	29	4,175	-14.8	47	283	26.8
550	29	4,823	-18.7	44	279	27.7
500	29	5,534	-23.1	39	277	34.0
450	29	6,291	-28.2	35	276	39.8
400	29	7,133	-33.8	32	275	47.2
350	29	8,056	-40.2	34	275	51.9
300	29	9,092	-47.0		276	58.5
250	29	10,283	-52.3		278	61.8
200	29	11,714	-55.8		281	57.1
175	29	12,564	-55.9		278	52.8
150	29	13,547	-55.1		277	48.0
125	29	14,710	-55.7		274	41.6
100	29	16,126	-56.8		275	36.7
80	29	17,538	-57.1		272	28.6
70	29	18,382	-56.8		273	29.7
60	29	19,361	-56.5		272	26.6
50	29	20,520	-54.7		268	22.3
40	28	21,956	-53.0		264	21.8
30	28	23,820	-50.5		262	24.3
25	28	25,011	-49.6		260	25.1
20	27	26,474	-48.3		258	28.9
15	26	28,376	-47.2		261	39.2
10	19	31,061	-45.4		266	52.1
7	7	33,492	-41.6			

*** NASHVILLE, TENN. 995 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	177	10.9	78	167	2.3
1000	30	133				
950	30	562	11.0	67	209	8.5
900	30	1,011	8.6	69	236	12.6
850	30	1,482	6.0	70	247	15.3
800	30	1,976	3.4	70	257	19.8
750	30	2,500	.8	66	259	22.9
700	30	3,050	-1.9	57	262	25.4
650	30	3,634	-5.2	54	265	29.5
600	30	4,261	-8.8	48	269	32.4
550	30	4,923	-13.3	47	270	35.2
500	30	5,648	-18.0	40	270	38.9
450	30	6,421	-23.1	38	269	42.9
400	30	7,281	-29.0	39	269	49.5
350	30	8,222	-35.8	36	267	52.1
300	30	9,276	-43.6	35	264	56.3
250	30	10,479	-51.7		267	64.7
200	30	11,900	-58.2		266	68.8
175	30	12,739	-58.5		267	64.5
150	30	13,710	-57.6		267	60.0
125	30	14,855	-59.5		267	52.3
100	30	16,245	-61.2		265	44.9
80	30	17,628	-61.2		267	34.0
70	30	18,457	-61.0		266	27.8
60	30	19,416	-60.0		271	21.4
50	29	20,561	-57.9		271	17.3
40	29	21,981	-53.9		265	15.0
30	27	23,842	-50.4		267	15.0
25	27	25,035	-48.8		269	16.3
20	27	26,506	-47.2		261	13.2
15	25	28,422	-44.0		259	19.0
10	20	31,136	-41.3		267	38.1
7	7	33,484	-39.3			

NOME, ALASKA 1020 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	7	-11.2	77	39	8.2
1000	29	160	-9.0	70	58	8.2
950	29	555	-9.4	71	94	6.4
900	29	976	-10.0	69	110	5.2
850	29	1,417	-11.0	62	128	5.2
800	29	1,881	-13.1	59	150	4.9
750	29	2,363	-15.4	61	174	4.9
700	29	2,889	-18.1	59	196	4.9
650	29	3,432	-20.7	58	216	7.0
600	29	4,029	-24.1	58	226	9.5
550	29	4,651	-28.0	59	226	12.8
500	29	5,338	-32.3	59	228	16.3
450	29	6,067	-37.0	51	229	20.2
400	29	6,881	-42.3	58	226	23.9
350	29	7,773	-47.6		223	28.0
300	29	8,781	-51.9		224	30.1
250	29	9,961	-52.2		223	27.6
200	29	11,411	-49.5		222	22.3
175	29	12,289	-48.6		219	19.8
150	29	13,302	-48.8		218	17.5
125	29	14,499	-49.0		213	15.0
100	29	15,964	-49.4		203	10.5
80	29	17,425	-50.0		196	8.4
70	29	18,295	-50.3		186	6.8
60	28	19,299	-51.0		183	5.8
50	28	20,483	-51.9		161	5.2
40	28	21,928	-52.2		106	4.9
30	27	23,785	-52.5		92	8.7
25	26	24,963	-52.8		89	10.3
20	24	26,396	-53.0		83	15.0
15	20	28,247	-52.7		82	19.4
10	12	30,881	-50.4			
7						

*** NORTH PLATTE, NEBR. 917 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	848	1.3	82	41	1.4
1000	30	139				
950	30	559				
900	30	995	2.9	65	11	1.2
850	30	1,458	2.1	64	293	3.7
800	30	1,946	.8	62	295	8.9
750	30	2,462	-1.1	61	287	14.2
700	30	3,011	-4.2	59	288	16.5
650	30	3,590	-7.5	58	287	20.2
600	30	4,211	-11.4	57	283	24.9
550	30	4,870	-15.7	51	280	27.8
500	30	5,586	-20.7	49	278	29.9
450	30	6,350	-26.4	45	275	31.3
400	30	7,197	-33.1	41	274	33.6
350	30	8,122	-40.3	40	271	35.2
300	30	9,155	-48.1		269	42.0
250	30	10,337	-55.0		270	48.6
200	30	11,746	-58.8		268	48.2
175	30	12,586	-57.1		271	46.4
150	30	13,566	-55.8		273	41.2
125	30	14,723	-57.0		271	36.3
100	30	16,129	-58.8		274	32.2
80	29	17,529	-59.6		276	26.8
70	29	18,363	-59.5		276	22.7
60	29	19,329	-59.3		270	21.2
50	29	20,473	-58.5		270	18.1
40	29	21,883	-56.1		272	17.3
30	29	23,718	-54.5		265	22.3
25	29	24,891	-52.4		264	27.2
20	29	26,343	-49.7		262	32.4
15	26	28,219	-47.5		263	42.7
10	23	30,916	-43.6		260	59.6
7	5	33,415	-38.8			

*** OAKLAND, CALIF. 1015 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	6	12.9	76	292	2.5
1000	30	130	12.3	75	287	2.5
950	30	563	12.3	64	320	3.1
900	30	1,014	12.8	40	335	6.0
850	30	1,493	10.8	35	340	5.4
800	30	1,996	7.9	33	321	4.9
750	30	2,521	5.1	28	306	6.6
700	30	3,085	1.7	23	308	9.3
650	30	3,672	-1.9	22	306	11.8
600	30	4,311	-5.9	23	305	14.6
550	30	4,977	-10.7	23	306	17.1
500	30	5,714	-15.9	26	305	20.8
450	30	6,493	-22.0	28	302	23.3
400	30	7,356	-28.8	30	301	26.4
350	30	8,297	-36.3	34	296	28.9
300	30	9,348	-44.7		296	31.3
250	30	10,543	-53.9		296	33.0
200	30	11,949	-61.1		291	35.2
175	30	12,778	-60.4		286	37.1
150	30	13,744	-58.7		284	34.4
125	30	14,886	-59.9		282	32.1
100	30	16,270	-62.4		282	26.6
80	30	17,643	-63.0		283	21.6
70	30	18,465	-62.9		286	19.4
60	30	19,414	-62.0		292	16.3
50	30	20,543	-61.0		295	12.8
40	30	21,935	-58.9		280	11.5
30	30	23,751	-56.0		272	14.8
25	30	24,915	-54.0		273	18.1
20	30	26,355	-51.2		267	23.3
15	29	28,242	-47.6		265	31.9
10	19	30,994	-41.9		263	41.0
7	13	33,452	-37.8			

OKLAHOMA CITY, OKLA. 967 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	392	9.7	73	27	4.5
1000	30	114				
950	30	543	10.6	68	50	4.7
900	30	993	9.7	64	243	1.0
850	30	1,468	9.5	53	281	6.0
800	30	1,969	7.3	54	270	10.5
750	30	2,494	4.6	43	270	13.8
700	30	3,057	1.2	43	271	19.0
650	30	3,643	-2.7	41	273	21.6
600	30	4,279	-7.2	37	272	24.1
550	30	4,942	-12.2	40	275	27.4
500	30	5,672	-17.5	36	272	29.7
450	30	6,445	-22.7	30	267	32.8
400	30	7,306	-29.3	33	262	37.3
350	30	8,246	-36.5	36	261	42.9
300	30	9,297	-44.5		260	49.1
250	30	10,495	-53.1		256	55.8
200	30	11,908	-59.9		255	62.5
175	30	12,742	-58.8		258	62.0
150	30	13,711	-58.7		263	59.1
125	30	14,852	-60.2		268	51.1
100	29	16,240	-61.9		267	41.8
80	29	17,616	-62.9		266	30.3
70	29	18,437	-62.8		268	23.3
60	29	19,389	-62.1		268	19.8
50	28	20,521	-59.5		270	15.3
40	28	21,931	-55.2		265	13.0
30	27	23,785	-51.8		263	15.2
25	27	24,971	-49.9		261	16.9
20	27	26,437	-47.5		261	18.8
15	23	28,343	-45.1		256	28.7
10	11	31,070	-43.1			
7	5	33,515	-40.1			

OMAHA, NEBR. 968 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	403	3.2	78	16	2.5
1000	30	136				
950	30	553	4.2	70	360	2.9
900	30	994	3.2	65	346	3.3
850	30	1,456	1.9	63	315	6.8
800	30	1,944	-.2	68	313	12.0
750	30	2,455	-2.3	61	299	16.1
700	30	3,004	-5.0	56	292	19.2
650	30	3,577	-8.4	57	293	22.7
600	30	4,201	-12.0	51	292	25.6
550	30	4,854	-16.2	47	287	28.9
500	30	5,573	-20.9	46	286	34.4
450	30	6,337	-26.4	41	280	36.1
400	30	7,184	-32.8	40	279	39.6
350	30	8,110	-40.0	38	277	41.6
300	30	9,146	-47.6		274	47.6
250	30	10,330	-54.7		271	55.6
200	30	11,744	-57.5		270	56.5
175	30	12,591	-56.1		267	48.6
150	30	13,572	-55.5		269	46.0
125	30	14,733	-56.3		275	40.0
100	29	16,139	-58.3		276	33.4
80	29	17,542	-58.6		275	28.9
70	28	18,384	-58.6		273	24.9
60	28	19,351	-58.4		273	21.4
50	27	20,503	-57.5		272	21.0
40	27	21,918	-55.6		271	20.0
30	27	23,759	-53.5		267	24.7
25	27	24,937	-51.7		267	28.6
20	27	26,388	-50.4		266	37.5
15	24	28,292	-47.9		268	46.2
10	16	30,990	-44.9		263	67.0
7						
5						

PAGO PAGO AMERICAN SAMOA + 1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	29.5	76	104	4.7
1000	30	94	28.1	74	102	5.4
950	30	550	23.9	75	84	6.4
900	30	1,020	20.6	75	71	6.8
850	30	1,514	18.2	68	69	6.0
800	30	2,032	16.2	61	43	4.7
750	30	2,582	13.7	56	29	4.5
700	30	3,159	10.8	49	11	3.5
650	30	3,776	7.5	48	23	4.1
600	30	4,430	3.7	47	28	4.7
550	30	5,129	-.3	44	24	4.1
500	30	5,890	-4.6	39	41	2.9
450	30	6,709	-9.6	36	26	1.6
400	30	7,614	-15.1	33	266	1.6
350	30	8,612	-21.6	28	236	3.3
300	30	9,728	-30.0	26	215	7.2
250	29	10,999	-40.2	28	214	15.0
200	29	12,481	-52.6		208	19.8
175	28	13,329	-59.7		204	19.4
150	27	14,275	-67.1		204	18.6
125	27	15,353	-74.7		200	14.2
100	27	16,630	-80.0		179	8.7
80	26	17,886	-79.5		110	9.5
70	26	18,651	-74.5		94	13.8
60	26	19,561	-68.9		89	21.0
50	26	20,666	-63.8		87	28.6
40	23	22,054	-59.5		85	32.6
30	15	23,865	-55.1		86	31.1
25	14	25,035	-51.7		84	27.2
20	5	26,460	-48.2			
15						
10						
7						
5						

*** PEORIA, ILL. 991 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	200	4.9	83	1	2.7
1000	30	127				
950	30	548	6.2	67	358	2.9
900	30	990	4.5	63	302	2.5
850	30	1,455	2.4	61	277	7.4
800	30	1,943	-.1	60	285	10.9
750	30	2,454	-2.6	58	289	14.8
700	30	3,003	-4.9	58	288	18.6
650	30	3,580	-7.7	52	283	22.1
600	30	4,203	-11.0	47	283	26.4
550	30	4,858	-15.1	46	281	29.7
500	30	5,580	-20.0	44	278	33.2
450	30	6,342	-25.3	40	275	36.3
400	30	7,198	-31.1	36	272	43.7
350	30	8,132	-37.8	40	269	48.2
300	30	9,177	-45.2		267	53.6
250	30	10,375	-52.0		267	59.4
200	30	11,803	-56.5		265	64.5
175	30	12,651	-55.7		266	60.0
150	30	13,637	-54.0		272	52.4
125	30	14,805	-55.1		272	42.7
100	30	16,223	-56.8		272	36.3
80	30	17,635	-57.3		269	31.9
70	30	18,476	-57.9		274	28.0
60	30	19,450	-57.5		277	25.1
50	30	20,606	-56.0		278	19.8
40	30	22,031	-54.2		275	18.8
30	30	23,885	-51.7		268	21.2
25	29	25,077	-49.7		265	28.6
20	29	26,542	-48.0		266	35.7
15	26	28,438	-45.6		263	48.0
10	20	31,138	-42.1		267	63.1
7	6	33,536	-38.0			
5						

*** PITTSBURGH, PA. 973 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	353	4.6	81	228	.6
1000	30	138				
950	30	559	5.1	78	225	3.1
900	30	998	3.7	71	262	9.3
850	30	1,461	1.4	73	268	12.6
800	30	1,946	-1.6	74	271	14.8
750	30	2,460	-4.1	71	271	19.4
700	30	3,000	-7.0	65	271	21.6
650	30	3,572	-10.0	56	269	25.3
600	30	4,189	-13.2	47	275	28.7
550	30	4,840	-17.1	43	276	31.5
500	30	5,556	-21.5	39	276	36.9
450	30	6,319	-26.7	40	274	41.4
400	30	7,165	-32.6	41	273	47.0
350	30	8,093	-39.4	42	274	53.0
300	30	9,132	-46.4		274	58.3
250	30	10,326	-52.8		273	66.4
200	30	11,752	-56.1		277	67.6
175	30	12,599	-56.5		277	61.6
150	30	13,578	-55.9		273	52.3
125	30	14,737	-56.8		274	47.6
100	30	16,147	-58.1		275	40.4
80	30	17,550	-58.6		274	33.0
70	30	18,388	-58.4		276	30.5
60	30	19,358	-57.9		274	24.7
50	30	20,509	-56.5		275	22.1
40	30	21,932	-54.4		272	22.5
30	30	23,786	-51.6		264	21.8
25	30	24,973	-50.3		263	25.3
20	29	26,432	-48.6		262	35.2
15	28	28,333	-46.4		265	42.5
10	25	31,029	-44.1		270	59.6
7	22	33,444	-40.8		271	65.3
5	11	35,759	-37.1			

PONAPE, CAROLINE IS. + 1005 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	39	28.5	76	64	8.0
1000	30	82	27.9	75	65	9.5
950	30	527	23.7	72	71	15.2
900	30	1,006	20.4	72	79	16.1
850	30	1,499	18.0	63	82	14.6
800	30	2,017	16.3	53	86	10.5
750	30	2,561	13.7	46	88	8.4
700	30	3,143	10.6	42	92	7.0
650	30	3,752	7.2	41	91	6.2
600	30	4,411	3.4	38	88	6.8
550	30	5,106	-.3	36	84	6.2
500	30	5,869	-4.1	30	75	6.6
450	30	6,689	-9.0	29	70	5.8
400	30	7,598	-14.5	28	72	4.5
350	30	8,596	-21.2	27	90	4.1
300	30	9,716	-29.4	25	129	6.2
250	30	10,990	-39.8	23	137	9.9
200	30	12,473	-52.3		143	9.7
175	30	13,323	-59.5		135	7.8
150	30	14,270	-67.1		120	7.0
125	30	15,349	-74.8		105	7.4
100	30	16,623	-81.3		68	3.9
80	30	17,868	-81.8		83	13.8
70	29	18,623	-76.7		91	20.4
60	29	19,525	-69.9		89	27.8
50	29	20,623	-64.9		91	38.1
40	25	21,998	-58.6		92	35.7
30	22	23,830	-52.7		87	11.3
25	21	25,015	-49.3		79	4.9
20	19	26,482	-47.5		128	2.5
15	11	28,392	-43.8			
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

PORTLAND, ME.
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	20	1.8	78	[illegible]	2.7
1000	30	149			336	2.1
950	30	560	1.0	58	311	4.3
900	30	996	-.9	57	313	5.2
850	30	1,451	-3.0	56	300	8.5
800	30	1,929	-5.0	54	290	12.0
750	30	2,431	-7.3	49	290	15.5
700	30	2,970	-10.1	48	287	18.8
650	30	3,533	-13.4	41	286	24.1
600	30	4,144	-16.9	38	288	26.8
550	30	4,789	-20.6	39	288	30.3
500	30	5,493	-25.0	35	287	33.2
450	30	6,242	-30.4	33	287	36.7
400	30	7,078	-36.4	33	285	39.0
350	30	7,992	-42.5	38	283	46.2
300	30	9,021	-47.9		279	52.3
250	30	10,213	-51.8		280	54.4
200	30	11,650	-54.2		280	50.7
175	30	12,506	-54.0		278	47.0
150	30	13,497	-53.7		276	43.5
125	29	14,673	-54.4		275	37.5
100	27	16,107	-55.9		275	31.9
80	27	17,523	-56.5		272	28.4
70	27	18,371	-56.1		272	25.1
60	27	19,351	-55.9		273	22.0
50	27	20,512	-55.0		268	18.8
40	26	21,940	-53.1		262	19.2
30	26	23,801	-51.8		259	22.0
25	26	24,985	-50.7		253	29.1
20	25	26,440	-49.4		257	37.7
15	17	28,328	-47.9		260	42.5
10						

RAPID CITY, S. DAK.
904 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	966		74	335	4.5
1000	30	148				
950	30	563				
900	30	1,000			323	4.3
850	30	1,461	.7	66	311	8.2
800	30	1,946	-1.5	67	314	12.2
750	30	2,454	-4.5	66	311	14.0
700	30	2,998	-7.8	68	304	16.5
650	30	3,565	-10.8	65	297	19.4
600	30	4,183	-14.1	64	287	25.1
550	30	4,834	-18.2	63	282	27.8
500	30	5,543	-22.9	55	282	31.7
450	30	6,302	-28.4	49	280	36.9
400	30	7,141	-34.7	49	275	36.9
350	30	8,059	-41.9	47	275	41.4
300	30	9,085	-49.7		276	42.2
250	30	10,258	-56.2		276	46.2
200	30	11,666	-57.1		280	45.6
175	30	12,516	-55.2		280	40.0
150	30	13,501	-54.7		278	38.5
125	30	14,664	-56.0		278	34.4
100	30	16,077	-57.7		280	29.5
80	30	17,482	-58.9		285	23.7
70	30	18,317	-59.1		282	18.8
60	30	19,286	-58.5		275	17.9
50	29	20,437	-58.3		281	16.1
40	28	21,849	-56.9		276	14.8
30	28	23,676	-55.4		272	19.4
25	27	24,838	-54.6		269	21.4
20	26	26,266	-53.2		267	29.7
15	22	28,109	-51.1		268	36.9
10	14	30,744	-46.4			

ST. CLOUD, MINN.
979 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	316	.3	77	322	1.7
1000	30	140				
950	30	554	.9	72	340	2.9
900	30	986	-1.1	71	332	4.9
850	30	1,441	-3.0	69	295	6.2
800	30	1,919	-5.3	66	289	9.5
750	30	2,423	-7.6	62	287	12.8
700	30	2,960	-10.1	62	287	15.3
650	30	3,527	-12.5	57	287	18.3
600	30	4,137	-15.6	52	290	20.2
550	30	4,785	-19.4	48	290	22.9
500	30	5,492	-24.2	47	286	27.0
450	30	6,244	-29.7	46	285	29.9
400	30	7,082	-35.7	44	281	34.8
350	30	7,998	-42.4	32	281	39.2
300	30	9,023	-49.6		279	43.5
250	30	10,200	-55.2		278	47.8
200	30	11,622	-54.6		275	44.3
175	30	12,479	-53.2		276	40.8
150	30	13,473	-52.8		275	36.7
125	30	14,646	-54.1		280	32.6
100	30	16,073	-55.9		278	27.4
80	30	17,489	-56.6		281	24.9
70	30	18,335	-56.6		281	21.8
60	30	19,313	-57.1		285	18.1
50	29	20,465	-56.9		281	15.9
40	28	21,885	-56.1		281	18.1
30	28	23,717	-54.7		276	18.5
25	28	24,886	-54.0		275	22.3
20	28	26,322	-52.9		273	27.0
15	24	28,183	-50.6		269	36.1
10	9	30,872	-46.5			

ST. PAUL I., ALASKA
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	10	-2.9	87	[illegible]	[illegible]
1000	28	114	-3.6	[illegible]	[illegible]	11.8
950	28	[illegible]	-5.3	89	73	[illegible]
900	28	943	-6.1	80	44	12.0
850	28	1,389	-7.1	[illegible]	89	9.9
800	28	1,861	-8.9	67	107	6.2
750	28	[illegible]	-11.3	[illegible]	131	4.1
700	28	2,886	-14.0	[illegible]	160	4.3
650	28	3,441	-17.1	62	180	4.5
600	28	4,042	-20.6	58	189	6.0
550	28	4,676	-24.6	57	[illegible]	7.2
500	28	5,369	-28.9	50	[illegible]	[illegible]
450	28	6,106	-33.9	[illegible]	[illegible]	[illegible]
400	28	6,933	-39.7	52	210	21.2
350	28	7,833	-46.0		211	[illegible]
300	28	8,844	-52.1		215	23.5
250	28	10,013	-54.8		215	[illegible]
200	28	11,449	-50.9		210	22.5
175	28	12,321	-49.5		215	21.4
150	28	[illegible]	-49.8		212	15.5
125	28	14,521	-50.4		[illegible]	17.5
100	27	15,968	-50.8		205	15.7
80	27	[illegible]	-51.2		[illegible]	11.8
70	26	18,297	-51.7		[illegible]	[illegible]
60	26	19,286	-52.1		176	7.6
50	26	20,465	-52.7		[illegible]	6.6
40	[illegible]	21,934	-53.6		141	[illegible]
30	24	23,753	-54.3		103	[illegible]
25	22	24,917	-54.3		95	8.5
20	16	26,333	-54.2		79	8.7
15	14	28,187	-53.3		83	12.2
10	8	30,862	-50.3			

SALEM, OREG.
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	61	5.8	84	217	[illegible]
1000	[illegible]	168	7.2	71	276	[illegible]
950	[illegible]	588	6.4	65	[illegible]	[illegible]
900	[illegible]	1,032	[illegible]	63	[illegible]	3.1
850	30	1,497	2.9	53	276	5.8
800	30	1,986	1.1	47	[illegible]	[illegible]
750	30	2,499	-1.3	47	283	[illegible]
700	30	3,050	-4.3	47	[illegible]	15.0
650	30	3,627	-7.5	43	295	[illegible]
600	[illegible]	4,249	-11.4	[illegible]	297	22.0
550	30	4,908	-15.8	42	298	25.1
500	30	5,623	-20.5	42	300	28.4
450	30	6,388	-26.0	42	296	29.9
400	[illegible]	7,237	-31.9	42	[illegible]	[illegible]
350	[illegible]	8,168	-38.6	43	[illegible]	37.9
300	[illegible]	9,208	-46.6		302	41.6
250	[illegible]	10,393	-55.4		300	[illegible]
200	30	11,793	-60.7		[illegible]	[illegible]
175	30	12,627	-58.5		[illegible]	[illegible]
150	[illegible]	13,600	-57.0		290	35.9
125	30	14,751	-58.2		291	[illegible]
100	30	[illegible]	-59.6		291	23.5
80	[illegible]	17,541	-60.1		297	19.6
70	28	18,372	-60.4		[illegible]	[illegible]
60	[illegible]	19,333	-59.9		[illegible]	[illegible]
50	27	20,471	-60.1		305	10.9
40	26	21,867	-59.6		317	8.5
30	23	[illegible]	-58.1		304	8.2
25	21	24,824	-57.5		287	10.5
20	21	26,238	-55.5		[illegible]	16.7
15	14	[illegible]	-52.7		274	25.6

SALT LAKE CITY, UTAH
871 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,288	4.6	63	127	1.9
1000	30	141				
950	30	568				
900	30	1,016				
850	30	1,485	7.1	46	175	1.7
800	30	1,982	4.6	46	274	3.9
750	30	2,503	.8	50	289	6.8
700	30	3,054	-3.5	55	290	10.3
650	30	3,633	-7.5	52	287	14.4
600	30	4,255	-11.9	54	284	18.6
550	30	4,914	-16.3	52	282	22.1
500	30	5,627	-20.8	45	286	25.4
450	30	6,398	-26.2	40	290	31.1
400	30	7,240	-32.3	37	291	33.2
350	30	8,168	-39.4	37	292	34.0
300	30	9,206	-47.3		291	35.7
250	30	10,391	-54.8		294	39.6
200	30	11,803	-58.4		295	39.8
175	30	12,644	-57.3		289	37.1
150	30	13,620	-56.6		283	38.7
125	30	14,773	-58.3		279	32.8
100	30	16,170	-60.1		277	28.6
80	30	17,559	-60.9		278	22.3
70	29	18,384	-61.0		279	18.8
60	29	19,343	-60.5		278	15.9
50	29	20,479	-60.0		278	15.7
40	29	21,876	-58.0		273	13.4
30	29	23,697	-55.7		266	18.8
25	28	24,860	-54.0		263	22.9
20	27	26,293	-52.8		264	30.9
15	22	28,193	-49.0		262	41.6
10	8	30,866	-44.9			
7						
5						

SAN ANTONIO, TEXAS
985 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	243	15.8	87	102	2.9
1000	29	111				
950	29	548	16.0	79	141	7.4
900	29	1,009	14.6	79	171	13.2
850	29	1,492	14.0	61	202	14.6
800	29	2,002	12.0	51	224	12.8
750	29	2,537	9.2	42	244	13.2
700	29	3,109	5.3	44	256	15.5
650	29	3,704	1.1	38	266	18.3
600	29	4,349	-4.0	40	266	23.1
550	29	5,023	-8.5	32	261	24.9
500	29	5,762	-13.6	30	261	29.3
450	29	6,545	-19.3	27	262	32.6
400	29	7,421	-25.5	32	258	41.8
350	29	8,375	-32.8	34	256	48.2
300	29	9,442	-41.0	36	257	56.7
250	29	10,657	-50.1		258	67.8
200	29	12,008	-57.7		260	76.1
175	28	12,927	-59.9		257	75.8
150	28	13,887	-61.5		257	75.4
125	28	15,011	-64.1		256	61.8
100	28	16,371	-66.5		261	42.0
80	26	17,712	-68.8		257	32.4
70	26	18,513	-67.0		263	23.1
60	26	19,447	-65.4		259	12.8
50	25	20,569	-61.0		258	10.1
40	25	21,968	-56.8		290	5.2
30	25	23,812	-52.2		34	2.7
25	24	24,995	-50.2		87	5.4
20	20	26,467	-47.6		87	8.0
15	5	28,359	-44.3			

SAN DIEGO, CALIF.
1000 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	124	12.4	84	207	1.0
1000	30	121			10	1.7
950	30	554	12.7	72	251	.6
900	30	1,006	12.8	54	329	3.3
850	30	1,486	12.7	36	320	5.4
800	30	1,993	10.6	32	315	5.1
750	30	2,523	7.3	33	305	6.6
700	30	3,092	3.7	29	296	6.6
650	30	3,683	-.1	28	296	8.5
600	30	4,326	-4.4	29	300	10.9
550	30	4,996	-9.4	29	302	14.4
500	30	5,736	-14.7	30	299	15.7
450	30	6,514	-20.8	31	294	18.6
400	30	7,384	-27.8	35	298	21.0
350	30	8,329	-35.1	35	295	24.9
300	30	9,386	-43.3		291	28.4
250	30	10,590	-51.8		286	33.2
200	29	12,010	-58.3		282	43.3
175	29	12,849	-58.3		278	44.5
150	29	13,821	-57.9		277	45.1
125	29	14,963	-60.7		277	37.1
100	29	16,343	-63.0		275	31.9
80	29	17,708	-65.0		279	26.2
70	28	18,520	-64.6		270	23.9
60	28	19,464	-63.0		275	19.4
50	28	20,591	-61.0		272	15.2
40	28	21,989	-57.5		264	11.8
30	27	23,826	-53.2		260	11.3
25	24	25,008	-51.3		254	13.0
20	24	26,469	-48.2		255	17.1
15	23	28,385	-44.5		263	15.7
10	23	31,124	-39.8		257	18.8
7	20	33,577	-36.8		272	24.9
5	15	[illegible]	-33.6			

• SAN JUAN, P. R.
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	6	23.9	80	89	5.6
1000	30	144	23.3	75	89	10.5
950	30	588	20.4	71	88	13.6
900	30	1,057	17.2	69	89	13.4
850	30	1,543	14.6	64	86	12.0
800	30	2,054	12.1	62	83	10.7
750	30	2,593	11.1	37	86	8.0
700	30	3,169	8.9	33	81	4.3
650	30	3,773	5.1	35	70	2.5
600	30	4,428	1.6	30	28	1.4
550	30	5,115	-2.7	29	310	1.2
500	30	5,875	-7.1	25	283	4.3
450	30	6,682	-12.3	24	291	8.0
400	30	7,581	-18.4	24	283	14.8
350	30	8,563	-25.4	25	278	20.6
300	30	9,663	-33.6	25	278	30.3
250	30	10,918	-42.9		276	39.0
200	30	12,387	-53.9		269	48.0
175	30	13,233	-59.8		269	49.9
150	30	14,182	-65.8		271	47.0
125	30	15,274	-70.8		277	36.5
100	30	16,584	-74.5		289	22.7
80	30	17,878	-74.9		332	10.3
70	30	18,657	-72.2		[illegible]	8.7
60	30	19,574	-67.3		69	12.4
50	30	20,687	-62.2		86	15.3
40	29	22,075	-58.8		87	18.5
30	27	23,900	-54.1		88	21.1
25	27	25,078	-50.7		90	25.8
20	26	26,549	-45.8		73	22.7
15	22	28,483	-42.2		83	21.4
10	15	31,247	-37.8		79	23.3

• SAULT STE. MARIE, MICH.
989 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	221	.4	82	41	2.1
1000	30	131				
950	30	542	.5	71	72	.8
900	30	976	-1.6	72	256	1.7
850	30	1,429	-4.1	73	266	5.1
800	30	1,906	-6.4	75	275	7.8
750	30	2,459	-8.4	67	277	10.9
700	30	2,941	-11.1	64	277	12.6
650	30	3,505	-13.7	57	274	14.8
600	30	4,112	-17.3	56	269	17.1
550	30	4,755	-21.4	57	267	19.2
500	30	5,455	-25.9	50	268	23.1
450	30	6,207	-31.1	43	268	26.6
400	30	7,035	-36.9	40	269	31.7
350	30	7,946	-43.3	38	270	37.3
300	30	[illegible]	-49.2		270	41.6
250	30	10,153	-52.9		268	46.6
200	30	11,586	-54.0		268	46.4
175	30	12,443	-53.5		273	39.2
150	30	13,437	-52.7		274	36.1
125	30	14,610	-54.1		275	32.2
100	30	16,037	-55.3		278	28.0
80	30	17,457	-55.9		278	24.5
70	30	18,306	-56.0		280	22.1
60	30	19,286	-56.1		280	18.5
50	30	20,446	-55.8		278	16.1
40	30	21,868	-55.2		271	16.1
30	30	23,705	-54.7		266	17.9
25	29	24,871	-53.3		266	20.8
20	29	26,312	-52.0		263	27.0
15	29	28,183	-50.2		263	34.4
10	21	30,838	-46.2		265	45.5
7	12	33,210	-41.9			

SHEMYA, ALASKA
1002 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	38	.6	84	47	4.9
1000	30	55			47	4.3
950	30	464	-3.1	89	62	5.6
900	30	890	-6.0	89	90	5.2
850	30	1,335	-8.8	86	97	3.9
800	30	1,802	-11.0	70	104	4.5
750	30	2,295	-13.3	67	114	4.1
700	30	2,819	-15.8	58	148	3.7
650	30	3,372	-18.6	54	183	4.1
600	30	3,967	-21.6	52	215	5.2
550	30	4,601	-25.5	50	237	7.8
500	30	5,288	-30.2	44	226	9.5
450	30	6,024	-35.4	47	236	10.7
400	30	6,840	-41.1	47	235	12.4
350	30	7,736	-46.7		218	10.5
300	30	8,747	-51.4		235	14.0
250	30	9,924	-53.2		241	18.5
200	30	11,369	-50.9		235	17.9
175	30	12,239	-50.2		233	17.3
150	30	13,246	-50.0		227	16.3
125	30	14,437	-50.0		218	14.6
100	30	15,893	-50.6		215	15.2
80	30	17,344	-51.4		206	11.3
70	30	18,209	-51.5		199	10.7
60	30	19,209	-51.7		192	10.1
50	30	20,390	-52.2		185	9.1
40	30	21,831	-52.9		166	8.7
30	29	23,682	-53.9		157	7.2
25	29	24,850	-54.6		151	5.6
20	25	26,275	-54.9		105	5.1
15	21	28,123	-54.2		102	5.8
10	12	30,719	-52.1		54	3.9
7	8	33,037	-49.8			

• SHREVEPORT, LA.
1005 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	79	14.5	82	182	2.5
1000	30	119			212	1.0
950	30	558	14.6	70	205	9.9
900	30	1,011	12.7	67	220	13.0
850	30	1,490	11.2	58	240	12.4
800	30	1,994	8.9	53	260	15.7
750	30	2,525	5.7	51	261	17.1
700	30	3,087	2.2	45	262	18.5
650	30	3,681	-1.9	48	268	20.6
600	30	4,314	-5.9	45	265	23.5
550	30	4,985	-10.5	42	268	27.2
500	30	5,718	-15.2	39	266	32.1
450	30	6,503	-20.4	36	262	37.1
400	30	7,369	-26.8	35	260	40.8
350	30	8,318	-34.2	39	260	46.8
300	30	9,378	-42.1	55	261	50.7
250	29	10,582	-51.2		263	60.0
200	29	12,001	-59.1		263	64.3
175	29	12,834	-60.5		261	65.5
150	29	13,795	-60.1		263	68.0
125	29	14,926	-61.9		265	58.3
100	29	16,297	-64.4		266	48.4
80	29	17,656	-65.7		269	35.5
70	29	18,467	-65.0		267	25.6
60	29	19,410	-63.1		265	21.6
50	29	20,539	-60.0		269	15.3
40	27	21,944	-55.5		264	14.0
30	27	23,796	-51.4		289	5.8
25	26	24,982	-50.1		298	3.7
20	26	26,448	-47.4		17	1.6
15	24	28,370	-43.6		240	4.5
10	15	[illegible]	-39.8		260	15.5
7	7	33,624	-36.2			

SPOKANE, WASH.
933 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	717	2.8	70	183	3.1
1000	30	151				
950	30	573				
900	30	1,012	5.3	49	223	4.7
850	30	1,478	3.0	47	252	6.2
800	30	1,965	-.6	49	259	8.5
750	30	2,474	-4.1	49	263	10.5
700	30	3,019	-7.7	48	273	14.0
650	30	3,588	-11.4	47	283	16.3
600	30	4,201	-14.7	40	286	20.6
550	30	4,852	-18.9	40	292	23.7
500	30	5,559	-23.3	41	296	27.6
450	30	6,317	-28.6	42	300	31.5
400	30	7,155	-34.7	46	[illegible]	34.6
350	30	8,073	-41.6	[illegible]	300	39.4
300	30	9,103	-48.8		299	44.7
250	30	10,282	-55.4		301	48.8
200	30	11,695	-57.3		297	42.9
175	30	12,542	-55.4		298	38.9
150	29	13,532	-55.4		294	34.2
125	29	14,694	-55.9		[illegible]	29.5
100	29	16,110	-57.3		300	23.1
80	29	17,516	-58.1		293	17.5
70	29	18,355	-58.4		295	16.1
60	28	19,320	-58.6		305	14.0
50	28	20,463	-58.8		311	11.1
40	28	21,863	-58.6		320	8.4
30	27	23,669	-58.3		317	6.6
25	26	24,820	-57.9		315	6.4
20	25	26,231	-56.2		294	10.7
15	[illegible]	28,065	-54.0		292	16.7
10	[illegible]	30,659	-49.5			

SWAN ISLAND, W. I.
1012 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	10	25.9	82	107	8.5
1000	[illegible]	114	25.1	82	102	10.5
950	30	561	21.6	84	107	14.8
900	[illegible]	1,033	18.9	77	[illegible]	14.0
850	30	1,523	16.4	67	111	13.6
800	[illegible]	2,038	14.1	57	[illegible]	9.1
750	[illegible]	[illegible]	11.6	[illegible]	107	6.0
700	[illegible]	3,156	8.9	[illegible]	[illegible]	4.1
650	30	3,762	6.2	32	[illegible]	.8
600	30	4,418	2.5	30	286	2.9
550	30	5,109	-1.4	24	276	5.8
500	30	5,869	-6.3	24	278	[illegible]
450	[illegible]	[illegible]	-11.7	23	[illegible]	[illegible]
400	30	7,577	-18.2	25	271	[illegible]
350	[illegible]	8,563	-24.9	28	[illegible]	16.8
300	[illegible]	9,661	-33.6	30	276	25.3
250	30	10,912	-43.7		[illegible]	31.7
200	29	12,375	-55.2		[illegible]	[illegible]
175	29	13,214	-61.5		259	[illegible]
150	29	14,154	-67.9		256	34.4
125	28	15,240	-71.2		260	[illegible]
100	26	16,543	-75.6		[illegible]	10.9
80	25	17,823	-77.6		86	6.0
70	25	18,592	-75.0		87	10.5
60	25	19,497	-70.6		[illegible]	12.0
50	25	[illegible]	-65.3		[illegible]	14.0
40	24	21,966	-60.6		86	20.4
30	24	23,778	-55.2		[illegible]	[illegible]
25	[illegible]	24,953	-51.1		[illegible]	22.7
20	[illegible]	26,417	-47.7		[illegible]	22.5
15	[illegible]	28,333	-44.0		89	19.0
10	8	31,070	-39.4			

TAMPA, FLA.
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	8	16.5	90	[illegible]	2.7
1000	[illegible]	155	17.8	75	111	5.4
950	30	592	16.1	65	157	7.4
900	30	1,051	13.5	63	[illegible]	[illegible]
850	30	[illegible]	11.5	[illegible]	221	[illegible]
800	30	2,037	10.1	40	241	4.5
750	30	2,572	7.5	40	265	7.0
700	30	3,137	4.4	[illegible]	[illegible]	9.1
650	30	3,736	.9	34	266	[illegible]
600	[illegible]	4,375	-3.1	36	[illegible]	18.1
550	29	5,060	-7.3	36	266	20.6
500	29	5,799	-12.1	32	263	24.5
450	29	6,594	-17.4	31	264	29.5
400	29	7,471	-23.6	29	267	34.0
350	29	8,433	-30.6	28	[illegible]	38.7
300	[illegible]	9,510	-38.6	29	268	44.7
250	29	[illegible]	-47.3		266	56.1
200	29	12,184	-56.2		266	65.7
175	29	13,025	-59.2		265	68.2
150	29	[illegible]	-61.4		[illegible]	67.2
125	29	15,107	-64.6		267	58.3
100	29	16,459	-67.8		268	47.2
80	[illegible]	[illegible]	-69.6		267	34.4
70	29	[illegible]	-68.5		266	26.2
60	29	[illegible]	-65.1		264	16.9
50	29	[illegible]	-60.5		262	9.7
40	29	[illegible]	-56.9		305	3.9
30	27	[illegible]	-52.6		61	8.0
25	27	25,063	-50.2		74	10.7
20	24	26,534	-46.6		[illegible]	[illegible]
15	7	28,437	[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

APRIL 1966

* TATOOSH IS., WASH
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	31	7.9	83	144	1.4
1000	30	162	6.9	77	183	1.0
950	30	584	4.2	79	239	2.5
900	30	1,020	2.4	68	243	5.6
850	30	1,480	.5	57	257	[illegible].0
800	30	1,965	-1.6	55	269	9.3
750	30	2,477	-4.2	47	276	12.0
700	30	3,018	-6.9	40	287	15.9
650	30	3,590	-10.1	43	290	18.6
600	30	4,206	-13.7	39	292	22.5
550	30	4,857	-17.8	41	290	26.4
500	30	5,568	-22.5	43	292	29.5
450	30	6,329	-27.7	44	293	33.2
400	30	7,171	-33.5	39	292	37.5
350	30	8,095	-40.4	43	287	39.2
300	30	9,129	-48.2		283	43.3
250	30	10,309	-56.0		283	48.6
200	30	11,711	-59.1		291	40.4
175	30	12,552	-56.6		283	37.7
150	30	13,532	-56.1		289	34.8
125	30	14,688	-57.0		287	28.7
100	29	16,091	-58.0		292	23.7
80	29	17,494	-59.0		293	16.1
70	29	18,330	-59.2		298	14.4
60	29	19,296	-59.3		301	13.8
50	28	20,435	-59.4		304	11.8
40	27	21,835	-59.1		320	9.9
30	22	23,633	-58.6		297	8.2
25	18	24,788	-57.6		311	5.2
20	15	26,213	-56.3		294	[illegible].4
15	13	28,059	-53.0		288	13.[illegible]
10	[illegible]	30,737	-46.7			
7						

TOPEKA, KANS.
984 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	269	5.6	77	24	2.3
1000	30	134				
950	30	552	6.9	68	17	3.3
900	30	999	5.5	68	345	2.7
850	30	1,466	4.5	63	298	8.0
800	30	1,958	2.6	61	298	12.0
750	30	2,476	.1	62	295	16.5
700	30	3,029	-2.8	59	293	21.4
650	30	3,608	-6.2	51	295	24.7
600	30	4,236	-9.9	49	289	28.9
550	30	4,893	-14.2	46	285	31.7
500	30	5,619	-19.2	46	280	34.0
450	30	6,383	-24.8	44	279	36.1
400	30	7,240	-31.5	43	276	38.7
350	30	8,171	-38.6	43	272	44.7
300	30	9,214	-46.1		268	50.1
250	30	10,405	-53.7		266	56.9
200	30	11,818	-58.8		265	56.7
175	30	12,657	-58.0		267	53.6
150	30	13,632	-56.6		271	49.1
125	30	14,787	-57.2		274	43.9
100	29	16,190	-58.6		273	38.3
80	29	17,587	-59.9		272	30.3
70	29	18,419	-60.0		275	27.6
60	29	19,382	-59.9		272	22.0
50	29	20,524	-57.9		273	18.6
40	29	21,938	-55.6		273	16.9
30	29	23,784	-52.6		268	20.4
25	27	24,959	51.0		265	26.4
20	26	26,416	-49.0		263	35.7
15	19	28,325	-46.1		265	44.3
10	7	31,044	-43.7			

+ TRUK, CAROLINE IS.
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	2	28.4	78	62	9.1
1000	30	91	27.3	73	67	10.7
950	30	539	23.4	72	80	15.7
900	30	1,014	20.5	68	87	15.2
850	30	1,507	18.2	61	92	12.[illegible]
800	30	2,025	16.3	48	93	11.5
750	30	2,573	13.7	42	95	8.5
700	30	3,150	10.5	42	103	6.4
650	30	3,763	7.1	39	94	5.8
600	30	4,419	3.8	33	100	6.0
550	30	5,113	.3	27	87	7.0
500	30	5,881	-3.9	26	74	7.4
450	30	6,702	-8.7	27	82	7.4
400	30	7,611	-14.5	26	105	6.6
350	30	8,611	-21.0	25	102	6.4
300	30	9,732	-29.1	23	124	5.8
250	30	11,008	-39.5	21	129	7.2
200	30	12,496	-51.7		149	9.3
175	30	13,347	-58.9		144	9.3
150	30	14,297	-66.6		122	7.2
125	30	15,379	-74.3		104	10.3
100	30	16,657	-81.1		77	6.[illegible]
80	30	17,904	-81.9		85	15.9
70	30	18,662	-76.2		92	20.4
60	30	19,568	-70.3		92	26.2
50	30	20,666	-64.7		95	37.7
40	28	22,049	-59.1		97	37.7
30	25	23,880	-52.0		89	16.3
25	18	25,067	-49.5		86	5.1
20	11	26,534	-46.9			

* TUCSON, ARIZ.
923 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	789	12.2	43	165	6.8
1000	30	103				
950	30	539				
900	30	997	16.8	30	177	4.9
850	30	1,483	14.6	28	222	3.5
800	30	1,991	11.0	29	253	4.3
750	30	2,522	7.1	28	260	6.6
700	30	3,089	3.2	27	253	9.5
650	30	3,681	-1.1	28	258	11.3
600	30	4,318	-5.6	30	260	13.8
550	30	4,987	-10.2	29	271	15.9
500	30	5,723	-15.1	27	273	19.8
450	30	6,501	-21.1	28	272	22.5
400	30	7,368	-28.1	33	273	26.2
350	30	8,312	-35.4	31	273	30.3
300	30	9,366	-43.6		274	34.0
250	30	10,568	-51.8		275	42.5
200	30	11,992	-57.6		275	53.6
175	30	12,836	-56.9		271	49.7
150	30	13,809	-58.6		273	46.2
125	30	14,946	-61.5		270	42.7
100	29	16,324	-64.3		271	36.[illegible]
80	29	17,683	-65.4		274	29.7
70	28	18,494	-65.4		276	24.1
60	28	19,432	-64.1		277	18.8
50	27	20,551	-61.7		273	14.0
40	27	21,945	-57.4		277	12.0
30	25	23,775	-53.7		252	9.3
25	24	24,957	-50.4		256	10.3
20	23	26,426	-47.8		260	10.9
15	19	28,341	-44.4		254	11.5
10	14	31,105	-39.6		262	10.7

* VANDENBERG AFB, CALIF.
1003 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	100	10.5	89	356	1.9
1000	30	127			5	2.7
950	30	556	12.5	67	3	7.2
900	30	1,013	13.8	38	14	8.0
850	30	1,493	11.8	34	1	7.0
800	30	1,997	9.4	21	343	5.1
750	30	2,524	6.9	19	320	6.2
700	30	3,093	3.6	18	323	7.6
650	30	3,683	-.1	15	313	9.9
600	30	4,327	-4.4	15	311	12.4
550	30	4,997	-9.1	18	302	14.2
500	30	5,736	-14.6	18	300	17.1
450	30	6,514	-20.9	22	296	19.4
400	30	7,385	-27.[illegible]	26	294	22.5
350	30	[illegible],329	-35.6	30	294	25.6
300	30	9,383	-44.2		293	27.6
250	30	10,581	-53.2		292	30.9
200	30	11,993	-59.7		286	37.9
175	30	12,828	-58.9		280	37.7
150	30	13,798	-58.5		280	36.9
125	30	14,940	-60.5		277	33.0
100	30	16,320	-63.1		276	27.6
80	30	17,688	-64.0		278	22.1
70	30	18,506	-63.7		277	20.0
60	30	19,454	-62.1		282	17.1
50	29	20,583	-61.0		280	12.0
40	28	21,979	-57.6		266	13.0
30	26	23,813	-53.[illegible]		265	12.2
25	26	24,989	-51.5		264	16.7
20	26	26,449	-48.5		262	20.6
15	25	26,358	-45.2		265	27.0
10	23	31,105	-39.5		261	27.2
7	18	33,571	-36.9		265	34.[illegible]

* WAKE IS., PACIFIC AREA
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	25.0	83	67	11.7
1000	30	143	23.7	84	74	14.4
950	30	583	19.8	88	85	17.9
900	30	1,056	17.0	80	87	16.9
850	30	1,542	14.3	78	88	15.0
800	30	2,053	12.1	62	87	11.7
750	30	2,588	10.1	48	86	9.5
700	30	3,165	7.8	40	78	7.0
650	30	3,769	5.4	26	63	5.2
600	30	4,424	2.1	21	37	3.3
550	30	5,117	-1.8	20	327	4.5
500	30	5,874	-6.6	21	312	7.2
450	30	6,683	-11.8	20	303	10.1
400	30	7,582	-17.9	20	289	15.7
350	30	[illegible],566	-25.3	22	284	21.[illegible]
300	30	[illegible],668	-33.2	23	283	30.7
250	30	10,924	-42.7		280	40.2
200	30	12,394	-53.7		279	48.[illegible]
175	29	13,241	-59.6		278	48.4
150	29	14,191	-66.1		279	47.[illegible]
125	29	15,278	-72.8		280	37.9
100	29	16,569	-77.7		282	21.[illegible]
80	29	17,841	-77.8		303	7.4
70	27	18,612	-75.2		46	3.7
60	27	19,517	-69.2		90	8.0
50	26	20,624	-62.7		102	11.3
40	26	22,007	-60.0		88	15.5
30	25	23,819	-55.6		83	20.0
25	25	24,987	-52.7		83	21.0
20	25	26,439	-48.8		82	21.0
15	23	28,353	-43.8		89	18.1
10	21	31,096	-39.3		84	15.3
7	13	33,576	-34.8		82	13.4
5	6	35,939	-30.9			

* WALLOPS IS. VA. NASA
1018 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	3	7.5	84	341	1.2
1000	30	154	9.0	68	295	3.1
950	30	579	8.4	64	279	8.5
900	30	1,025	6.4	65	274	12.2
850	30	1,491	3.5	66	270	14.4
800	30	1,981	.4	67	267	17.7
750	30	2,496	-2.3	64	268	20.6
700	30	3,042	-5.2	57	268	24.1
650	30	3,616	-8.5	54	264	28.0
600	30	4,239	-11.9	53	267	33.0
550	30	4,896	-15.4	42	270	36.9
500	30	5,615	-19.8	35	269	43.5
450	30	6,384	-25.0	36	270	48.2
400	30	7,236	-30.9	37	270	52.3
350	30	8,171	-37.2	38	269	56.9
300	30	9,221	-44.4		270	63.5
250	30	10,422	-51.8		272	66.4
200	30	11,850	-56.8		274	62.7
175	30	12,692	-58.4		277	57.5
150	30	13,662	-58.1		275	54.6
125	30	14,811	-58.4		274	50.3
100	30	16,210	-59.5		275	40.4
80	30	17,603	-59.7		275	34.8
70	30	18,436	-59.6		277	29.9
60	30	19,402	-58.5		276	23.1
50	29	20,550	-56.4		273	18.5
40	28	21,978	-53.4		275	17.3
30	28	23,843	-50.2		262	15.3
25	27	25,031	-48.8		255	16.5
20	26	26,506	-46.8		263	17.5
15	23	28,410	-45.3		259	25.8
10	15	31,098	-44.2			

WASHINGTON, D. C.
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	84	5.3	79	333	1.4
1000	30	151			345	1.2
950	30	576	6.1	69	288	3.9
900	30	1,015	4.6	70	275	7.6
850	30	1,479	2.5	73	276	14.8
800	30	1,967	-.3	76	279	17.7
750	30	2,484	-3.0	72	273	21.0
700	30	3,025	-5.8	68	270	23.9
650	30	3,605	-8.7	63	270	26.8
600	30	4,219	-12.3	53	268	30.7
550	30	4,878	-16.2	47	271	34.0
500	30	5,591	-20.[illegible]	39	272	38.9
450	30	6,358	-25.6	38	272	44.7
400	30	7,207	-31.6	38	272	51.1
350	30	8,139	-37.8	37	272	55.2
300	30	9,185	-45.0		271	64.9
250	30	10,386	-51.6		274	72.3
200	30	11,815	-56.6		275	72.1
175	30	12,659	-57.7		275	67.0
150	30	13,633	-57.0		273	61.2
125	30	14,786	-57.6		273	50.1
100	30	16,190	-58.[illegible]		274	41.8
80	30	17,586	-59.4		273	35.9
70	30	18,423	-58.6		275	29.9
60	30	19,391	-58.6		274	23.3
50	30	20,539	-56.9		271	19.6
40	29	21,964	-54.3		267	19.0
30	29	23,818	-51.1		268	21.2
25	29	25,008	-49.3		262	22.3
20	28	26,474	-48.0		263	28.0
15	17	28,366	-46.8		266	35.0

WINNEMUCCA, NEV.
869 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,310	1.5	52	102	.6
1000	30	160				
950	30	582				
900	30	1,031				
850	30	1,494	7.4	39	354	2.5
800	30	1,991	5.1	39	305	4.1
750	30	2,514	1.8	41	290	[illegible].0
700	30	3,067	-2.3	44	286	12.0
650	30	3,650	-6.0	40	293	15.0
600	30	4,275	-9.7	36	291	18.1
550	30	4,935	-13.8	29	297	20.6
500	30	5,659	-18.9	30	298	23.9
450	30	6,429	-24.7	34	297	25.3
400	30	7,281	-31.2	36	295	27.4
350	30	8,212	-38.6	38	298	32.4
300	30	9,254	-46.0		300	35.4
250	30	10,445	-53.8		300	39.6
200	30	11,855	-59.7		296	39.6
175	30	12,691	-58.7		291	36.9
150	30	13,663	-57.4		290	35.0
125	29	14,816	-58.5		291	32.1
100	29	16,210	-60.9		289	26.2
80	29	17,596	-61.0		289	20.4
70	29	18,424	-61.0		288	17.5
60	29	19,381	-60.8		290	12.0
50	29	20,517	-60.0		284	11.1
40	29	21,914	-58.6		291	10.3
30	27	23,734	-56.2		273	15.0
25	25	24,901	-54.6		275	20.4
20	23	26,336	-52.8		270	26.8
15	17	28,189	-49.7		270	36.1
10	9	30,822	-44.6			

WINSLOW, ARIZ.
849 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	1,492	5.3	41	217	4.3
1000	29	129				
950	29	561				
900	29	1,011				
850	29	1,482			208	3.3
800	29	1,985	9.6	32	265	9.3
750	29	2,516	6.0	33	279	10.1
700	29	3,078	1.8	34	273	10.5
650	29	3,667	-2.9	35	269	11.3
600	29	4,300	-7.5	37	271	14.8
550	29	4,966	-11.9	30	282	17.7
500	29	5,696	-16.6	26	283	21.0
450	29	6,470	-22.8	28	280	22.7
400	29	7,332	-29.4	32	285	26.6
350	29	8,271	-36.8	33	286	29.1
300	29	[illegible],320	-45.0		285	33.8
250	29	10,514	-53.8		283	38.7
200	29	11,926	-58.6		279	44.9
175	29	12,769	-57.2		278	45.1
150	29	13,742	-58.1		276	44.1
125	29	14,884	-60.5		275	40.0
100	28	16,270	-63.2		275	34.8
80	28	17,635	-64.5		277	26.2
70	28	18,452	-63.[illegible]		274	21.6
60	28	19,398	-63.0		273	17.7
50	27	20,527	-60.9		276	14.4
40	27	21,926	-57.3		270	14.0
30	25	23,766	-53.6		262	12.8
25	25	24,944	-51.4		263	19.[illegible]
20	24	26,402	-48.[illegible]		260	21.6
15	22	28,308	-46.1		259	24.3
10	8	31,002	-42.6			

YAKUTAT, ALASKA
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	12	-2.2	93	104	3.9
1000	30	149	1.9	77	106	4.9
950	30	562	.7	72	119	5.4
900	30	994	-2.3	74	131	5.2
850	30	1,446	-4.8	71	149	3.7
800	30	1,921	-7.2	68	196	2.7
750	30	2,422	-9.8	67	222	3.3
700	30	2,952	-11.9	64	244	5.6
650	30	3,515	-14.8	60	249	7.2
600	30	4,118	-18.1	59	267	10.9
550	30	4,760	-22.1	56	280	9.9
500	30	5,457	-26.7	50	290	13.0
450	30	6,203	-32.1	49	286	15.2
400	30	7,031	-38.1	54	286	17.3
350	30	7,938	-44.4		300	19.4
300	30	8,957	-50.8		297	24.9
250	30	10,132	-54.6		295	28.6
200	30	11,560	-53.7		293	25.8
175	30	12,422	-52.2		294	23.7
150	30	13,421	-51.8		286	19.8
125	30	14,601	-52.7		290	17.5
100	30	16,039	-53.7		302	13.6
80	30	17,472	-54.1		305	10.9
70	30	18,327	-54.3		304	6.6
60	30	19,315	-54.9		326	6.0
50	30	20,480	-55.2		346	5.8
40	30	21,901	-56.0		14	8.0
30	28	23,728	-56.3		36	11.5
25	27	24,887	-56.5		42	12.8
20	24	26,302	-56.6		43	16.5
15	17	28,129	-55.5		55	16.1
10	8	30,810	-48.9			
7	6	33,149	-46.0			

+ YAP, CAROLINE IS.
1009 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	17	28.4	76	61	9.7
1000	30	91	27.5	76	64	11.7
950	30	539	22.9	78	73	18.5
900	30	1,015	20.1	71	78	18.1
850	30	1,508	18.0	61	82	16.1
800	30	2,026	16.1	50	80	12.8
750	30	2,564	13.5	47	83	11.8
700	30	3,151	10.4	41	87	12.0
650	30	3,759	7.6	35	88	11.3
600	30	4,420	3.8	34	89	12.0
550	30	5,111	.0	30	87	11.5
500	30	5,880	-4.4	29	92	10.7
450	30	6,694	-9.2	25	93	9.7
400	30	7,606	-14.9	23	86	7.0
350	30	8,604	-21.5	22	95	6.0
300	30	9,721	-29.8	21	96	5.6
250	30	10,994	-40.1	24	109	5.6
200	30	12,476	-52.5		125	5.1
175	30	13,325	-59.8		127	5.4
150	30	14,270	-67.4		119	3.7
125	30	15,346	-75.3		86	4.3
100	30	16,617	-81.7		82	8.2
80	30	17,859	-82.9		89	15.0
70	30	18,613	-76.9		87	19.6
60	30	19,516	-69.5		86	25.4
50	30	20,618	-64.5		88	34.2
40	30	21,999	-59.7		87	37.9
30	30	23,821	-54.1		90	26.0
25	29	25,001	-49.7		93	17.7
20	27	26,471	-46.3		97	10.7
15	18	28,400	-43.0		122	8.9
10	7	31,142	-39.8			

YUCCA FLAT, NEV.
880 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,196	4.8	34	314	2.9
1000	30	133				
950	30	559				
900	30	1,008				
850	30	1,482	11.6	22	352	6.2
800	30	1,986	8.7	22	358	5.1
750	30	2,514	5.2	23	330	5.1
700	30	3,075	1.2	25	304	7.0
650	30	3,663	-3.1	27	286	7.0
600	30	4,294	-7.6	R26	292	9.7
550	30	4,958	-12.2	R23	291	12.6
500	30	5,687	-17.2	R23	292	20.2
450	30	6,456	-23.2	R25	298	21.6
400	30	7,319	-29.9	R28	299	25.3
350	30	8,256	-37.3	R27	296	28.4
300	30	9,302	-45.6		293	31.1
250	30	10,493	-54.1		296	35.4
200	30	11,903	-59.6		296	39.6
175	29	12,738	-58.0		292	38.9
150	29	13,711	-58.0		286	40.4
125	29	14,855	-59.8		285	33.0
100	29	16,240	-62.4		282	27.8
80	29	17,613	-63.3		281	22.9
70	29	18,433	-62.9		284	20.0
60	29	19,385	-61.8		278	15.9
50	29	20,519	-59.9		277	14.0
40	27	21,926	-57.6		269	17.7
30	24	23,764	-54.1		267	19.8
25	24	24,939	-52.0		263	23.9
20	21	26,396	-49.3		264	27.0
15	16	28,301	-46.6		265	36.3
10	7	31,064	-41.1			

YUMA, ARIZ.
996 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	21	131	15.4	33	7	.6
1000	21	93				
950	21	530	20.4	29	301	7.4
900	21	998	18.0	27	305	7.6
850	21	1,484	14.9	26	302	3.9
800	21	1,993	10.9	27	269	3.3
750	21	2,522	7.3	26	253	4.9
700	21	3,090	3.4	24	272	6.0
650	21	3,678	-.5	24	273	7.6
600	21	4,321	-4.8	24	274	12.6
550	21	4,988	-9.6	24	271	16.3
500	21	5,727	-15.2	26	270	19.2
450	21	6,501	-21.3	30	271	23.5
400	21	7,370	-28.3	34	270	28.2
350	21	8,311	-36.2	41	274	33.2
300	20	9,366	-44.6		271	35.9
250	20	10,561	-53.3		271	44.7
200	16	11,976	-58.2		269	51.5
175	16	12,818	-57.4		269	50.7
150	16	13,790	-58.7		273	41.8
125	15	14,933	-61.4		269	41.6
100	14	16,302	-63.4			

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. They were also equipped with carbon hygristors. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

R More than half of the observations are from statistical values.

Note: All observations are scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from lithium chloride hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes: dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

APRIL 1966

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
ALBUQUERQUE, N. MEX.									
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Apr.									
1	----	----	----	----	1.47	1.22	1.02	0.82	0.67
3	----	----	----	1.20	1.39	----	----	----	----
4	0.91	1.03	1.16	----	----	1.35	1.17	1.03	.91
5	.94	1.05	1.17	1.35	1.54	1.33	1.17	1.04	.91
6	.96	1.05	1.19	1.30	1.50	1.31	1.16	1.05	.93
7	.91	1.03	1.12	----	1.50	----	----	----	----
8	.82	.91	1.05	1.22	----	----	----	----	----
9	.82	.93	1.06	1.25	----	----	----	----	----
10	.92	----	----	----	----	----	----	----	----
12	.75	.86	1.16	1.28	1.35	1.15	----	----	----
13	.72	.84	.98	1.17	----	----	----	----	----
14	.73	.85	1.01	----	----	----	----	----	----
15	.63	.81	1.00	1.18	1.40	1.13	.95	.79	.66
16	.77	.89	1.03	1.21	1.45	1.25	1.01	.87	.74
17	.80	.90	1.05	1.23	1.42	----	----	----	----
19	.71	.82	1.00	1.17	1.34	----	----	----	----
20	----	----	----	1.08	1.33	1.15	1.01	.86	.79
22	.62	----	----	.99	----	----	----	----	----
23	.59	----	.82	1.01	----	----	----	----	----
25	----	----	----	----	----	----	1.04	.92	.79
26	----	.96	1.11	1.28	1.40	1.27	1.11	----	----
27	.81	.91	1.03	1.23	1.39	----	----	----	----
28	.57	.71	.86	1.07	1.38	----	----	----	----
29	.77	.89	1.03	1.17	1.42	1.17	.97	----	----
Averages	0.78	0.91	1.05	1.19	1.42	1.23	1.06	0.92	0.80
BLUE HILL OBS., MASS.									
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Apr.									
3	0.65	0.76	0.89	1.10	----	----	----	----	----
6	.60	.69	.82	1.00	----	----	----	----	----
11	----	.75	.82	1.00	----	----	----	----	----
12	.67	.79	.96	1.16	----	----	----	----	----
14	----	----	----	----	----	1.05	0.82	0.66	0.52
15	.60	.72	.87	1.07	1.33	.96	.77	.64	.55
18	.71	.82	.96	1.12	----	----	----	----	----
19	.67	.79	.99	1.18	1.41	1.18	1.00	.87	.76
23	.67	.79	.94	1.16	1.36	----	----	----	----
26	.82	.96	1.07	1.23	1.39	----	----	----	----
Averages	0.67	0.79	0.92	1.11	1.37	1.06	0.86	0.72	0.61
OMAHA, NEBR.									
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Apr.									
1	----	----	HS1.10	HS1.26	----	----	----	----	----
6	HS0.80	HS0.92	HS1.08	----	----	HS1.22	HS1.00	----	----
15	----	HS .87	HS1.00	----	----	----	----	----	----
21	HS .82	HS .90	HS1.04	HS1.20	----	----	----	----	----
24	----	----	----	HM1.15	----	----	----	----	----
25	----	----	----	----	HS1.30	----	----	----	----
26	----	----	HS .81	HS1.03	HS1.25	----	----	----	----
28	HS .77	HS .87	HS1.03	HS1.22	HS1.40	1.35	----	----	----
30	----	----	----	----	HS1.35	HM .81	.52	.39	.31
Averages	0.80	0.89	1.01	1.17	1.32	1.13	0.76	0.39	0.31
GUAM, M. I.									
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
	No observations due to cloudiness								

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
MADISON, WIS.									
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Apr.									
21	S 0.73	S 0.88	S 1.04	S 1.24	S 1.43	S 1.25	S [illegible]	S 0.91	S 0.78
22	----	----	----	M .98	S 1.26	----	----	----	----
25	----	----	S .98	S 1.10	S 1.41	----	----	----	----
28	----	----	----	----	----	1.24	1.07	.93	.83
Averages	0.73	0.88	1.01	1.11	1.37	1.25	1.06	0.92	0.81
TUCSON, ARIZ.									
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Apr.									
1	0.75	0.86	----	----	----	----	----	----	----
2	----	----	1.01	----	----	----	----	----	----
3	----	----	----	----	----	----	----	0.75	----
4	.58	.68	----	----	----	----	----	----	----
8	.77	----	1.00	----	----	----	----	.86	0.73
10	----	----	----	----	----	----	0.93	.78	.62
11	.62	.74	.89	----	----	----	.69	----	----
12	.63	.73	----	----	----	----	.89	.17	.53
13	.66	.77	.89	----	----	----	----	----	.68
16	.61	.73	.88	----	----	----	----	----	----
17	.55	.66	.83	----	----	----	----	----	----
18	----	.72	.86	----	----	----	----	----	----
20	.68	.77	.92	----	----	----	----	----	----
22	.64	.71	.83	----	----	----	.89	.74	.63
24	.58	.72	.85	----	----	----	----	----	----
25	.64	.75	.90	----	----	----	----	----	.71
26	.75	.85	.98	----	----	----	----	.85	.73
27	.83	.93	1.04	----	----	----	----	----	----
28	.86	.96	1.08	----	----	----	----	----	----
29	.75	.86	----	----	----	----	----	----	.77
30	.81	.92	----	----	----	----	----	.81	.72
Averages	0.69	0.79	0.93	----	----	----	0.85	0.78	0.68
MAUNA LOA OBS., HAWAII									
	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Apr.									
1	1.14	1.22	1.33	1.45	1.58	H 1.40	H 1.26	H 1.17	H 1.09
2	H 1.09	H 1.19	H 1.30	1.43	HS1.57	H 1.41	H 1.29	H 1.19	H 1.09
3	H 1.12	H 1.19	H 1.29	H 1.42	HS1.57	H 1.40	H 1.28	H 1.16	H 1.09
4	1.15	1.23	1.33	1.44	HS1.57	HS1.41	HS1.30	HS1.20	HS1.12
5	H 1.12	H 1.20	H 1.30	HS1.42	HS1.54	(1.40)	----	H 1.18	H 1.11
6	H 1.12	H 1.20	H 1.30	(1.42)	----	----	----	----	----
7	HI1.03	HI1.13	H 1.26	H 1.41	----	----	----	----	----
8-11	Electrical Interference								
13	H 1.08	H 1.17	H 1.28	H 1.41	----	----	----	----	----
14	----	----	----	----	1.58	1.41	1.29	1.19	1.10
15	1.14	1.23	1.33	1.45	1.57	1.41	1.29	1.18	1.10
16	1.14	1.21	1.32	1.42	1.56	1.41	1.28	1.18	1.11
17	1.14	1.23	1.33	1.44	1.58	----	1.30	1.20	1.13
18	----	----	----	1.42	(1.55)	(1.37)	H 1.26	H 1.17	H 1.07
19	H 1.09	H 1.19	H 1.29	1.42	H 1.56	H 1.38	H 1.25	H 1.15	H 1.06
20	1.07	1.16	1.26	1.39	1.57	1.41	1.29	1.19	1.09
21	1.10	1.19	1.29	1.42	1.59	1.46	1.33	1.26	1.16
22	1.19	1.27	1.35	1.47	1.58	1.42	1.31	1.21	1.13
23	1.14	1.23	1.32	1.44	1.56	----	----	----	----
25	1.06	1.16	1.27	1.40	1.54	----	----	----	----
26	1.16	1.24	1.34	1.45	1.54	----	----	----	----
27	1.12	1.20	1.31	1.41	1.55	----	(1.26)	(1.15)	(1.09)
28	1.06	1.17	1.25	----	----	----	----	----	----
29	(1.10)	(1.22)	(1.26)	(1.39)	----	----	----	----	----
Averages	1.11	1.20	1.30	1.42	1.57	1.32	1.21	1.18	1.10

HS	Slight haze	H	Haze
HM	Moderate haze	S	Slight haze - indeterminable
HI	Intense haze	M	Moderate haze - indeterminable
( )	Clouds present	*	Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

APRIL 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	574	585	594	579	636	659	641	538	606	454	555	604	---	646	630	643	557	460	642	649	427	516	653	415	649	631	607	623	628	402		560
AMES IOWA	450	237	335	239	116	---	---	---	---	114	120	522	537	512	310	559	254	69	172	232	643	316	137	601	570	455	172	675	98	614		349
ANNETTE ALASKA	155	289	487	436	475	484	467	175	388	495	479	402	309	321	472	444	492	468	202	481	100	227	244	410	590	590	328	589	309	405		391
APALACHICOLA FLORIDA	613	612	277	159	635	644	614	640	244	655	645	592	548	337	248	615	630	---	161	642	636	633	655*	690	651	500	609	570	627	587		522*
ARGONNE NAT. LAB.	191	363	162	270	194	170	298	216	348	269	278	458	504	376	385	455	278	388	190	135	562	522	179	439	533	339	48	576	476	151		325
ASTORIA OREGON	214	519	529	539	469	205	317	166	309	191	72	353	487	192	580	588	600	603	611	225	305	366	218	433	362	245	234	606	460	512		384
ATLANTA GEORGIA	566	638	414	367	617	539	541	556	636	674	646	586	488	235	296	584	602	567	313	280	306	197	556	554	345	279	106	480	373	413		458
BARROW ALASKA	278	298	333	334	278	316	381	385	239	212	263	418	415	430	428	474	440	339	439	456	487	498	485	526	531	520	488*	519*	430	493		404*
BETHEL ALASKA	359	---	344	434	352	396	419	468	454	332	514	502	489	516	413	369	285	381	579	588	597	614	598	492	396	422	459	465	533	578		460
BISMARCK N.DAK.	500	146	323	321	287	519	254	386	500	143	64	98	164	577	517	495	565	321	293	473	361	582	479	358	260	44	359	507	573	641		370
BLUE HILL MASS.	294	318	420	363	379	421	360	211	386	316	502	537	388	514	534	363	406	528	647	122	286	398	589	69	377	658	599	131	200	457		392
BOISE IDAHO	519	567	569	---	577	572	---	507	302	277	537	393	610	566	533	623	357	605	667	321	552	642	585	646	350	441	629	542	667	558		525
BOSTON MASSACHUSETTS	292	348	407	331	395	426	312	191	362	323	402	477	483	477	582	375	394	549	620	121	287	---	---	---	---	---	585	137	161	419		378
BROWNSVILLE TEXAS	606	539	366	641	448	686	437	307	562	609	478	589	265	133	157	229	381	505	701	665	202	518	628	464	415	536	562	498	647	---		459
CANTON ISLAND P.I.	416	130	554	635	662	673	574	624	661	607	642	607	583	647	639	434	508	580	619	613	625	585	602	636	600	608	632	568	632	636		584
CAPE HATTERAS N.C.	530	560	592	120	521	606	607	569	353	617	563	236	204	202	626	474	599	621	545	473	555	579	509	656	463	123	494	366	268	525		472
CARIBOU MAINE	238	341	346	334	439	521	555	455	214	440	250	264	500	596	604	503	356	334	554	614	550	649	615	188	245	633	696	684	190	413		444
CHARLESTON S.C.	581	629	538	192	661	524	477	626	---	657	645	588	603	174	507	510	479	626	458	104	404	271	696	680	659	334	560	262	400	518		495
CLEVELAND OHIO	---	---	---	---	---	223	208	324	402	422	408	402	266	505	461	568	570	390	82	448	194	582	93	94	638	537	44	278	470	93		348
COLUMBIA MISSOURI	448	363	223	212	165	577	569	298	607	444	126	81	255	589	496	273	450	183	493	43	632	432	212	448	513	268	305	592	365	135		360
DAVIS CALIFORNIA	565	560	591	549	511	526	584	555	210	393	427	584	642	644	646	615	650	609	681	651	650	661	678	657	665	700	686	674	686	685		598
DODGE CITY KANSAS	552	403	446	392	428	546	558	573	554	426	336	88	148	494	587	579	553	196	513	575	609	103	261	597	470	604	492	618	537	106		445
E. LANSING MICHIGAN	72	299	144	243	297	146	277	332	237	488	354	528	545	590	399	462	532	367	105	393	481	564	66	341	623	197	63	281	628	117		339
EL CENTRO CALIF. NPF	496	497	468	468	467	533	489	527	480	542	530	543	536	553	490	499	530	554	531	529	542	529	577	571	573	578	441	555	592	570		526
EL PASO TEXAS	667	650	661	678	741	722	709	633	669	691	706	738	727	677	697	681	732	637	612	724	436	752	737	170	722	770	784	698	765	743		678
ELY NEVADA	587	607	635	643	631	597	414	575	488	394	394	401	669	666	643	---	326	454	452	701	398	714	696	700	644	709	736	684	719	662		584
EPPLEY NEWPORT R.I.	---	428	413	281	317	---	---	251	311	407	---	454	178	412	586	495	576	546	625	168	---	---	556	126	297	622	542	108	216	377		387
FAIRBANKS ALASKA	350	323	248	323	401	395	418	393	433	409	257	427	470	489	459	451	397	206	434	454	554	557	561	523	573	443	470	558	508	577		435
FORT WORTH TEXAS	620*	644	552	671	616	648	635	586*	603	192	636	652	439	353	691	692	244	358	557	337	652	92	244	181	301	376	703	177	30	121		453*
FRESNO CALIFORNIA	551	498	549	524	496	546	576	589	414	544	635	624	636	633	636	643	626	198	559	651	655	632	664	661	658	685	661	666	688	672		592
GLASGOW MONTANA	423	167	356	306	467	397	209	605	233	479	389	229	520	481	497	175	620	471	541	569	554	520	474	569	893	117	503	589	726	584		455
GRAND JUNCTION COLO.	591	579	509	500	639	599	585	605	507	372	119	524	584	680	638	669	518	370	458	725	679	520	701	706	698	679	745	641	681	715		585
GREAT FALLS MONTANA	302	324	269	355	390	476	334	405	146	399	442	405	505	205	176	201	311	332	522	366	423	563	318	346	427	89	345	286	582	408		355
GREENSBORO N.C.	404	519	516	238	455	539	440	261	552	616	395	447	83	282	442	292	521	567	260	331	313	177	444	636	346	191	288	283	283	331		382
INDIANAPOLIS INDIANA	---	400	151	383	380	292	232*	228	---	638	---	---	175	566	339	576	492	533	125	391	454	576	195	148	650	---	---	392	434	122		370*
ITHACA NEW YORK	174	279	139	262	189	256	229	229	283	414	350	498	348	305	481	535	566	359	249	301	301	573	389	170	538	422	219	52	500	110		324
LAKE CHARLES LA.	590	597	162	596	618	629	521	427	433	528	358	---	321	57	590	635	372	369	428	---	8	335	565	142	296	643	328	463	548	581		433
LAKELAND FLORIDA	558	469	496	58*	319	543	543	602	305	610	714	661	646	655	391	554	646	532	418	514*	579	598	648	625	730	597	592*	508	576	605		544*
LANDER WYOMING	537	308	270	634	591	581	463	541	444	276	371	603	621	637	565	429	125	433	700	707	613	582	689	679	356	585	529	684	245	646		515
LARAMIE WYOMING	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	412	562		---
LAS VEGAS NEVADA	639	603	655	640	665	640	575	648	627	674	695	615	695	698	701	699	675	466	470	726	725	720	736	732	715	705	727	749	731	742		670
LITTLE ROCK ARKANSAS	516	561	307	575	615	566	604	492	619	598	213	274	241	564	638	---	---	188	390	122	---	---	65	203	123	269	584	402	171	185		388
LOS ANGELES CALIF.	490	247	216	435	521	500	333	412	292	604	618	504	594	608	592	575	297	485	634	603	658*	564*	681	670	601	517	576*	519	571	497		514*
MADISON WISCONSIN	168	553	390	280	273	225	299	317	386	375	477	605	615	578	490	457	251	146	328	142	676	567	167	640	618	95	143	675	481	351		392
MANHATTAN KANSAS	544	313	424	446	231	585	527	372	443	242	82	36	217	165	459	354	376	123	224	372	493	115	289	451	373	614	126	660	391	428		349
MAUNA LOA OB.HAWAII	804	804	802	800	714	617	672	---	---	---	---	581	802	823	821	825	828	784	818	826	841	835	821	791	697	781	773	546	565	434		746
MEDFORD OREGON	526	579	566	570	553	525	539	433	177	340	303	297	583	592	537	620	651	674	579	358	560	605	642	603	660	693	602	631	615	625		541
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	486	543	558	560	613	615	553*	632	636	634	575	480	507	485	564		---*
MIDLAND TEXAS	619	633	644	430	588	694	---	---	655	631	679	689	494	508	---	667	482	673	383	565	528	207	261	587	440	705	715	90	298	357		527
NASHVILLE TENNESSEE	407	613	102	626	495	424	636	190	627	658	92	220	192	281	496	591	480	529	338	422	180	349	379	352	549	239	373	251	245	238		386
NEW YORK N.Y.U	207	182	344	264	397	402	303	341	429	429	518	516	68	544	545	404	517	405	323	68	369	153	507	91	414	624	279	51	281	95		336
NORTH OMAHA NEBRASKA	601	310	398	385	158	658	536	585	---	195	93	196	554	373	563	356	286	89	111	259	715	293	376	650	690	692	142	761	164	728		411
OAK RIDGE TENNESSEE	392	582	337	184	320	383	624	125	409	634	337	135	482	271	445	546	619	579	154	340	202	260	406	459	475	316	274	275	322	210		370
OKLAHOMA CITY OKLA.	498	440	521	526	488	543	536	509	532	376	484	81	341	546	567	551	494	278	529	449	607	40	87	354	107	247	586	153	251	67		393
PAGE ARIZONA	538	523	548	571	560	558	541	543	343	509	465	397	572	582	575	562	441	422	351	615	569	552	590	595	592	583	642*	608	552	625*		537*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	545	548	542	560	553	573	571	559	445	570	575	578	583	444	491	542	580	599	461	602	453	576	551	580	610	614	547	583	635	630		557
PORTLAND MAINE	486	81	442	529	423	342	471	81	144	248	429	338	264	372	621	532	440	643	---	---	252	504	599	55	401	---	634	266	188	548		383
PROSSER WASHINGTON	423	---	---	588	568	544	532	466	479	487	366	528	570	426	512	622	622	595	637	328	622	577	625	593	611	587	623	629	650	642		552
RAPID CITY S.DAK.	464	265	281	330	361	446	188	474	464	416	96	78	360	534	439	273	209	289	531	638	596	424	479	432	392	270	535	561	190	612		388
RENO NEVADA	540	543	544	546	537	527	518	455	245	436	541	609	594	607	596	585	538	620	642	607	592	614	614	633	639	660	673	634	650	624		572
RICHLAND 25 NW WASH.	404	535	542	541	533	526	506	398	407	545	295	427	548	363	434	598	577	589	592	344	599	508	562	522	558	572	486	542	572	583		507
RIVERSIDE CALIFORNIA	637	490	437	520	640	625	472	470	253	526	610	607	641	682	648	656	257	218	351	648	673	581	264*	---	343*	530	529	592	429	444		509*
RUSTON LOUISIANA	531	563	164	570	589	564	547	264	567	504	223	289	419	123	543	574	541	445	337	253	85	233	154	105	126	428	527	487	163	396		377
SAINT CLOUD MINN.	380	423	386	245	142	160*	192*	275	383	258	360	551	553	346*	555	550	63	235	59	499	664	546	277	625	585	81	277	525	221	714		371*
SALT LAKE CITY UTAH	578	584	616	614	603	597	546	584	378	350	461	493	675	668	686	644	439	341	547	651	555	455	661	736	720	482	706	618	752	715		582
SAN ANTONIO TEXAS	626	553	505	630	336	659	521	164	599	536	450	570	155	233	594	608	151	456	529	402	542	112	255	201	345	644	645	312	320	380		434
SANTA MARIA CALIF.	562	572	187	280	382	326	541	330	394	539	598	593	603	603	604	621	126	252	586	582	626	600	627	632	598	536	536	386	468	554		495
SAULT STE MARIE MICH	---	497	333	404	---	---	---	---	---	---	---	---	469	---	637	666	---	---	74	142	---	---	272	341	606	---	575	77	569	228		---
SEATTLE WASH. UNIV.	94	459	517	533	524	346	217	102	121	314	92	306	318	316	441	452	583	599	528	77	253	168	125	305	149	445	409	385	513	446		338
SEATTLE TACOMA WASH.	120	499	550	556	549	386	209	119	322	310	124	438	396	271	453	561	597	635	611	175	362	252	237	339	365	593	439	426	583	580		402
SPOKANE WASHINGTON	336	513	513	517	524	511	501	456	310	499	340	360	511	315	512	626	524	586	608	188	343	347	557	530	551	381	485	551	613	569		473
STATE COLLEGE PENN.	288	252	170	181	308	355	334	388	283	348	349	70	38	481	429	642	623	247	358	420	332	430	102	138	584	627	49	50	410	69		312
STERLING VIRGINA	---	346	320	---	484	375	404	464	368	280	427	38	49	---	485	497	638	289	367	503	516	108	93	412	422	427	52	72	92	75		319
STILLWATER OKLAHOMA	527	455	507	561	479	542	580	579	547	449	340	40	204	577	598	584	564	192	549	441	637	24	113	399	153	342	602	143	296	45		462
SWAN ISLAND W.I.	---	521	640	649	669	672	574	622	671	513	609	666	680	661	676	622	554	558	424	597	576	628	550	523	641	599	567	494	637	590		558
TAMPA FLORIDA	628	563	545	77	441	578	623	671	291	686	680	675	678	658	341	642	676	608	426	604	494	620	604	720	712	719	583	471	531	507		568
TUCSON ARIZONA	599	596	571	594	597	611	615	633	492	640	629	645	653	598	414	412	596	666	441	669	437	689	595	683	682	677	693	623	693	701		605
WAKE ISLAND,PACIFIC	594	564	551	548	552	534	551	545	443	576	587	414	596	506	567	558	561	603	585	596	610	514	542	586	547	554	580	546	524	598		554

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

APRIL 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	165	37	245	233	253	242	140	268	215	225	159	258	317	242	147	25	221	179	236	248	233	301	173	306	177	34	226	239	276	327		212

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

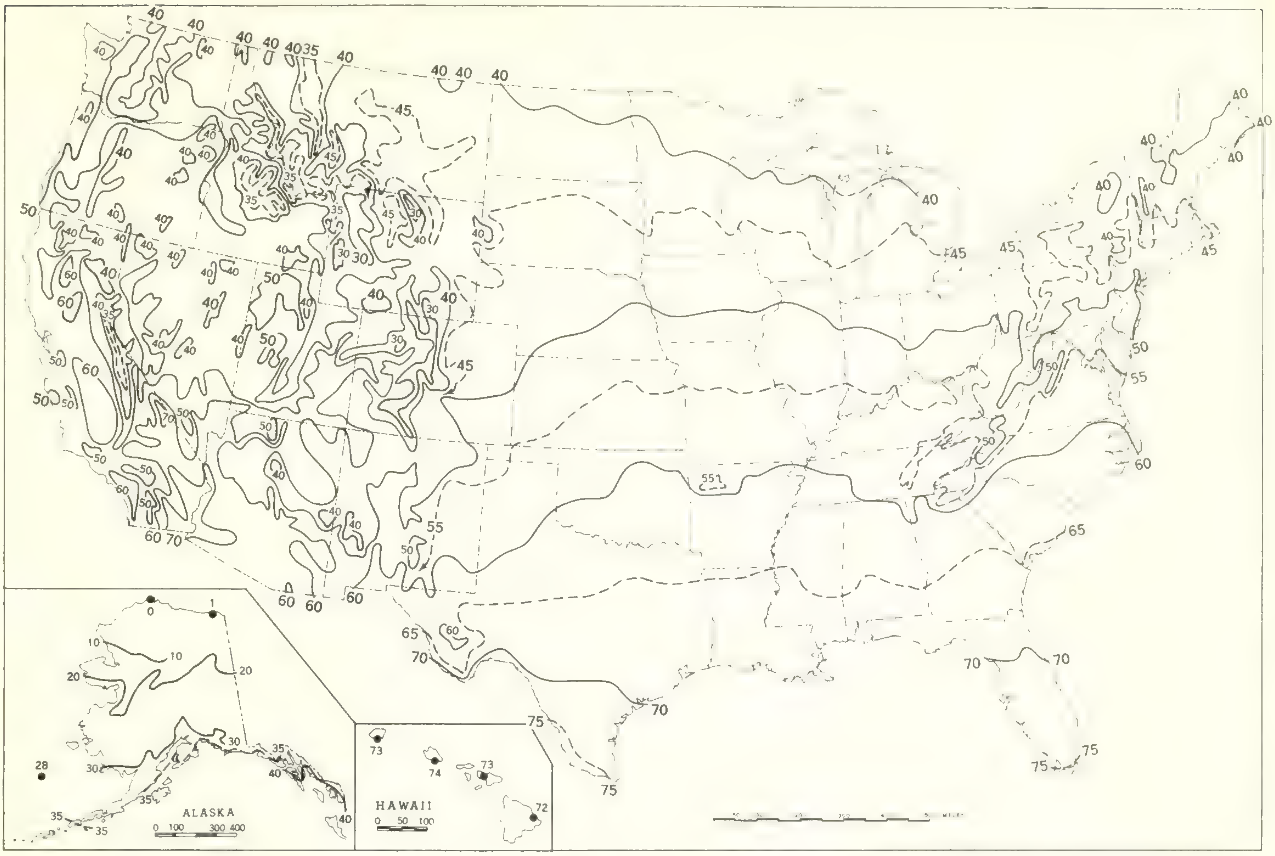
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ʌ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

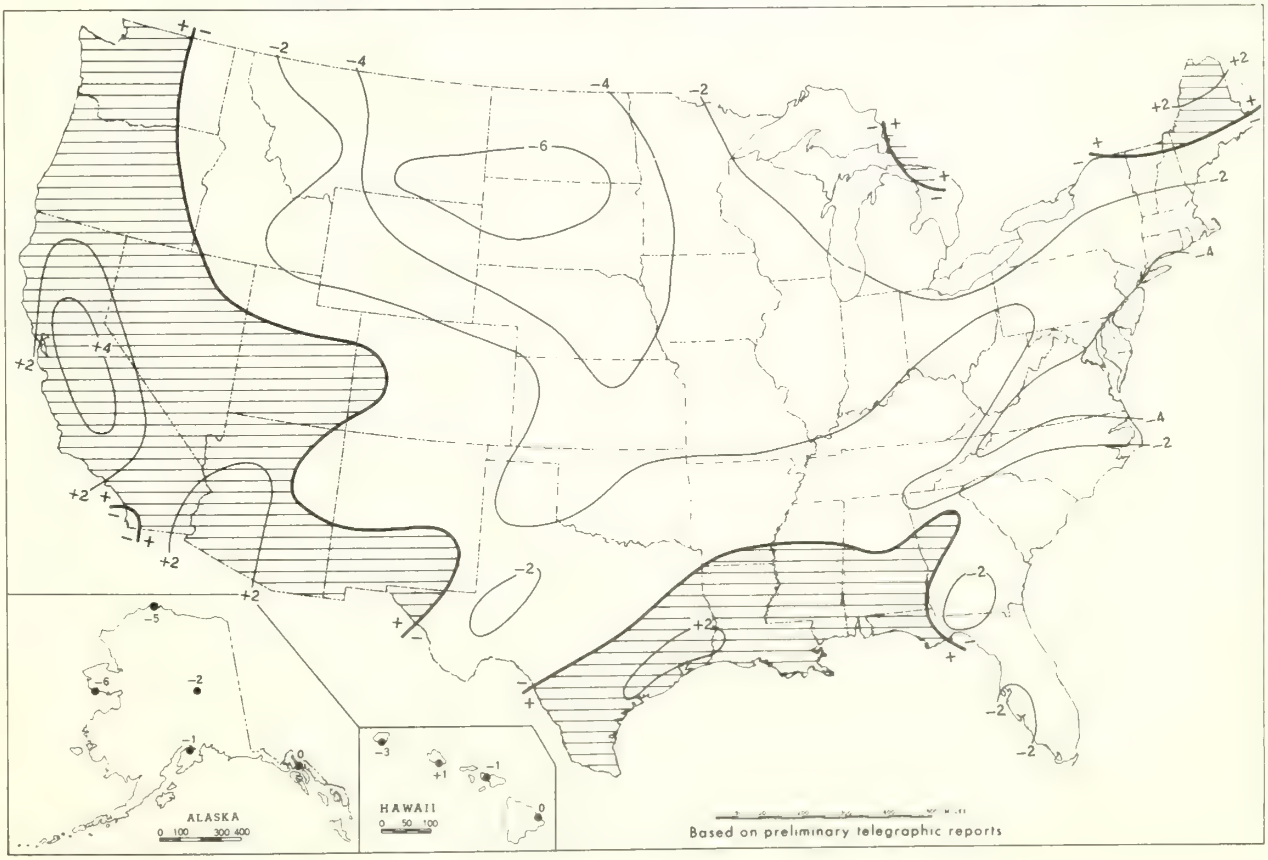
Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code ʌ s designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), April.

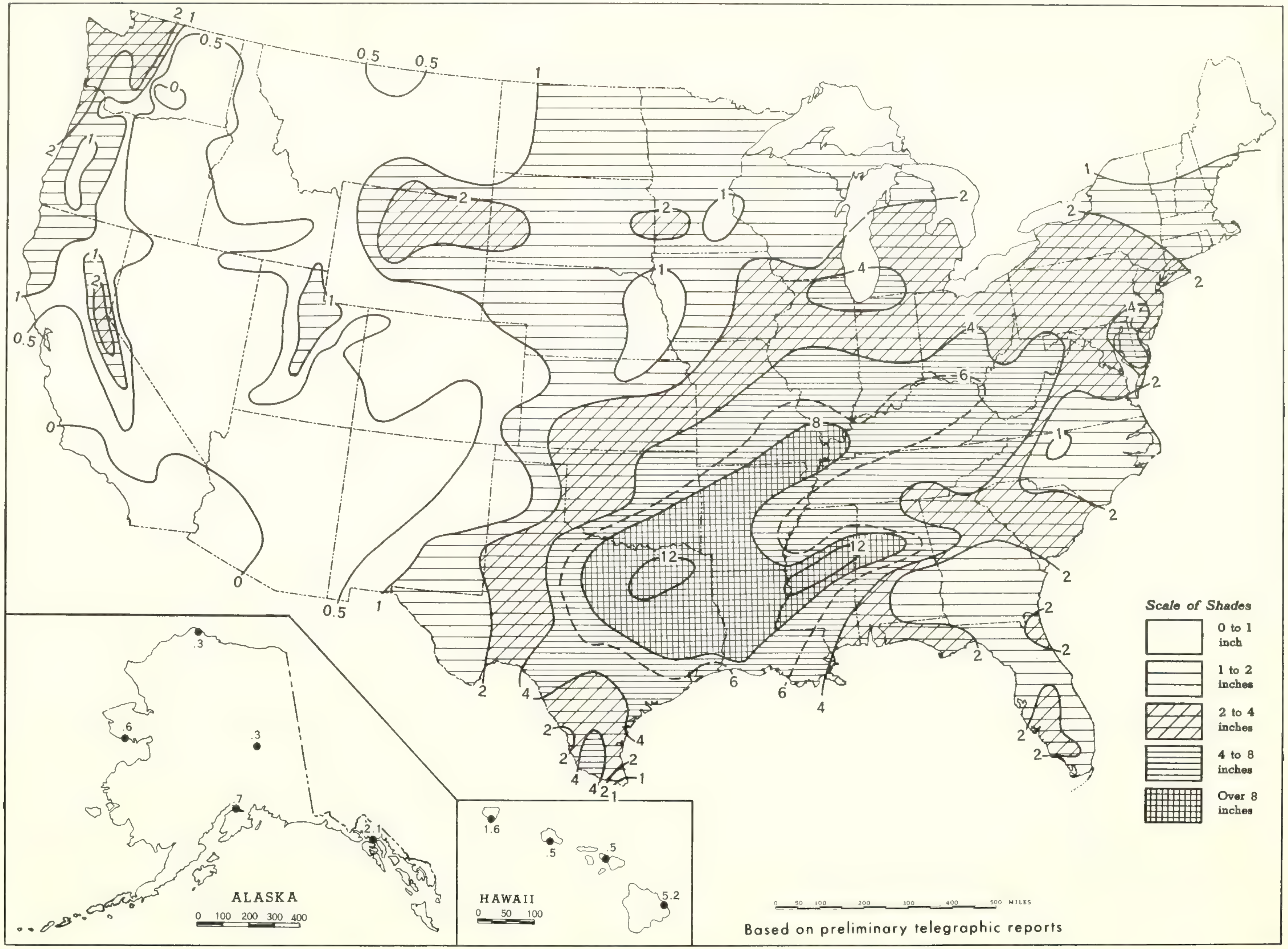


B. Temperature Departure from 30 - Year Mean (°F 1931-60), April 1966.



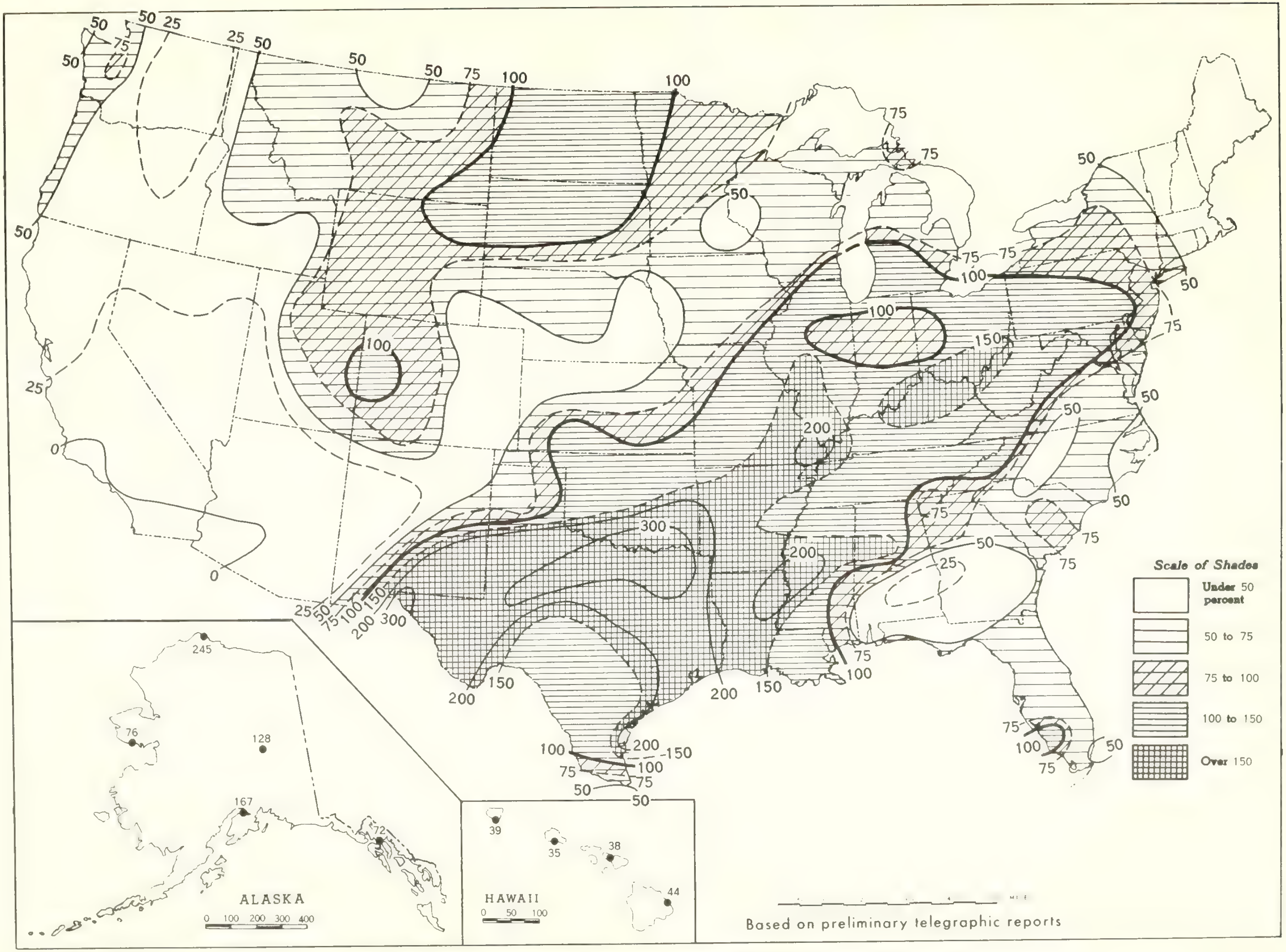
Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), April 1966.



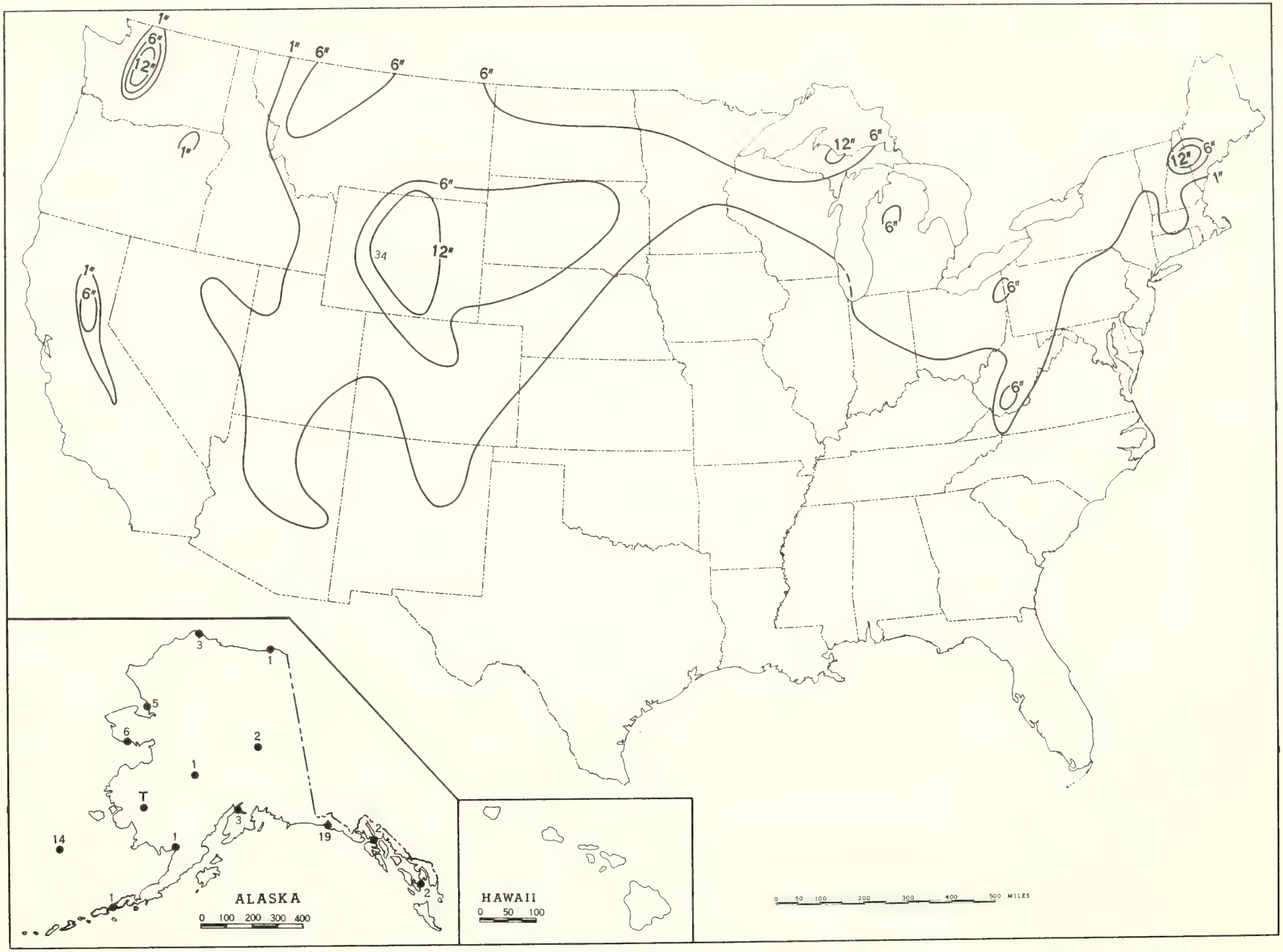
Based on preliminary telegraphic reports

Chart III. Percentage of Normal Precipitation, April 1966.



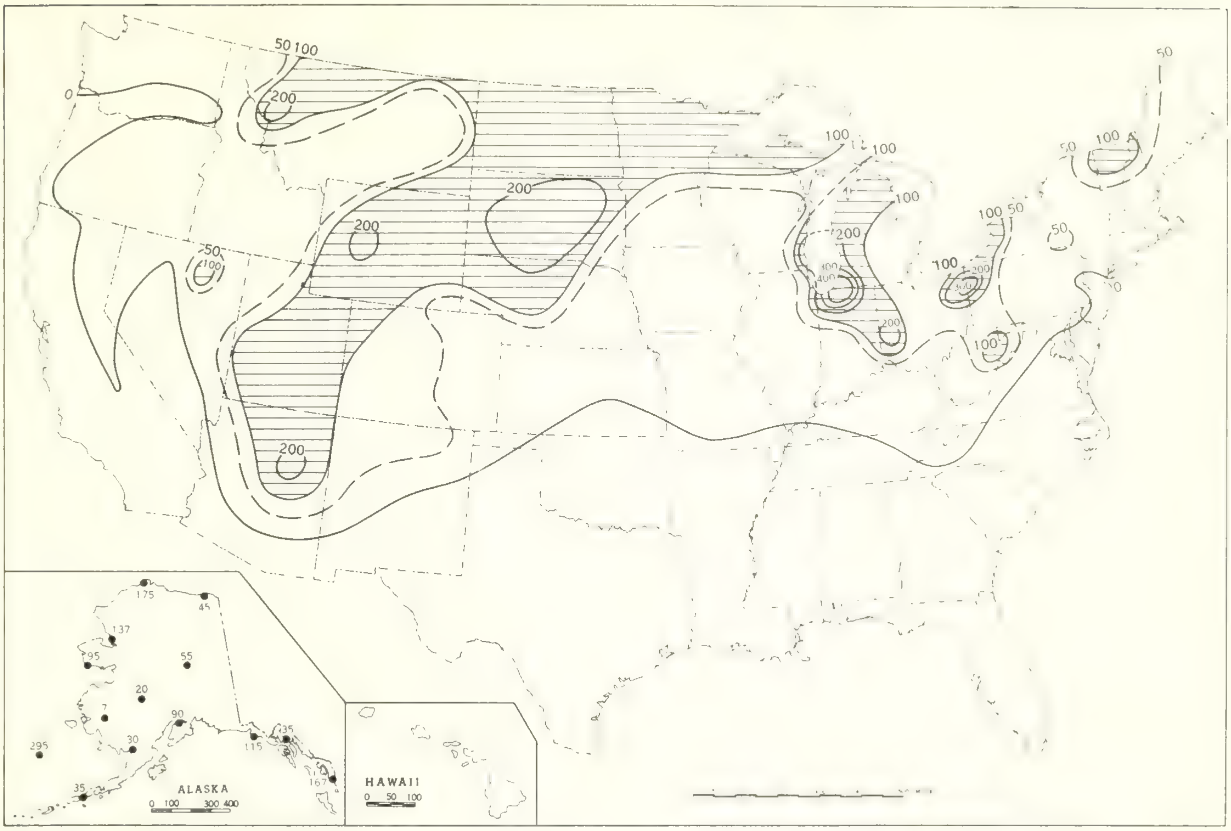
Normal monthly precipitation amounts are computed from 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart IV. Total Snowfall (Inches), April 1966.

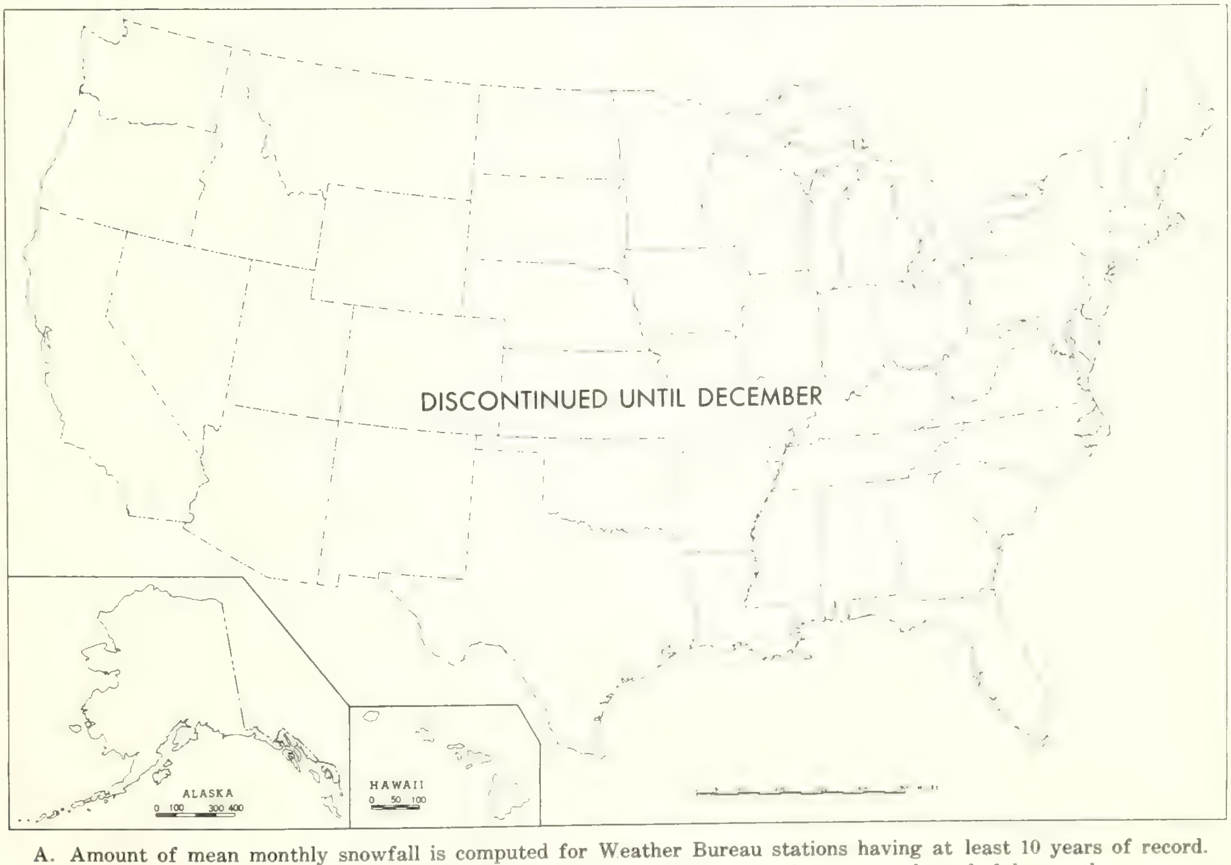


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, April 1966.

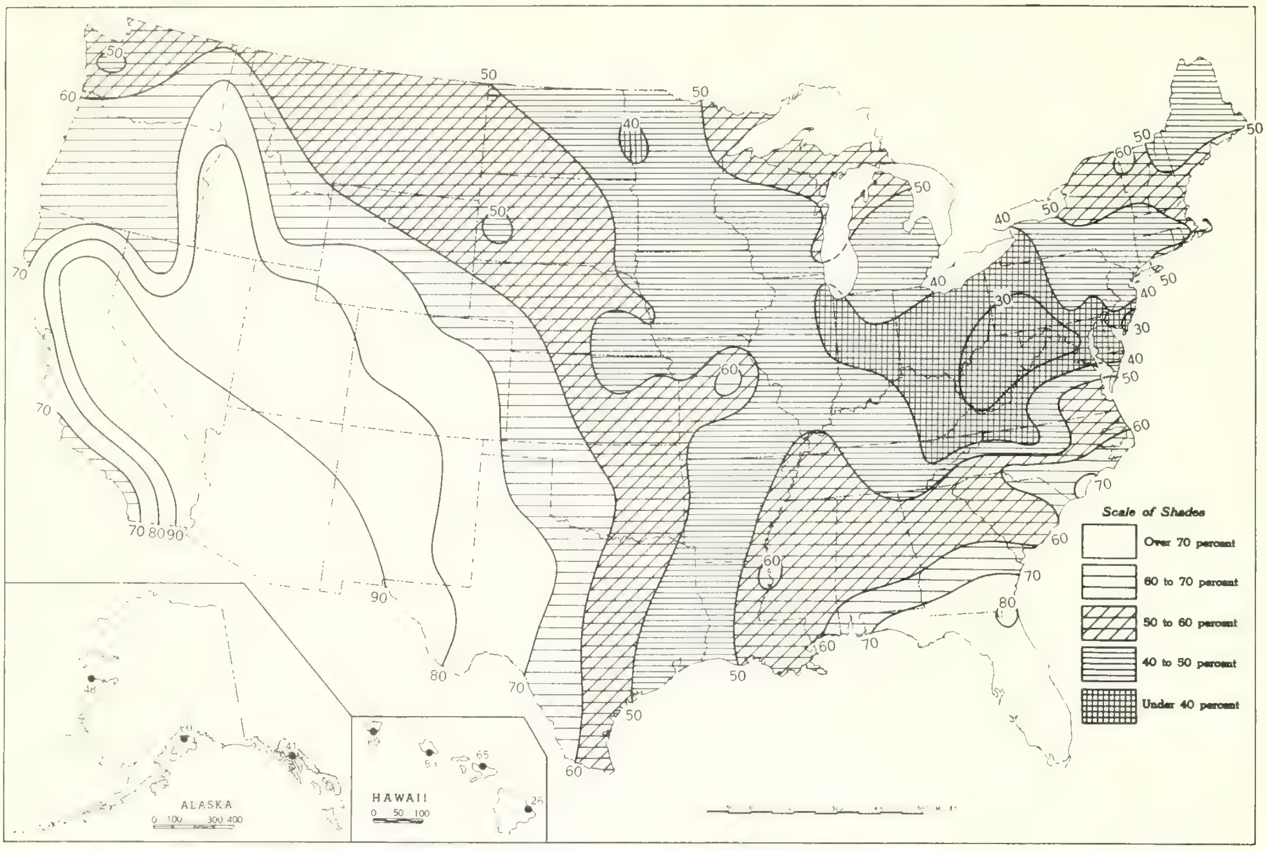


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., April 1966.

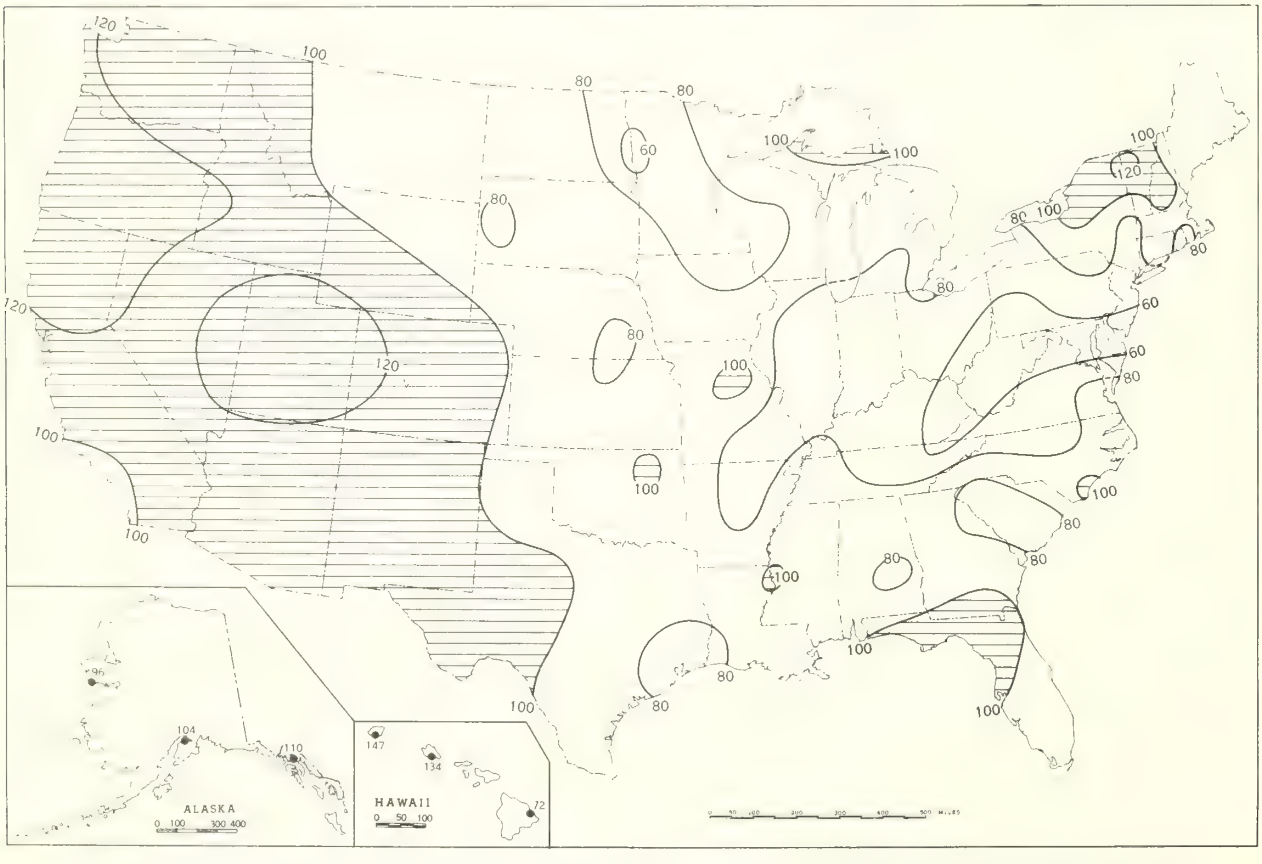


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a.m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, April 1966.

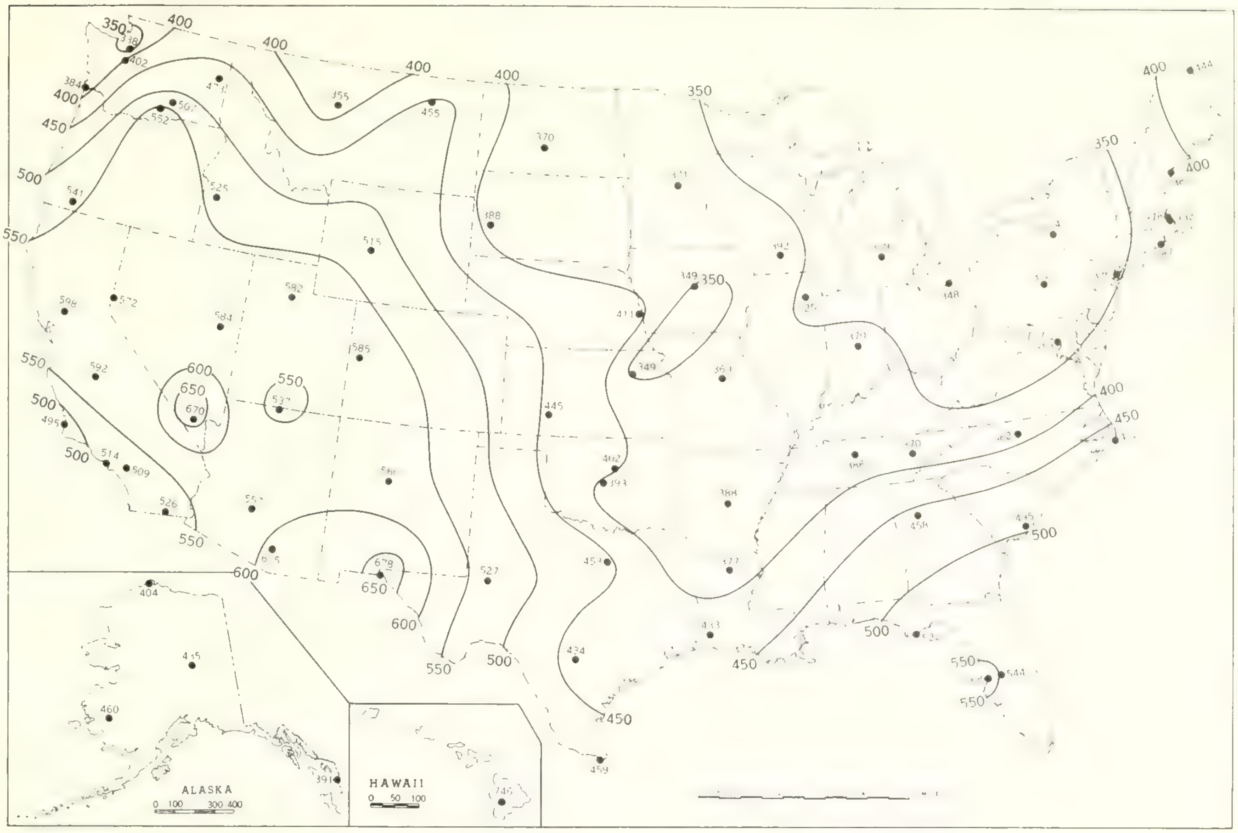


B. Percentage of Mean Monthly Sunshine, April 1966.

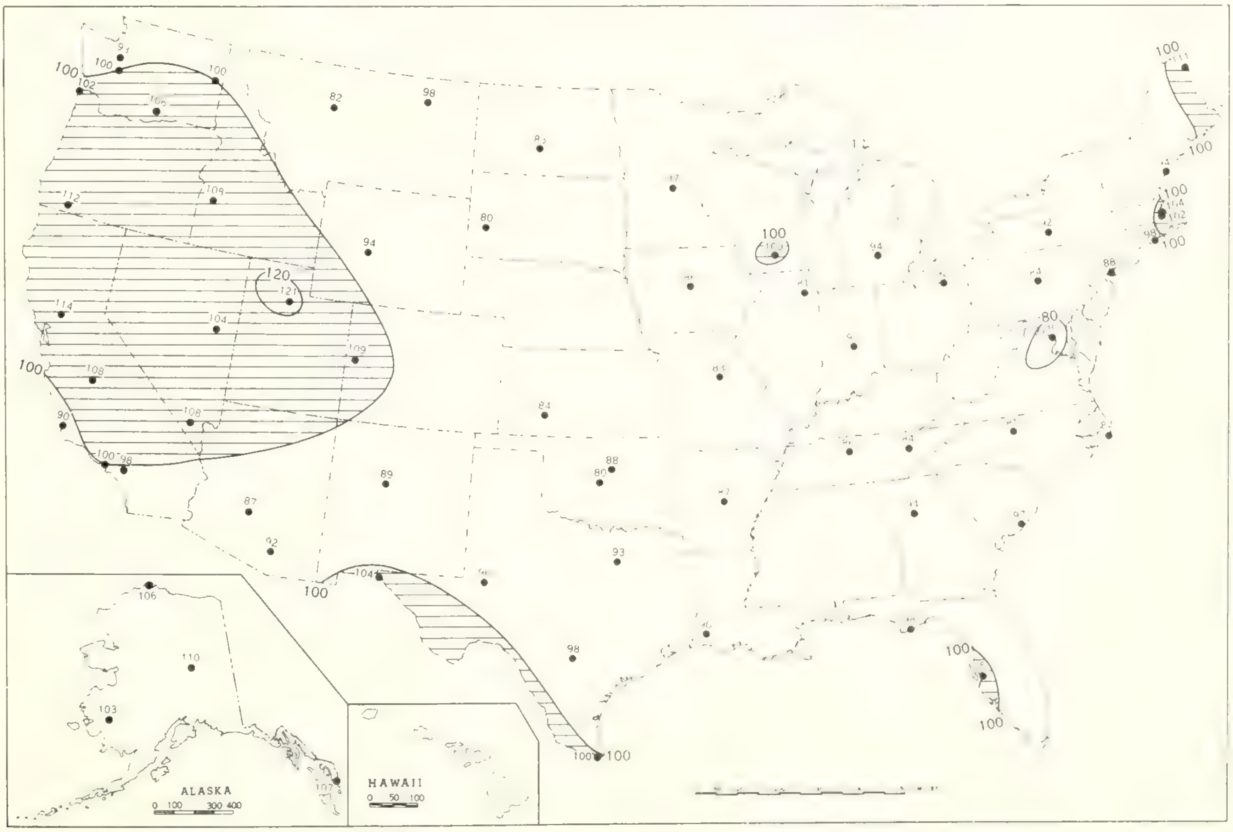


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, April 1966.

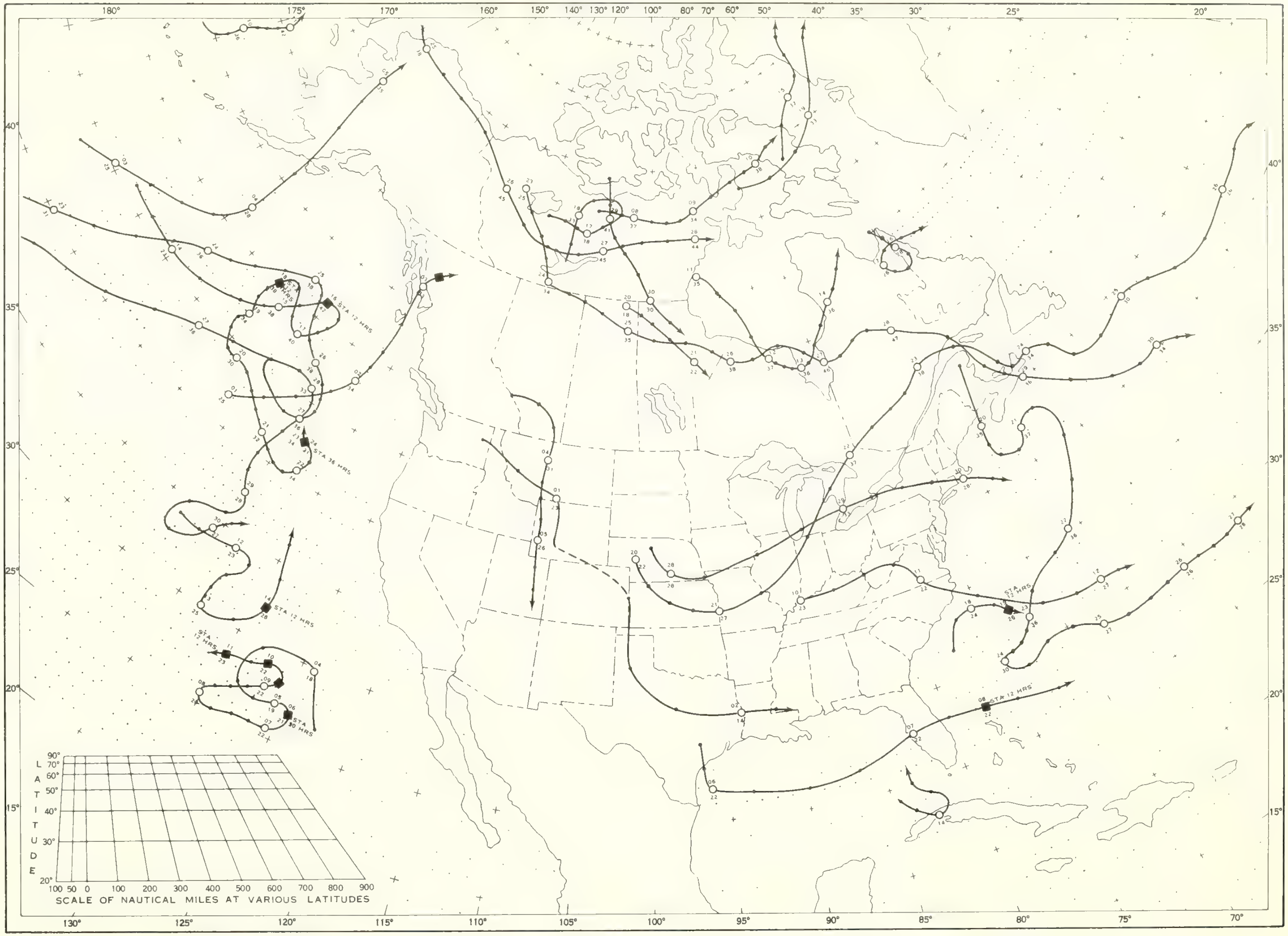


B. Percentage of Mean Daily Solar Radiation, April 1966.



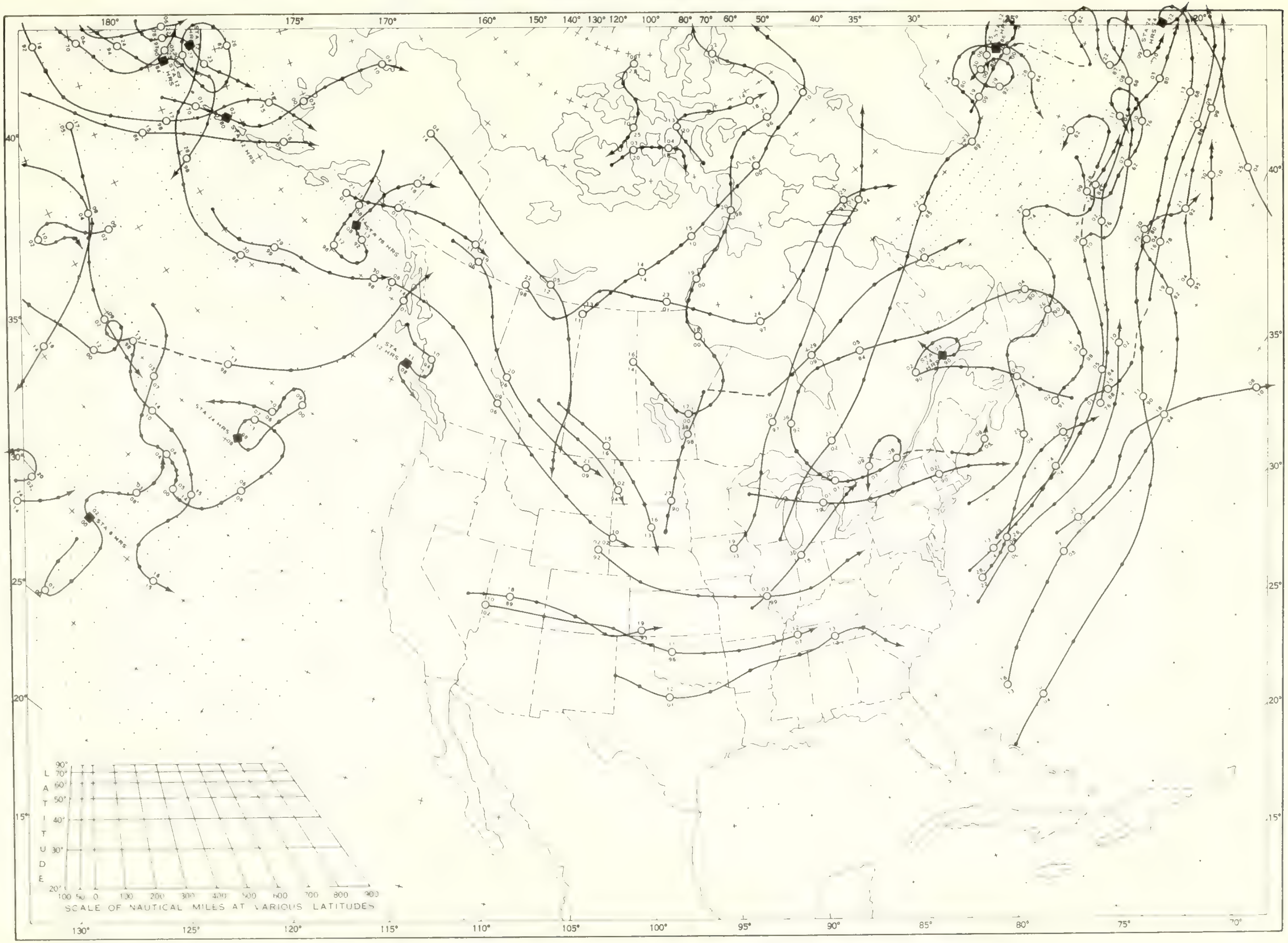
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, April 1966.



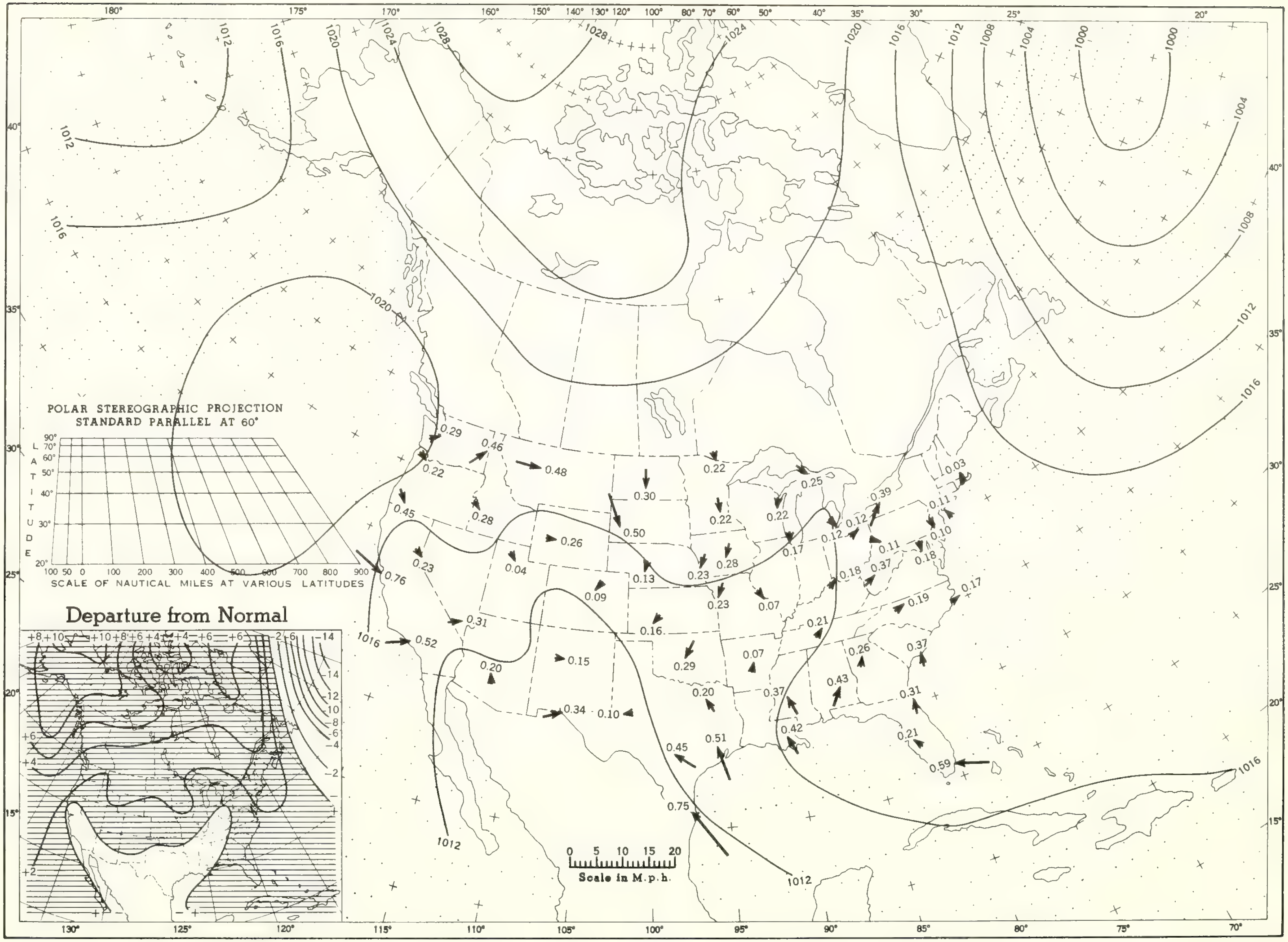
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, April 1966.



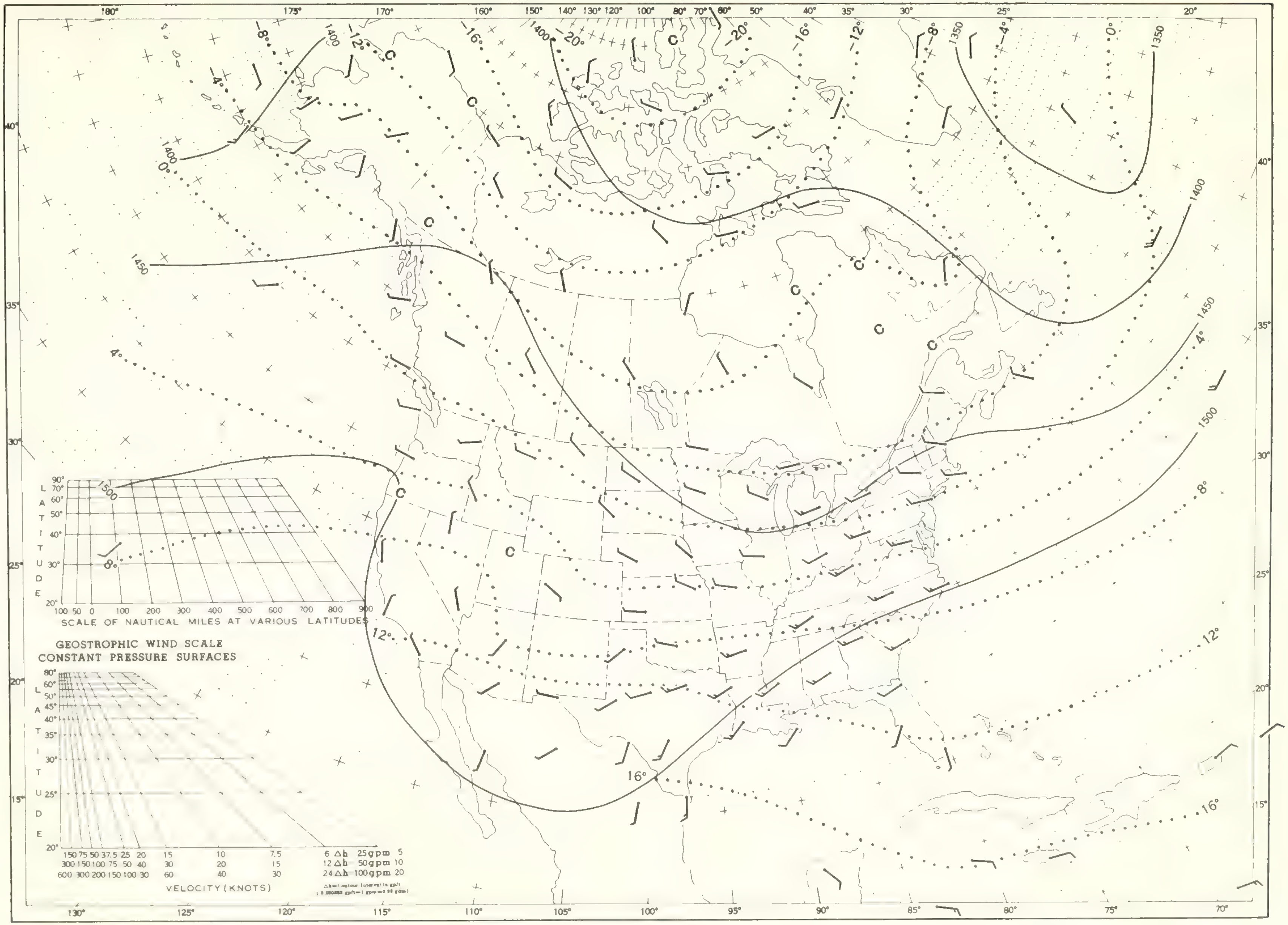
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, April 1966. Inset: Departure of Average Pressure (mb) from Normal, April 1966.



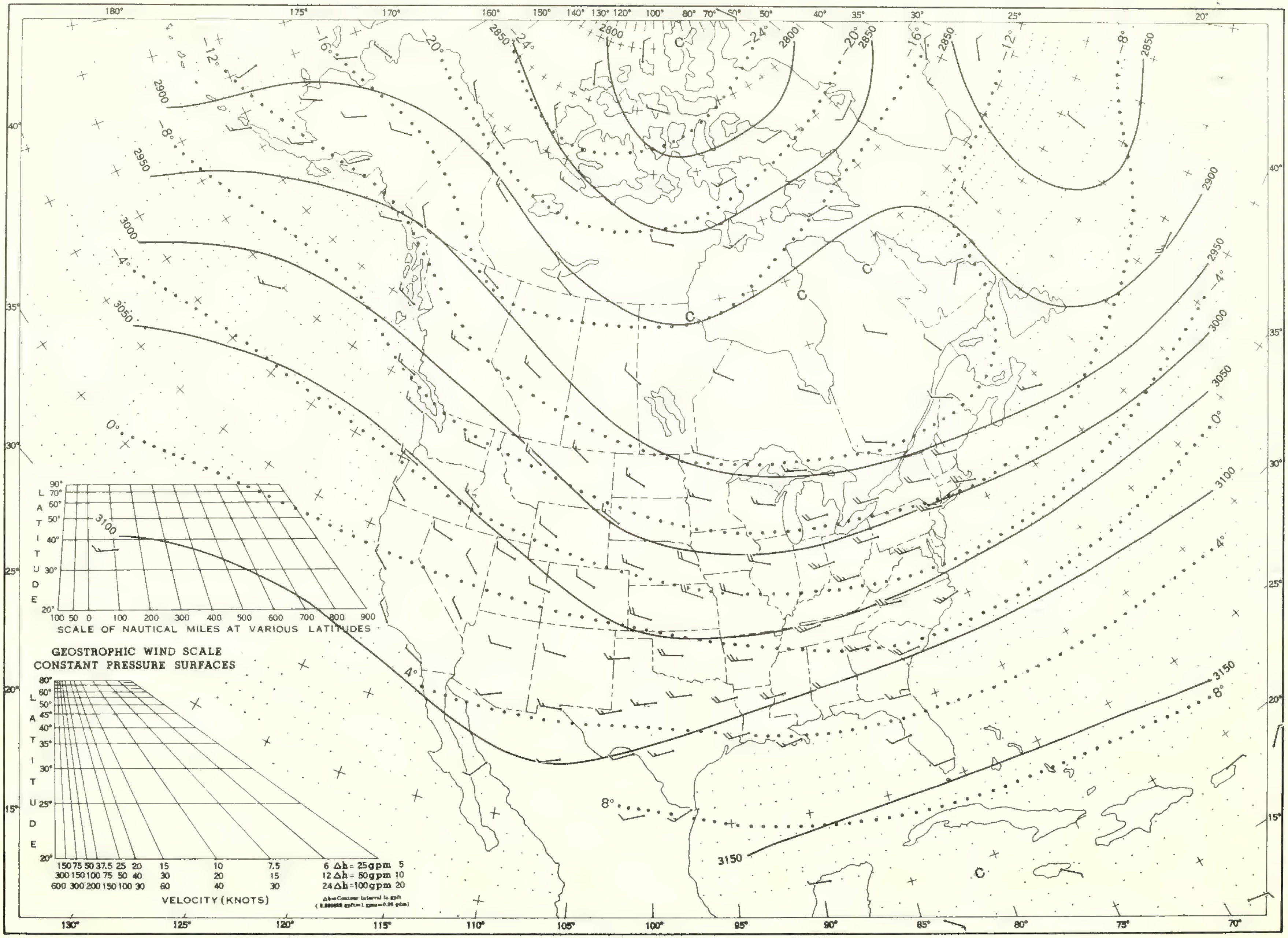
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, April 1966. Average Height and Temperature, and Resultant Winds.



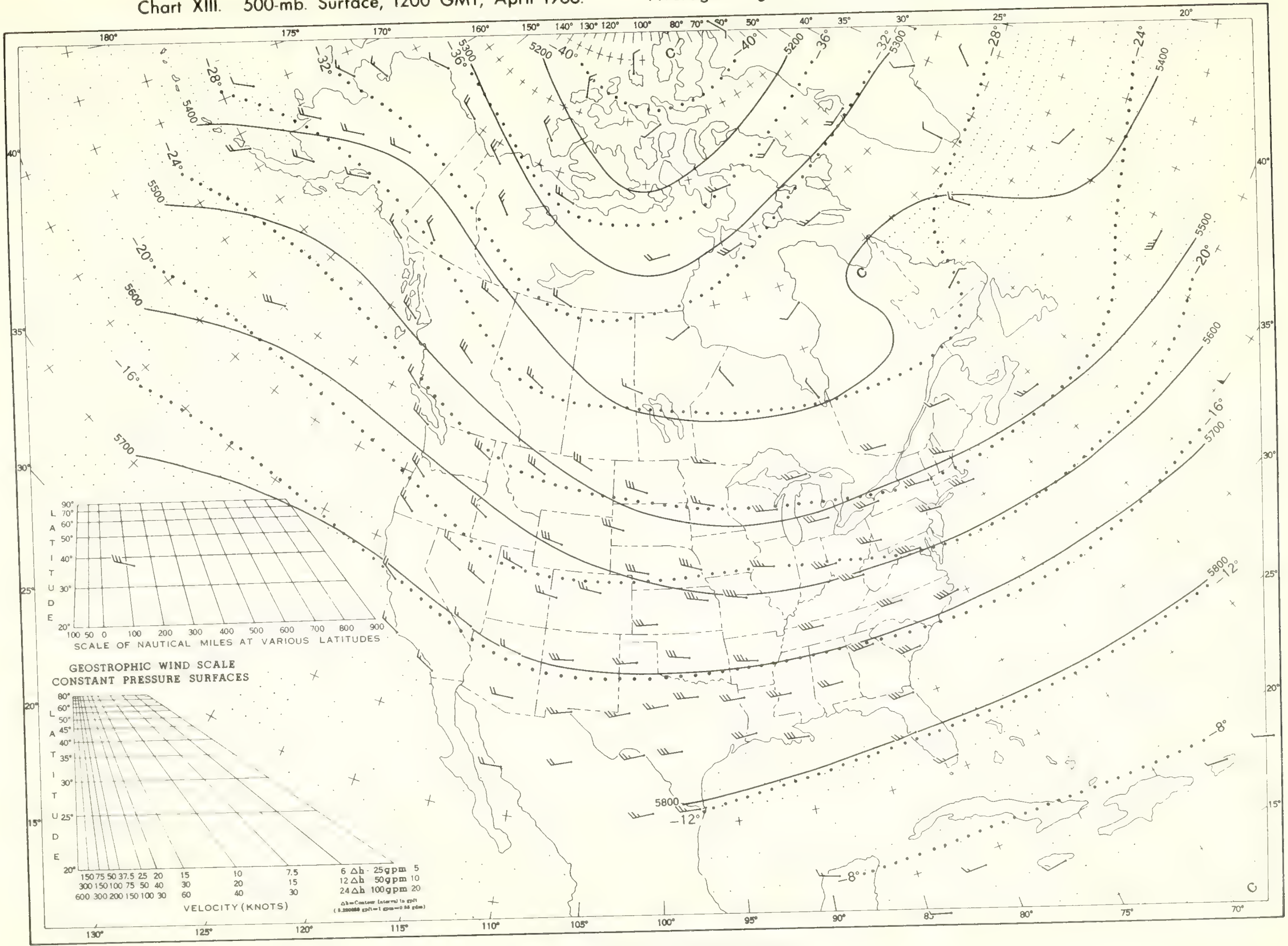
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, April 1966. Average Height and Temperature, and Resultant Winds.



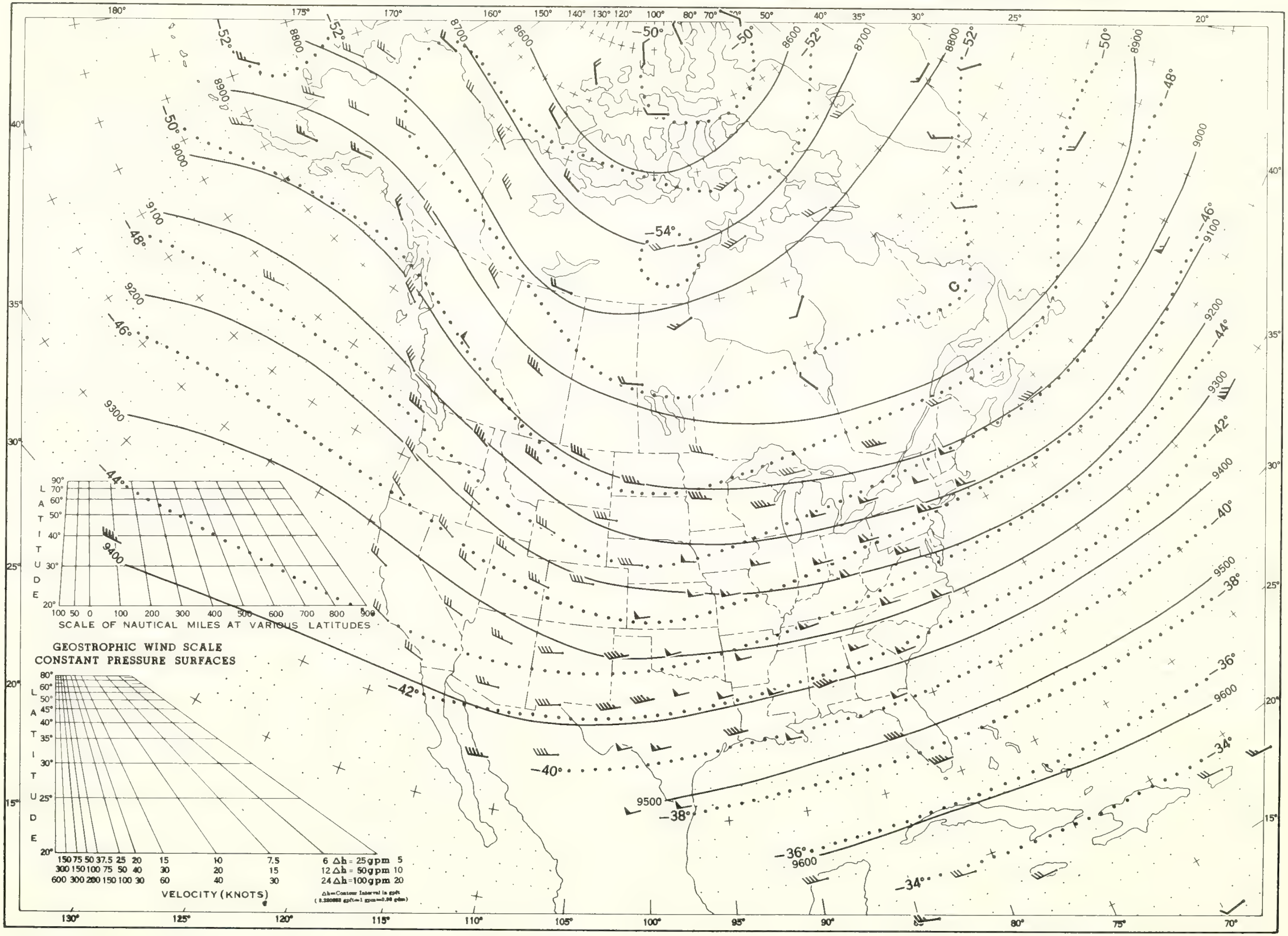
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, April 1966. Average Height and Temperature, and Resultant Winds.



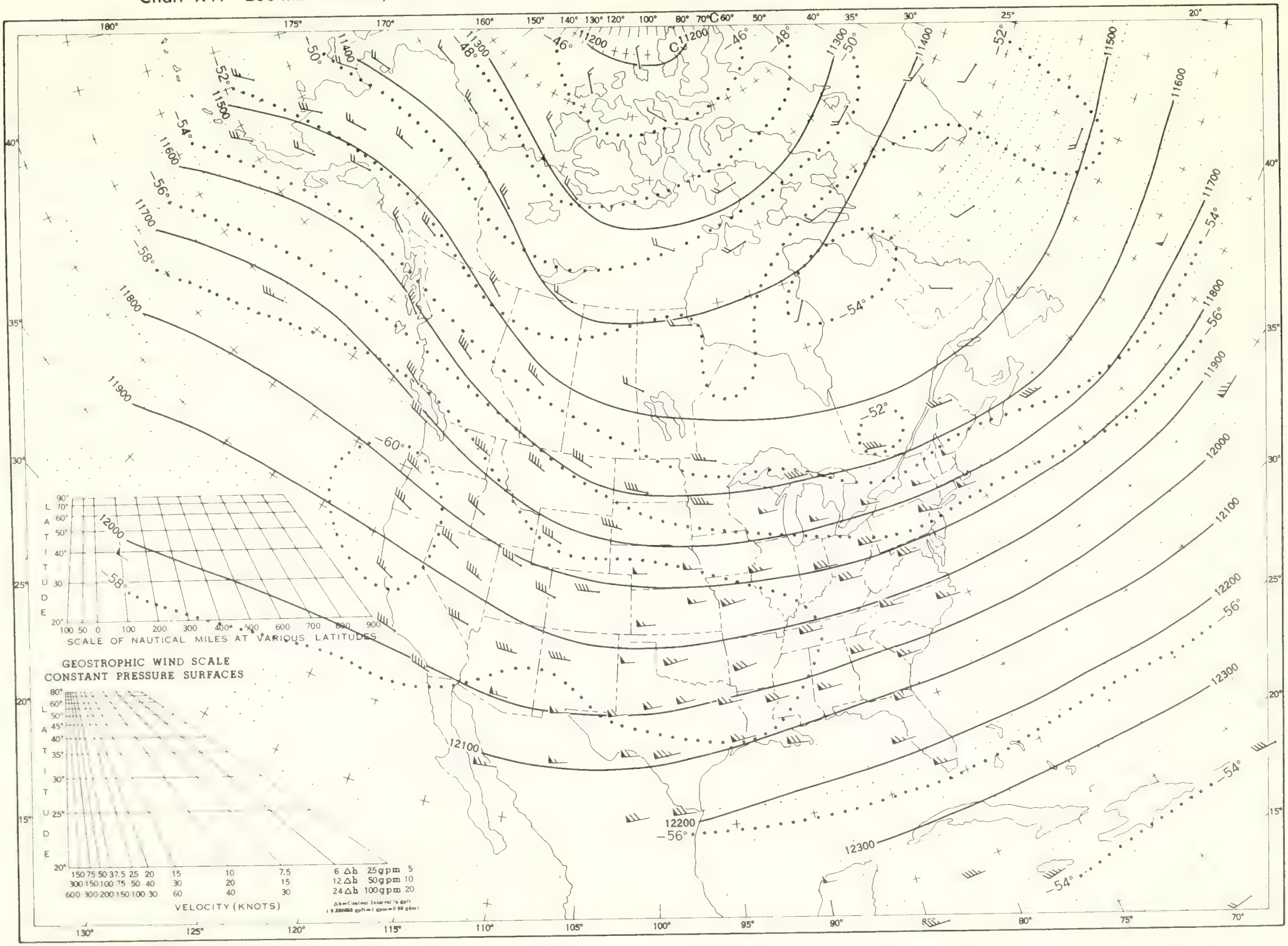
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, April 1966. Average Height and Temperature, and Resultant Winds.



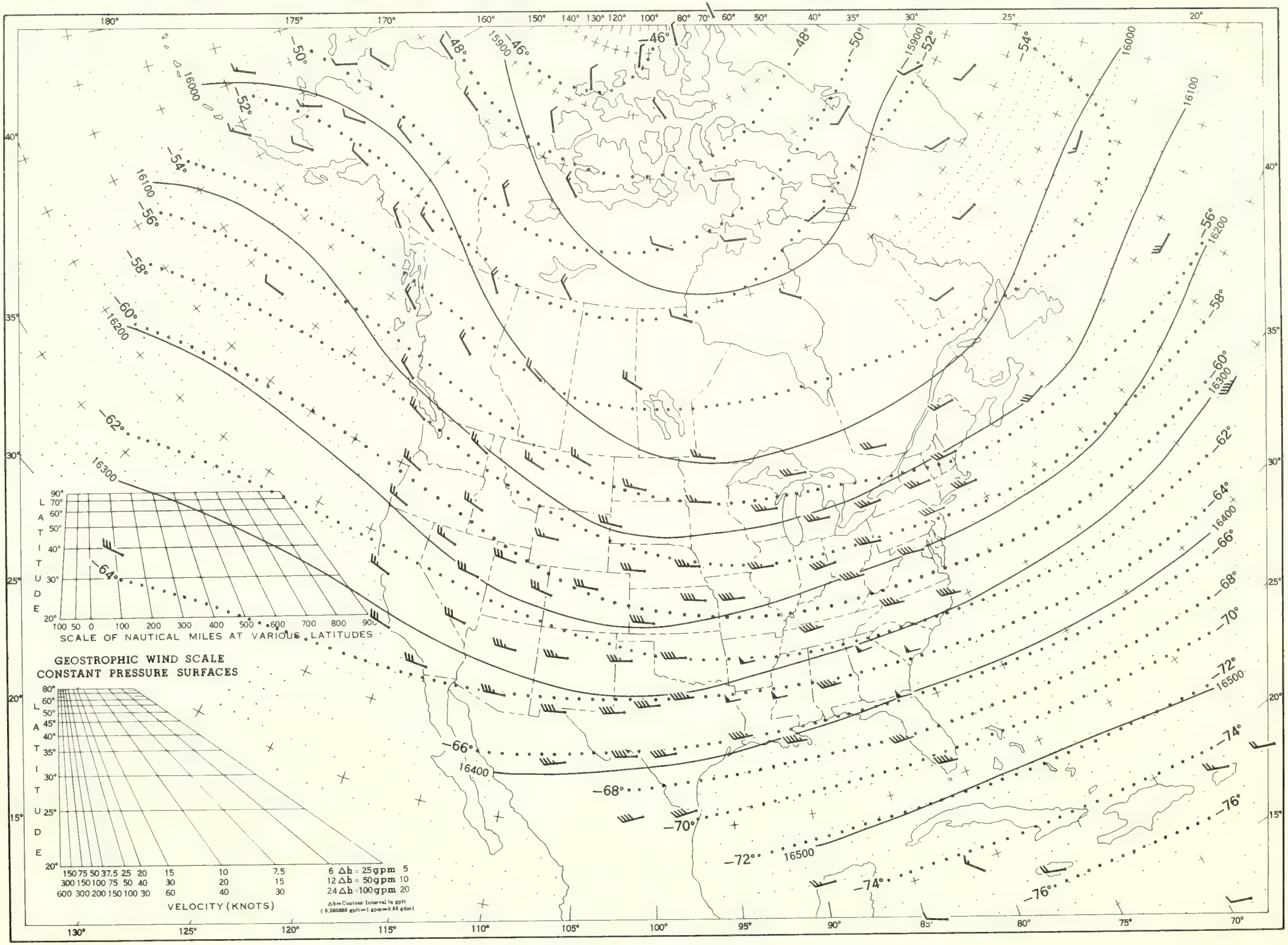
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, April 1966. Average Height and Temperature, and Resultant Winds.



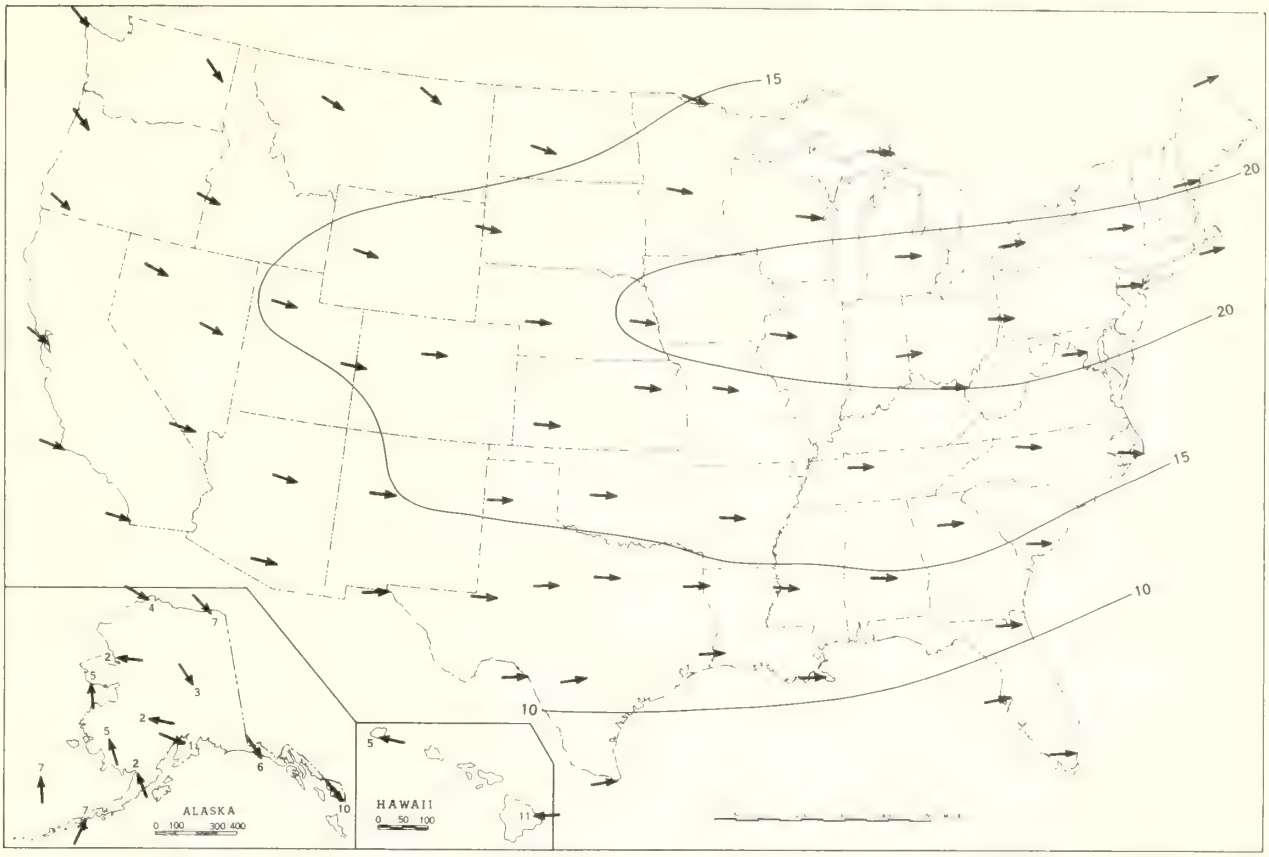
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, April 1966. Average Height and Temperature, and Resultant Winds.

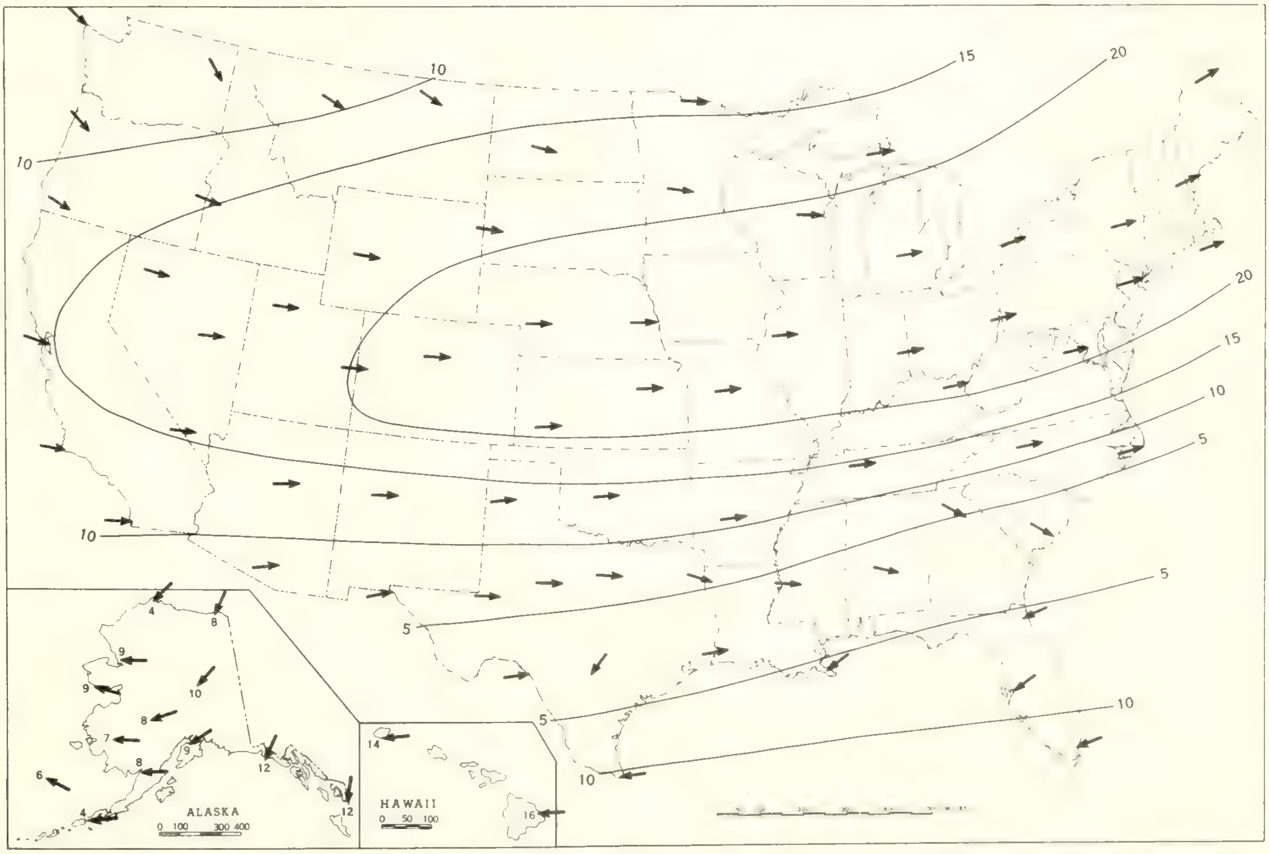


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, April 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, April 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. - 8/2/66 - 1900

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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Volume 17 No. 5

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 5 MAY 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Warm, dry, sunny weather in West.
2. Cloudy, showery, cool weather in East.
3. Record low temperatures in Midwest on May 9-10.
4. Northeast drought continued.
5. Heavy rainfall Gulf and south Atlantic coast.
6. Extremely dry in central Great Plains.

TEMPERATURE.--The month was unseasonably warm and sunny in the western half of the country, cool and cloudy in the East. Temperatures for the month averaged 6° above normal at some stations in Nevada to 6° below in parts of the Midwest. This was one of the coldest Mays on record in the northeastern quarter of the Nation where many low temperature records occurred.

The first half of the month was unusually cold in the northeastern quarter of the conterminous United States where temperatures averaged 6° to 9° below normal for the first week. The freeze line dipped down into the Ohio Valley, and on the 7th Sault Ste. Marie, Mich., recorded 18°, the lowest ever there for May.

During the second week an unusually cold and extensive area of high pressure overspread all areas from the Rocky Mountain States eastward. Temperatures for the week averaged below normal nearly everywhere, and ranged from 9° to 15° below in the northeastern quarter. Lowest temperatures generally occurred on the 10th, 11th, or 12th when temperatures fell below zero at some high stations in Colorado and on Mount Washington, N. H., and freezing occurred in all the 48 States except Arkansas, Louisiana, Mississippi, and Florida. Many stations in an area extending from the upper Mississippi Valley to the Atlantic Coast recorded their lowest temperatures ever for May. Among the stations with new May lows were Philadelphia, Pa., 28° on the 11th; Lexington, Ky., 26°; St. Louis, Mo., 31°; Milwaukee, Wis., 21°; Detroit, Mich., 25°; Cleveland, Ohio, 25°; and Indianapolis, Ind., 28°; all on the 10th. This freeze damaged fruit from North Carolina and Tennessee northward with heaviest losses in Ohio and Michigan. In the same area considerable damage to vegetables also occurred.

A hot spell occurred in the West during the first week when temperatures rose into the 80's and 90's even into the northern Rockies where Helena, Mont., reported an early season high of 86° on the 6th. The second half of the month was generally warmer than normal with abnormally cool weather in the Southeast and the Pacific Northwest the main exceptions.

A cold snap in the Northeast at the end of the month again brought near record low temperatures for so late in the month.

PRECIPITATION.--Precipitation was frequent east of the Mississippi, but monthly totals were above normal only in the Mississippi Valley and most of the Gulf and Atlantic coastal areas. In the rest of the 48 States monthly totals were nearly all below normal. Owing to the unusually cold weather, more snowfall occurred in northern areas than is usual for May.

In the South monthly totals exceeded 10 inches at points in Texas, Louisiana, Mississippi, and Georgia. The greatest total in the 48 States was 15.05 inches at Metter, Ga. Development of vegetation and fieldwork in the East was about 1 to 2 weeks late. This was the wettest May in Georgia and at Jackson, Miss., since 1923.

Below normal precipitation continued the drought in the Northeast. Precipitation in most interior sections of New England and eastern New York ranged from 50% to 75% of normal. Western New York State, much of the western two-thirds of Pennsylvania, West Virginia, western Virginia, and western Maryland had less than 25% of normal. While late winter and early spring precipitation improved drought conditions in New York and Pennsylvania, May deficits were disappointing there. Above normal rainfall in coastal areas from southern New England southward was very beneficial.

The month was also extremely dry in the upper Great Lakes region and west of the Mississippi. Most of this region received less than 50% of normal precipitation and the central Great Plains and Far Southwest less than 25%. Cheyenne, Wyo., had its driest May since 1871; Aberdeen, S. Dak., since 1895; and Denver, Colo., since 1919. This was one of the driest Mays on record in Kansas where Topeka, the capital, not only had its driest May with 0.41 inch but also its driest January-May period with 3.19 inches. Wheat was deteriorating in the western two-thirds of Kansas at the end of the month and topsoil and subsoil moisture were critically short. Small grains needed rain in Nebraska, and crops prospects were declining in eastern Colorado.

SNOW.--The water supply outlook in the West continued to deteriorate during May, it being either the second or third consecutive very dry month in most sections. In Idaho not a single storm in the last 3-month period was heavy enough to increase streamflow significantly. The mountain snowpack decreased and was below normal with few exceptions. In Utah only 4 snow courses had snow on the ground while 46 had snow on the ground at the end of May in 1965.

In contrast to the lack of snow in the West, late season snowfall east of the Rockies on the 8th and 9th was notable for the many new records set in northern interior sections. Dubuque, Iowa, measured 3.1 inches for the month and Burlington, Vt., 3.9 inches, May records for both stations. The Akron-Canton Airport in Ohio measured 3.2 inches of snowfall on the 9th, the fifth May snowfall since 1887. Youngstown, Ohio, had 4.7 inches of snow on the 9th, its first snowfall in May to exceed an inch. Wellsboro, Pa., had 4.0 inches on the 9th and other stations in Pennsylvania had lesser amounts the same day. Concord, N. H., measured 1.1 inches on the 8th, the fifth measurable May snowfall there since 1871.

STORMS.--Severe local storm frequency, which normally is higher for May than other months, apparently was less than usual in most areas. This was particularly true of tornadoes.

Several tornadoes crossed northern Florida early in the month and more than a dozen occurred in the mid-continent area, particularly in Kansas, Oklahoma, and Missouri, on the 11th. Hail, wind, and tornadoes were reported again in these three States on the night of the

15th.

There were many storms during the third week and on the 16th a tornado struck Columbus, Ga., causing several hundred thousand dollars damage and injuring 11 persons.

On the 23d tornadoes affected an 8-state area from Texas to Wisconsin. Considerable damage and some personal injuries were reported.

CONDENSED CLIMATOLOGICAL SUMMARY

MAY 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	2 Stations	94	30+	Valley Head	31	10	Redstone Arsenal	9.48	Mathews 1SSW	1.10
Alaska	Data will be delayed									
Arizona	Gila Bend	108	20	Bright Angel RS	21	12	Wupatki Nat Mon	.82	79 Stations	.00
Arkansas	2 Stations	93	22+	Mammoth Springs	33	10	Corning	9.14	Batesville Livestock	1.74
California	Death Valley	110	27+	White Mountain 2	14	12	Greenview	2.92	85 Stations	.00
Colorado	2 Stations	99	22+	Jones Pass 2E	-5	12	Bonham Reservoir	3.20	Lamar	T
Connecticut	Hartford WBAP	86	27	Coventry	21	3	Groton	6.39	Baltic	2.37
Delaware	Wilmington N Castle WBAP	88	6	Georgetown 5SW	28	11	Lewes 1SW	6.21	Wilmington Porter Resvr	2.54
Florida	Fountain 3SSE	99	30	Crestview Radio WJSB	46	10	Federal Point	11.95	Tampa WBAP	.71
Georgia	5 Stations	93	30+	3 Stations	32	11+	Metter	15.05	Lincolnton	2.90
Hawaii	Data will be delayed									
Idaho	Slate Creek RS	102	5	Idaho Falls 16SE	7	23	Conda	2.79	Dubois 34W	.05
Illinois	2 Stations	91	27+	2 Stations	21	10	Cairo WB City	9.50	Red Bud	2.24
Indiana	Valparaiso Waterworks	93	27	Wheatfield 2NNW	19	10	Lowell	7.08	Marengo	1.30
Iowa	Onawa	98	7	5 Stations	22	10+	Newton	8.26	Hawarden	.74
Kansas	Hunter	103	22	Russell Springs	21	13	Girard	7.59	4 Stations	.00
Kentucky	2 Stations	92	25+	Falmouth 5WNW	20	10	Paducah FAA AP	9.08	Jeremiah	.61
Louisiana	do	94	24+	3 Stations	45	3	Paradis 7S	13.61	Harrisonburg Dam	1.25
Maine	do	89	24	Clayton Lake 2	10	8	Machis	4.33	Grand Lake Stream	1.17
Maryland	3 Stations	91	6	Bittinger 2NW	19	10	Coleman 3WNW	6.04	Hancock Fruit Lab	.99
Massachusetts	Framingham	89	28	Birch Hill Dam	21	3	Edgartown	8.51	Turners Falls	1.74
Michigan	2 Stations	90	28+	Fife Lake 4SW	8	1	Battle Creek WBCK	4.96	Lake City Exp Farm	.30
Minnesota	Springfield 1NW	95	26	Cook 18W	5	1	2 Stations	2.99	Wayland 9NW	.75
Mississippi	4 Stations	93	31+	Pontotoc	36	10	Lafayette Spring	11.48	Brooksville Exp Sta	1.53
Missouri	2 Stations	95	7	Berryman 6NW	25	10	Charleston	9.97	Edgerton	1.00
Montana	Loma 1WNW	100	27	2 Stations	11	12	Essex	4.28	Ineomar 11NE	.14
Nebraska	9 Stations	98	21+	Harrison	19	12	Omaha N Omaha AP	5.04	3 Stations	.00
Nevada	Sunrise Manor Las Vegas	106	26	Gibbs Ranch	13	23	Hawthorne Babbitt	1.09	2 Stations	.00
New Hampshire	Berlin	91	25	Mount Washington	-2	7	Mount Washington	4.55	Lebanon FAA AP	2.10
New Jersey	8 Stations	87	21+	High Point Park	21	10	New Brunswick Exp Sta	5.94	Ringwood	1.83
New Mexico	3 Stations	101	31+	Gavilan	17	13	Cameron	1.77	31 Stations	.00
New York	Penn Yan 2SW	92	28	Angelica	14	5	Bridgehampton	6.88	Theresa	.93
North Carolina	4 Stations	91	30+	Grandfather Mountain	17	10	Columbia 2	14.20	Marshall	1.39
North Dakota	Enderlin	99	23	Munich 4SW	8	1	Beach	2.83	Hurdsfield	.47
Ohio	Toledo Blade	94	28	Jackson 2NW	17	10	Columbus Valley Cross	5.41	Athens 5NW	1.37
Oklahoma	Frederick	108	22	Hooker	26	13	Sallisaw	6.56	Union City 1SSE	.07
Oregon	Ontario KSRV	102	26	Fremont	11	1	Brightwood	3.35	5 Stations	T
Pennsylvania	2 Stations	91	24+	Clermont 4NW	10	10	Creekside	8.00	Breezewood	.47
Puerto Rico	3 Stations	94	15+	San German, PR	57	2	Palmarito, PR	22.95	Bethlehem Old Works, VI	1.08
Rhode Island	Greenville	83	27	2 Stations	32	19+	Kingston	6.61	Woonsocket	3.48
South Carolina	Bamberg	93	30	Caesars Head	30	10	Hilton Head	12.23	Fort Mill 4NW	1.44
South Dakota	2 Stations	96	26+	Deerfield 4NW	12	12	Bridgewater	4.23	Mt Coolidge	T
Tennessee	do	91	23+	Mountain City No 2	26	5	Linden	7.70	Bristol WBAP	1.31
Texas	Presidio	109	16	Gruver	27	13	Freer	14.87	4 Stations	.00
Utah	2 Stations	100	26+	Strawberry Hwy Station	12	6	Timpanogos Cave	4.01	2 Stations	.00
Vermont	do	88	25+	Mount Mansfield	9	7	Waitsfield 2WSW	5.50	McIndoe Falls	2.27
Virginia	do	93	22+	Big Meadows	18	10	Wallaceton Lk Drummond	8.37	St Paul	1.37
Washington	Pleasant View	103	6	2 Stations	20	22+	Tolt South Fork Resvr	5.78	2 Stations	.00
West Virginia	Williamson	93	9	Terra Alta No 1	17	11	Rowlesburg 1	4.93	Wayne 2	.51
Wisconsin	2 Stations	92	26	Gordon 2ESE	7	9	Blanchardville 1N	5.40	Minocqua Dam	.48
Wyoming	4 Stations	95	31+	Kendall	2	23	Bedford 2SE	3.11	Deaver	.00

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h							%
ALABAMA																																
BIRMINGHAM	620	993.9	1016.3	78	56	66.9	- 4.9	86	29	38	10	0	0	58	75	3.30	- 0.12	1.07	10	7	0.0	0	1.6	5	23	N	9	6	11	14	6.5	68
HUNTSVILLE	600	993.6	1016.3	80	58	68.7	- 1.7	90	29	40	10	1	0	56	68	6.23	2.84	2.08	9	8	0.0	0	2.2	4	29	18	18+	7	11	13	6.1	
MOBILE	211	1007.1	1015.1	83	67	75.1	- 0.5	92	29+	52	10	4	0	63	72	4.66	- 0.22	1.56	10	6	0.0	0	3.4	8	25	6	19+	4	10	17	7.3	
MONTGOMERY	194	1008.5	1015.7	81	62	71.9	- 0.5	90	9	45	10	1	0	62	75	2.36	- 1.11	0.53	11	9	0.0	0	1.5	4	21	N	31+	4	9	18	7.2	45
ALASKA												B																				
ANCHORAGE PRK STRIP	85			51	37	44.2	- 1.7	58	1	29	5	0	1			0.73	0.21	0.20	10		0.4	0										
ANCHORAGE	141	1002.4	1007.4	51	37	44.2		57	21	29	5	0	3	32	64	0.75		0.21	9	0	T	T	2.2	19	28	17	21+	1	8	22	8.2	38
ANNETTE	110	1011.2	1015.2	53	40	46.3	- 2.9	74	31	35	21	1	0	38	75	14.68	7.61	2.66	22	0	0.0	0	5.0	16	30	14	2+	3	5	23	8.3	
BARROW	22	1013.5	1014.1	22	10	16.1	- 2.3	35	30	- 3	16+	0	31	14	89	0.15	0.03	0.12	3	0	3.0	18	0.9	17	18	28	12	5	3	23	8.0	
BARTER ISLAND	39	1011.2	1013.2	25	13	19.3	- 1.4	36	26	- 4	2	0	31	17	88	0.18	- 0.07	0.14	6	0	3.3	31	1.7	30	45	27	9	4	5	22	8.0	
BETHEL	125	1004.7	1010.4	40	27	33.2	- 5.8	56	31	15	15	0	29	28	82	0.45	- 0.50	0.27	6	0	4.8	2	5.3	30	35	32	21	3	6	22	8.1	
COLD BAY	94	1008.5	1012.3	42	33	37.4	- 2.1	53	12	25	11	0	15	32	83	2.49	0.20	0.75	19	0	0.7	T	5.6	27	56	16	12	0	2	29	9.5	
FAIRBANKS	436	990.5	1007.5	54	37	45.4	- 1.7	63	31+	30	12	0	3	31	61	0.38	- 0.33	0.13	10	1	1.7	3	0.6	23	21	18	18	1	7	23	8.1	
JUNEAU	12	1011.5	1012.4	50	36	43.3	- 2.3	64	31	27	9	0	5	40	89	6.33	3.09	0.83	27	0	T	0	8.3	11	37	11	22	1	3	27	8.9	34
KING SALMON	43	1006.8	1009.0	44	31	37.4	- 5.9	55	30	17	17	0	19	31	78	2.40	1.44	0.54	15	0	2.6	1	4.3	24	35	14	12	2	4	25	8.4	
KOTZEBUE	10	1010.5	1011.1	31	17	23.8	- 7.1	45	31	4	16+	0	31	20	83	0.04	- 0.29	0.02	3	0	1.3	23	7.2	29	35	31	14	7	12	12	6.0	
MC GRATH	349	995.6	1008.4	48	32	40.0	- 4.1	64	31	22	16+	0	14	27	61	0.40	- 0.48	0.34	5	0	T	5	2.2	29	22	17	13	2	8	21	7.9	
NOME	13	1009.8	1010.6	35	23	29.0	- 6.0	56	31	10	16+	0	29	23	77	0.12	- 0.57	0.08	4	0	0.8	10	4.7	1	44	9	12	8	10	13	5.8	48
ST. PAUL ISLAND	22	1010.2	1011.2	38	29	33.6	- 1.2	45	30	20	9+	0	22	29	82	2.24	0.94	0.77	20	0	1.2	T	3.0	29	44	15	12	0	4	27	9.3	
SHEMYA	122	1007.8	1011.5	41	34	37.7	- 0.3	45	23+	30	21	0	6	34	88	3.04	0.64	0.72	16	0	0.9	T	7.5	23	58	23	1	2	2	27	8.8	
YAKUTAT	28	1009.1	1010.2	45	32	38.3	- 6.3	50	29	24	10+	0	17	36	88	11.15	3.17	2.10	23	0	0.5	1	4.5	14	36	14	22	2	1	28	8.7	
ARIZONA																																
FLAGSTAFF	6993	788.0	1013.9	72	36	53.7	2.8	79	25	27	1	0	8	27	39	T	- 0.51	T	0	4	0.0	0	4.5	20	23	21	19	16	12	3	3.3	
PHOENIX	1117	970.9	1008.9	97	63	80.1	5.1	103	25+	53	11	27	0	39	24	T	- 0.13	T	0	0	0.0	0	1.8	14	39Y	SW	20	23	7	1	1.8	95
TUCSON	2584	923.5	1009.6	92	61	76.1	2.6	100	25	52	10	22	0	36	26	0.11	- 0.02	0.11	2	2	0.0	0	4.9	18	34	NW	20+	23	6	2	2.5	94
WINSLOW	4895	850.7	1012.1	85	47	65.6	0.8	93	25	36	1	3	0	27	26	T	- 0.32	T	0	2	0.0	0	5.3	19	38	24	20	20	8	3	2.5	
YUMA	194	1001.7	1008.8	96	66	81.2	3.2	104	19+	56	11	26	0	44	30	0.00	- 0.01	0.00	0	0	0.0	0	4.1	19	28	E	3	25	6	0	1.4	95
ARKANSAS																																
FORT SMITH	449	999.3	1015.6	80	56	68.3	- 1.6	89	23+	47	3	0	0	57	69	3.14	- 2.12	1.35	9	5	0.0	0	2.6	8	42	NE	17	11	6	14	5.6	73
LITTLE ROCK	257	1007.1	1016.4	80	57	68.4	- 2.1	90	29+	46	14+	2	0	58	71	2.23	- 3.05	1.05	7	4	0.0	0	1.8	8	30	N	16	11	8	12	5.4	69
TEXARKANA	372	1002.7	1015.6	81	58	69.7	- 1.9	89	22	44	3	0	0	61	75	1.76	- 3.14	0.96	8	5	0.0	0	2.9	10				6	12	13	6.3	
CALIFORNIA																																
BAKERSFIELD	494	994.6	1012.0	86	59	72.6	2.2	102	3	49	30	10	0	43	38	T	- 0.22	T	0	0	0.0	0	4.9	34	25	33	29+	25	2	4	2.1	
BISHOP	4108			86	48	66.7	4.1	95	26	37	31	7	0			0.18	- 0.02	0.17	2		0.0	0						20	8	3	3.0	
BLUE CANYON	5280			66	48	57.1	4.9	77	18+	37	6	0	0			1.06	- 2.04	0.93	5		0.0	0			30	21	3	16	4	11	4.3	
BURBANK	724	988.8	1013.8	75	55	64.9	0.5	89	2+	47	31	0	0	53	73	0.14	- 0.04	0.11	3	0	0.0	0	5.9	16	17	16	17	10	11	10	5.4	
EUREKA U	43			55	46	50.4	- 2.6	61	18	43	23+	0	0			0.06	- 2.12	0.03	3		0.0	0			25	SW	29+	9	7	15	6.4	58
FRESNO	328	1000.3	1011.9	87	54	70.9	2.7	100	20	48	1	14	0	47	47	0.10	- 0.20	0.10	1	1	0.0	0	4.5	30	25	NW	21	20	6	5	2.8	86
LONG BEACH	34	1013.2	1014.6	72	58	64.8	1.3	80	19+	50	31	0	0	51	65	0.02	- 0.09	0.02	1	0	0.0	0	3.4	23	18	28	30	9	11	11	6.0	
LOS ANGELES	97	1010.5	1014.2	70	57	63.5	1.5	75	7	52	31	0	0	53	73	0.02	- 0.11	0.01	2	0	0.0	0	6.3	25	26Y	W	30	3	16	12	6.3	
LOS ANGELES U	270			72	57	64.5	- 0.3	79	2	53	31	0	0			0.22	0.06	0.22	1		0.0	0			15	SW	30+	9	9	13	6.1	41
MT SHASTA R	3544			73	42	57.5	3.7	86	25+	32	15	0	1			0.25	- 1.74	0.18	3		0.0	0										
OAKLAND	6	1014.2	1014.6	65	53	59.0	- 0.7	76	2	50	17+	0	0	49	72	0.25	- 0.40	0.25	2	0	0.0	0	8.7	27	24	22	5	15	8	8	4.4	
RED BLUFF	341	999.3	1011.7	86	56	70.7	2.4	99	25+	47	7+	10	0	41	40	0.06	- 1.07	0.03	2	1	0.0	0	1.9	18	29	S	3	15	7	9	4.2	89
SACRAMENTO	17	1011.5	1012.4	82	51	66.4	2.4	96	19	46	14	9	0	47	60	0.25	- 0.34	0.24	2	1	0.0	0	7.0	21	30	SW	21	20	5	6	3.4	89
SANDBERG R	4517			69	50	59.3	2.7	84	2	37	10	0	0			T	- 0.31	T	0		0.0	0			29	16	3	24	3	4	2.5	
SAN DIEGO	13	1013.2	1014.4	68	59	63.5	- 0.5	70	24+	56	1	0	0	54	75	0.02	- 0.13	0.01	2	0	0.0	0	4.7	27	20	NW	30+	5	12	14	6.8	40
SAN FRANCISCO	8	1014.2	1014.9	66	49	57.3	- 1.0	80	18	44	2	0	0	46	73	0.12	- 0.36	0.12	2	0	0.0	0	8.4	28	32	W	14+	18	5	8	4.0	
SAN FRANCISCO U	52			60	50	55.1	- 2.3	76	2	46	3	0	0			0.19	- 0.44	0.19	1		0.0	0			29	SW	13					67
SANTA CATALINA	1568			65	52	58.3	- 0.7	86	2	48	30	0	0			0.18	- 0.18	0.15	4	0	0.0	0						7	8	16	6.6	
SANTA MARIA	236			68	48	58.2	0.6	75	7+	39	31+	0	0			0.01	- 0.21	0.01	1		0.0	0						11	11	9	5.1	
STOCKTON	22	1012.2	1013.2	83	53	68.0	1.8	98	19	48	15	8	0	44	50	0.20	- 0.24	0.16	2	1	0.0	0	7.9	30	26	27	14	19	4	8	3.3	
COLORADO																																
ALAMOSA	7536			71	34	52.5	1.7	78	7+	20	13	0	13			0.30	- 0.43	0.23	5		0.0	0						17	11	3	3.9	
COLORADO SPRINGS	6145	811.4	1013.5	72	42	57.1	2.1	87	30	27	12	0	4	28	41	0.95	- 1.18	0.41	8	5	4.2	2	0.9	9	38	23	10	11	11	9	5.1	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Sleet				Fastest mile							
		Station ◎	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft	Mb.	Mb	F	F.	F.	F	F.		F.				F.	%	In.	In.	In			In	In.	M.p.h.		M.p.h							%
COLORADO																																
DENVER	5283	835.8	1011.8	75	42	58.7	2.5	88	30	27	12	0	4	30	41	0.34	- 2.36	0.29	4	4	2.9	2	2.7	18	33	NE	8	4	18	9	5.9	71
GRAND JUNCTION	4855	851.0	1010.9	80	51	65.4	3.2	90	7	40	12	1	0	29	30	0.71	0.11	0.48	6	7	T	T	1.6	14	65	NW	11	16	10	5	4.0	80
PUEBLO	4684	855.1	1012.0	82	43	62.4	1.8	94	30	30	1	5	3	31	38	0.38	- 1.42	0.26	5	5	0.2	T	0.5	4	43	N	8	15	7	9	4.3	81
CONNECTICUT																																
BRIDGEPORT	7	1016.6	1017.3	61	45	53.0	- 5.7	76	23	31	10	0	2	44	74	3.59	- 0.12	1.00	15	2	0.0	0	2.1	25	35	32	10	5	10	16	7.1	
HARTFORD	169	1009.5	1016.1	68	45	56.4	- 3.5	86	27	32	11+	0	2	43	65	3.01	- 0.40	1.01	13	0	0.0	0	2.6	26	29	NW	4	4	9	18	7.2	49
NEW HAVEN	6			63	45	54.0	- 3.2	77	21	33	3	0	0			3.17	- 0.54	1.48	13		0.0	0			25	NW	4	4	11	16	7.1	52
DELAWARE																																
WILMINGTON	78	1013.9	1016.9	70	50	60.3	- 2.4	88	6	32	11	0	1	47	66	3.35	- 0.18	1.22	16	3	0.0	0	1.2	19	25	19	5	6	12	13	6.5	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1014.2	1016.7	76	54	65.0	- 0.8	92	6	36	11+	1	0	51	63	2.74	- 1.40	1.05	15	4	0.0	0	0.7	21	31	W	6	9	9	13	5.7	56
FLORIDA																																
APALACHICOLA U	13			80	69	74.4	- 0.4	87	29	59	11	0	0			5.33	2.45	2.60	10	4	0.0	0			34	N	23	5	7	19	7.4	43
DAYTONA BEACH	31	1014.6	1016.1	84	67	75.6	1.4	90	19	60	16	1	0	67	81	6.77	3.92	2.44	20	17	0.0	0	2.9	13	32	13	26	1	13	17	7.6	
FORT MYERS	15	1015.2	1015.4	89	69	79.0	1.6	91	20+	64	4	13	0	70	78	1.61	- 2.24	0.94	6	5	0.0	0	3.1	19	24	23	9	3	22	6	5.7	
JACKSONVILLE	20	1014.9	1015.8	82	66	74.1	- 1.7	89	18+	57	16	0	0	66	83	10.43	6.96	2.12	18	17	0.0	0	2.1	14	32	W	27+	1	6	24	8.3	46
KEY WEST	4	1014.6	1015.1	84	76	79.7	0.7	88	30	71	26+	0	0	70	74	2.77	0.04	0.79	7	9	0.0	0	6.9	14	33	E	6	6	17	8	5.7	71
LAKELAND U	214			86	69	77.4	0.5	92	21+	62	23	5	0			4.46	0.92	2.10	11		0.0	0						3	17	11	6.4	69
MIAMI	7	1015.2	1015.5	84	71	77.6	0.0	88	10	67	7	0	0	69	79	5.53	- 0.91	2.03	10	11	0.0	0	6.2	13	21	26	29+	1	15	15	7.1	
ORLANDO	108	1011.5	1015.7	86	68	77.4	- 0.2	91	21	66	13+	5	0	67	77	6.57	3.00	2.60	15	13	0.0	0	3.1	17	32	26	9	1	17	13	6.9	
PENSACOLA	112	1011.2	1015.3	82	66	74.3	- 1.2	90	29	52	10	1	0	65	75	4.40	- 0.16	1.62	12		0.0	0	0.9	9	39	E	23					46
TALLAHASSEE	55	1012.9	1015.3	83	65	74.0	- 0.9	91	30	58	11+	2	0	64	76	8.23	4.13	3.27	15	11	0.0	0	1.0	7	20	5	10+	2	9	20	7.7	
TAMPA	19	1014.9	1015.2	88	70	78.5	1.7	91	21+	63	16	10	0	66	71	0.71	- 2.14	0.44	4	6	0.0	0	2.0	21	28	20	9	4	18	9	6.4	73
WEST PALM BEACH	15	1014.9	1015.6	86	71	78.5	0.9	90	8	66	23+	1	0	68	74	3.75	- 1.36	0.89	13	9	0.0	0	6.2	15	27	9	11	3	12	16	6.7	
GEORGIA																																
ATHENS	802	987.8	1016.5	78	58	67.9	- 2.2	89	9	40	11	0	0	59	79	6.50	2.89	2.43	8	6	0.0	0	0.6	4	21	6	23+	3	8	20	7.5	
ATLANTA	1010	979.7	1016.1	77	58	67.6	- 1.5	88	9	44	10	0	0	57	74	5.84	2.68	1.73	9	5	0.0	0	1.2	2	30	NW	9	7	6	18	7.0	50
AUGUSTA	143	1010.5	1015.6	81	59	70.1	- 1.5	90	29	39	11	1	0	59	74	5.77	2.78	2.14	14	3	0.0	0	0.9	8	35	32	27	2	10	19	7.9	
COLUMBUS	385			82	62	72.1	0.0	92	9	45	10	2	0	61	73	7.87	4.37	4.11	9		0.0	0	2.3	4	35	31	18+	3	8	20	7.7	
MACON	354	1003.1	1016.1	81	60	70.8	- 3.1	92	9	44	11	2	0	61	78	5.54	2.22	1.99	17	6	0.0	0	1.7	4	23	S	20+	1	11	19	7.9	47
ROME	637			79	54	66.4	- 2.3	88	29+	39	10	0	0			6.65	2.85	4.24	13		0.0	0										
SAVANNAH	46	1014.2	1016.0	81	62	71.6	- 1.8	90	30	50	11	1	0	64	82	6.73	2.96	1.50	19	13	0.0	0	1.8	13	22	NE	23	0	6	25	8.7	36
HAWAII																																
HILO	31	1015.2	1016.3	84	66	75.0	2.0	94	20	61	6	1	0	66	75	5.04	- 4.29	1.44	21	2	0.0	0	1.7	13	29	14	20	1	11	19	7.5	35
HONOLULU	7	1015.6	1015.9	85	69	77.1	1.2	90	24	65	15+	1	0	65	67	0.41	- 0.58	0.35	4	0	0.0	0	5.4	7	25	NE	31+	8	16	7	5.3	85
KAHULUI	48	1013.5	1015.8	85	68	76.5	1.2	90	11	60	5	1	0			0.17	- 0.52	0.08	4	0	0.0	0	7.3	6	30	NE	2	5	16	10	5.8	64
LIHUE	103	1011.9	1016.9	81	68	74.2	- 0.3	85	21	60	18+	0	0	66	79	0.69	- 1.90	0.14	13	1	0.0	0	5.5	6	19	E	3	5	16	10	6.4	74
IDAHO																																
BOISE	2838	913.6	1012.4	77	46	61.5	3.3	98	26	32	23	4	1	33	39	0.32	- 0.97	0.15	5	1	0.0	0	2.3	30	33	NW	14	10	8	13	5.3	87
IDAHO FALLS 42NW R	4790			75	34	54.3	1.6	89	27	22	1	0	18			1.05	0.17	0.84	5				3.1	23	38	SW	14					
IDAHO FALLS 46W R	4932			73	35	54.1	1.5	87	27	17	23	0	11			0.84	- 0.26	0.73	3		1.7	1	4.1	22	39	WSW	14					
LEWISTON	1413			76	47	61.2	2.8	96	5	36	18	5	0			0.42	- 1.13	0.11	6		0.0	0						10	9	12	5.7	
POCATELLO	4454	861.8	1012.9	75	38	56.9	1.8	89	27	23	23	0	6	28	38	0.93	- 0.20	0.75	7	2	T	0	5.8	23	42	SW	22	13	9	9	4.8	73
ILLINOIS																																
CAIRO U	314			76	56	66.1	- 2.9	88	28+	39	10	0	0			9.50	5.11	3.82	11		0.0	0			33	NE	9	12	8	11	5.1	71
CHICAGO O HARE	658	992.9	1017.6	65	42	53.4	- 4.4	85	27+	24	10	0	5	40	62	4.77	1.01	2.91	12	3	1.6	2	1.1	36	32	24	23	15	10	6	4.4	
CHICAGO MIDWAY	607	994.9		65	46	55.5	- 4.5	87	27	29	10	0	2	40	59	5.78	2.05	3.63	12	4	0.2	T	0.9	4	30	W	19+	17	8	6	4.3	68
MOLINE	582	995.3	1016.8	68	45	56.3	- 4.9	88	27	26	10	0	3	44	65	6.39	2.59	2.29	11	5	T	T	0.7	10	63	NE	7	17	6	8	4.3	66
PEORIA	652	993.2	1017.3	69	46	57.1	- 4.4	87	27	25	10	0	3	44	65	4.50	0.23	1.57	8	7	0.1	T	0.8	8	31	SW	5	16	9	6	4.2	72
ROCKFORD	724	989.8	1017.1	63	40	51.4	- 7.7	81	26	24	10	0	6	39	65	4.76	0.93	2.55	9	2	1.0	1	0.7	4	35	31	18	15	9	7	4.5	
SPRINGFIELD	588	994.6	1016.9	69	47	57.7	- 6.2	84	27	28	10	0	3	48	71	3.54	- 0.34	1.35	8	7	T	T	0.1	16	33	SE	15	15	9	7	4.4	69

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No of days							No. of days		Snow, Sleet				Fastest mile							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1003.4	1017.3	74	49	61.2	- 5.6	87	28+	31	10	0	1	50	67	3.48	- 0.71	1.18	12	7	0.0	0	1.4	35	27	S	12	10	10	11	5.5	65
FORT WAYNE	791	987.5	1017.5	64	42	53.0	- 7.7	83	27	27	10	0	3	42	67	3.25	- 0.48	1.18	13	4	T	T	1.9	31	38	SW	5	9	12	10	5.3	65
INDIANAPOLIS	792	988.2	1017.3	71	46	58.4	- 3.0	87	27+	28	10	0	2	44	60	1.47	- 2.52	0.50	8	4	T	T	1.5	31	28	SW	5	12	9	10	4.9	66
SOUTH BEND	773	989.2	1017.2	62	42	52.2	- 6.5	86	27	28	10	0	6	38	60	3.89	0.27	2.34	11	4	0.6	T	2.1	33	26	29	20+	15	8	8	4.5	
IOWA																																
BURLINGTON	692			69	47	57.9	- 3.9	86	27+	30	10	0	2	44	63	4.00	- 0.03		10	8	T		0.8	36	35	21	23	15	7	9	4.4	
DES MOINES	938	981.7	1016.7	69	46	57.7	- 2.9	92	7	32	10	1	1	43	61	5.37	1.30	2.02	9	8	T	0	1.0	10	30	SW	19+	13	10	8	4.8	66
DUBUQUE	1065			65	42	53.2	- 4.9	84	26	24	10	0	4			4.75	0.53	2.47	9		3.1	3						12	11	8	4.9	
SIOUX CITY	1095	976.0	1015.6	72	45	58.7	- 2.7	90	7+	29	1	2	1	42	57	1.15	- 2.08	0.48	11	7	0.0	0	2.2	14	34	NW	23	12	14	5	4.6	76
WATERLOO	868	984.8	1016.6	67	42	54.6	- 5.3	89	26	28	1	0	5	42	66	4.79	1.05	1.98	10	6	0.3	T	1.0	15	39	27	19	13	12	6	4.5	
KANSAS																																
CONCORDIA	1470	962.4	1014.8	79	48	63.6	0.5	94	22	30	1	4	1	43	52	0.26	- 3.63	0.19	5	5	0.0	0	4.6	16	35	S	15	18	7	6	3.6	77
DODGE CITY	2582	924.5	1014.1	79	50	64.7	1.0	97	22	32	13	3	1	43	50	0.77	- 2.45	0.61	4	3	0.0	0	5.2	17	40	N	8	16	8	7	4.0	77
GOODLAND	3645	888.3	1013.4	80	45	62.5	4.0	95	7	28	13+	5	3	36	45	0.55	- 1.86	0.37	5	5	0.8	1	5.1	18	39	34	11	18	9	4	3.9	
TOPEKA	876	984.1	1015.6	79	49	63.8	- 0.6	91	15	33	2	2	0	47	56	0.41	- 3.97	0.24	7	8	0.0	0	2.2	19	40	SW	8	13	12	6	4.3	74
WICHITA	1321	967.8	1015.2	80	52	65.7	- 0.3	93	28	32	13	4	1	49	59	0.76	- 3.21	0.37	6	6	0.0	0	3.9	16	43	N	23	15	12	4	3.9	76
KENTUCKY																																
COVINGTON	869	985.8	1017.2	72	49	60.4	- 2.1	90	28	28	10	1	1	45	60	2.42	- 1.17	1.10	8	2	T	0	1.3	36	29	34	28	10	9	12	5.9	
LEXINGTON	966	982.1	1017.3	72	49	60.5	- 4.0	85	23+	26	10	0	1	47	63	4.85	1.00	1.95	9	4	0.0	0	0.5	1	21	36	9	11	6	14	5.9	
LOUISVILLE	474	999.3	1016.8	74	51	62.3	- 2.1	87	8	31	10	0	1	48	63	3.91	0.01	1.40	7	3	0.0	0	1.4	36	46	NW	21	11	6	14	5.7	75
LOUISIANA																																
ALEXANDRIA	92	1010.8	1015.2	82	64	72.9	0.0	89	24	53	11+	0	0	64	79	3.24	- 2.30	1.52	9	3	0.0	0	2.2	5	21	18	17+	3	12	16	7.1	
BATON ROUGE	64	1012.2	1015.0	83	67	75.0	0.2	89	24+	55	10	0	0	65	73	4.48	- 0.32	1.57	10	5	0.0	0	2.0	6	25	24	13	4	12	15	7.1	
LAKE CHARLES	14	1013.5	1014.7	83	68	75.7	0.1	90	24	58	10	1	0	67	78	6.30	1.69	3.23	12	9	0.0	0	2.5	10	32	4	13	6	11	14	7.0	
NEW ORLEANS	3	1013.5	1014.5	82	68	75.0	0.6	88	23+	55	11	0	0	69	83	9.31	4.93	2.78	13	10	0.0	0	2.2	7	28	7	4	3	13	15	6.8	
SHREVEPORT	252	1005.8	1015.1	82	64	72.7	- 0.4	91	17	52	10+	1	0	62	73	3.78	- 1.01	1.78	9	6	0.0	0	3.3	9	23	17	17+	6	9	16	6.6	51
MAINE																																
CARIBOU	624			60	38	49.0	- 0.9	88	24	20	8	0	12			1.73	- 1.30	0.47	9		8.2	4						6	10	15	6.7	
PORTLAND	61	1012.9	1C15.4	61	40	50.4	- 2.6	80	25+	24	3	0	6	39	67	1.96	- 1.45	0.60	11	0	2.0	1	3.2	23	30	W	29	7	9	15	6.5	58
MARYLAND																																
BALTIMORE	148	1011.2	1016.7	73	51	61.7	- 2.7	90	6	32	11	1	1	46	61	4.53	0.55	1.47	13	6	0.0	0	0.5	26	37	W	6	9	10	12	5.7	58
MASSACHUSETTS																																
BLUE HILL OBS R	629			65	45	54.5	- 2.2	84	27	32	10	0	1			3.08	- 0.40	0.85	13		0.0	0			46	S	5					55
BOSTON	15	1014.9	1016.0	65	49	57.3	- 1.5	86	27	38	10	0	0	41	59	2.66	- 0.68	0.93	11	2	T	T	3.7	24	32	SW	5	5	12	14	6.7	63
NANTUCKET	43	1015.9	1016.4	57	43	49.5	- 3.1	77	23	35	14+	0	0	43	82	8.19	5.31	2.89	16	4	0.0	0	3.5	22	38	S	8	4	6	21	7.6	55
PITTSFIELD	1170			62	39	50.5	- 4.1	79	27	24	3	0	8			2.50	- 1.37	0.64	16		T	T										
WORCESTER	986	979.0	1016.2	63	43	52.9	- 2.3	82	27	30	11+	0	3	38	61	3.21	- 0.58	0.63	14	1	T	T	4.9	26	27	30	29+	4	14	13	6.6	
MICHIGAN																																
ALPENA	689	991.2	1016.7	60	34	46.8	- 3.8	80	23	20		0	12	30	55	1.05	- 1.86	0.33	10	2	0.3	T	2.1	31	29	NW	3	5	17	9	5.9	69
DETROIT	619	994.2	1017.2	65	44	54.4	- 4.6	90	27	30	10	1	2	37	53	2.31	- 1.22	1.96	9	1	T	T	2.4	30	33	33	28	10	11	10	5.3	
DETROIT M WAYNE CO	633	992.6	1017.0	64	40	51.9	- 6.5	87	27	25	10	0	5	40	64	2.18	- 1.36	1.72	7	1	0.0	0	2.1	30	32	SW	5	11	13	7	4.9	65
DETROIT WILLOW RUN	711	989.2	1017.5	63	39	50.9	- 7.8	86	27	23	10	0	6	37	59	2.19	- 1.29	1.88	7	1	0.0	0	2.4	30	30	27	5	12	10	9	5.0	
FLINT	770	988.8	1016.9	61	39	50.1	- 5.2	81	27	22	10	0	6	36	59	1.31	- 2.08	1.03	6	2	T	T	3.2	27	27	23	20+	10	14	7	5.4	
GRAND RAPIDS	784	987.8	1017.2	64	40	52.0	- 4.8	83	23	22	10	0	5	37	60	2.16	- 1.30	1.41	9	1	T	T	2.7	29	35	SW	5	13	10	8	4.9	68
HOUGHTON LAKE	1150	974.9	1017.4	60	36	47.6		79	26+	21	2	0	14	33	58	0.40		0.13	7	1	0.1	T	3.7	28	28	26	19	9	10	12	5.7	
LANSING	841	985.1	1017.0	63	38	50.7	- 6.4	85	26	19	10	0	7	38	61	1.88	- 1.85	1.34	8	2	T	T	2.9	29	35	W	5	9	13	9	5.1	68
MARQUETTE U	677			56	39	47.1	- 2.8	84	22	26	2	0	11			1.10	- 1.86	0.41	15		0.3	T			31	SW	24	5	15	11	6.0	68
MUSKEGON	627	994.2	1017.5	62	40	50.6	- 5.2	84	23	23	10	0	7	37	63	1.23	- 1.74	0.46	11	1	0.0	0	2.1	28	32	19	5	14	9	8	4.8	
SAULT STE MARIE	721	989.5	1016.4	55	35	45.0	- 4.6	78	22	18	7	0	11	33	67	1.78	- 0.99	0.59	12	2	4.5	2	5.2	29	42	NW	3	8	11	12	5.7	70
MINNESOTA																																
DULUTH	1428	965.1	1017.1	58	37	47.3	- 1.9	84	26	19	1	0	7	31	59	1.53	- 1.76	0.64	9	0	1.7	1	1.1	27	45	W	24	9	10	12	5.8	69

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	973.2	1016.8	58	36	46.9	- 3.8	82	21	17	9	0	10	33	62	1.20	- 1.41	0.42	9	1	2.1	2	1.1	29	31	11	15	8	11	12	6.1	
MINNEAPOLIS	834	986.1	1016.7	66	42	53.6	- 3.7	90	26	27		1	4	37	55	1.46	- 1.73	0.47	11	3	T	T	0.2	28	35	S	22	11	10	10	4.9	70
ROCHESTER	1297	969.2	1017.0	64	39	51.8	- 4.9	87	26	22	9	0	6	36	58	1.54	- 2.11	0.55	8	3	0.2	T	1.5	23	36	16	22	11	12	8	4.6	
ST CLOUD	1034	978.3	1016.3	64	40	51.8	- 3.8	88	26	22	1	0	4		57	2.22	- 1.29	0.72	9		T	T						14	8	9	4.8	
MISSISSIPPI																																
JACKSON	310	1004.1	1015.8	81	61	70.9	- 2.2	89	29	46	10	0	0	62	77	7.96	3.58	3.27	12	5	0.0	0	2.6	6	30	N	19	6	10	15	6.4	59
MERIDIAN	290	1004.7	1015.9	81	60	70.4	- 2.0	90	29	44	10	1	0	61	77	8.49	4.58	3.37	10	8	0.0	0	2.5	3	21	36	9	5	7	19	7.1	
VICKSBURG U	234			80	63	71.7	- 1.7	88	29+	47	10	0	0			4.71	0.58	2.49	8		0.0	0			23	N	9	8	6	17	6.6	63
MISSOURI																																
COLUMBIA	778	988.2	1016.3	74	51	62.6	- 1.8	88	17	33	10	0	0	46	59	2.22	- 2.48	0.83	6	7	0.0	0	1.4	13	29	NW	23+	15	9	7	4.3	78
KANSAS CITY	742	988.8	1015.7	78	53	65.6	0.0	91	7	38	2	2	0	47	54	2.48	- 1.92	1.12	6	5	T	T	1.2	15	34	S	15	14	11	6	4.5	75
SAINT JOSEPH	811			80	50	65.1	1.0	95	7	32	2	7	1	42	50	1.34	- 3.05	0.65	8	5	0.0	0	2.0	16	29	32	23	16	9	6	4.0	
ST LOUIS	535	997.0	1017.2	73	51	61.7	- 2.5	87	8	31	10	0	1	47	61	4.59	0.86	2.03	10	6	0.0	0	0.3	11	32	SE	11	14	10	7	4.6	70
SPRINGFIELD	1268	971.6	1016.7	75	47	60.9	- 3.6	84	23+	34	2	0	0	51	72	3.54	- 1.74	0.90	9	9	0.0	0	2.2	14	38	N	17	13	12	6	4.2	70
MONTANA																																
BILLINGS	3567	889.6	1012.9	70	41	55.4	- 1.4	88	27	24	12	0	4	34	50	0.84	- 1.04	0.50	7	2	T	T	3.2	30	40	W	31	8	17	6	5.2	72
GLASGOW	2284			69	41	55.3	0.2	88	26	28	2	0	4			1.91	0.42	0.66	11		1.7	1						4	15	12	6.5	
GREAT FALLS	3662	886.6	1012.7	69	42	55.8	2.8	88	26	29	12	0	2	34	48	1.54	- 0.56	0.97	6	5	T	0	5.0	25	43	W	29	6	13	12	6.0	83
HAVRE	2582			72	41	56.6	1.9	94	27	24	12	1	5			0.53	- 1.00	0.19	8		0.0	0			43	W	16	5	13	13	6.3	74
HELENA	3828	879.4	1013.5	73	40	56.5	3.6	90	6	25	12	1	4	32	43	0.43	- 1.13	0.27	5	3	T	T	5.9	28	41	SW	6	11	7	13	5.7	76
KALISPELL	2965	909.9	1014.2	68	38	53.0	0.8	89	26	25	18	0	8	37	57	1.63	- 0.04	0.75	10	5	0.6	T	1.4	22	32	20	26	5	15	11	6.0	
MILES CITY	2629	920.4	1012.5	74	44	59.1	1.7	92	31+	31	12+	5	2	39	52	1.07	- 0.66		8	2	T		1.0	34								
MISSOULA	3190	903.5	1014.8	72	39	55.1	2.5	91	26	24	17	1	6	35	50	0.50	- 1.37	0.26	6	7	T	0	3.0	31	40	W	22	11	11	9	5.3	78
NEBRASKA																																
GRAND ISLAND	1841	949.2	1015.0	77	46	61.1	0.5	96	27	27	13	6	3	42	54	1.03	- 2.82	0.31	8	9	T	0	2.8	18	29	33	23	16	8	7	4.2	
LINCOLN U	1150			75	48	61.4	- 1.1	95	27+	30	1	3	1			1.74	- 1.74	0.46	9		0.0	0			40	S	22	13	12	6	4.6	74
NORFOLK	1544			73	45	58.8	- 1.4	97	7	28	1	3	3			1.38	- 2.28	0.51	8		0.0	0						13	11	7	4.5	
NORTH PLATTE	2775	916.7	1013.5	77	43	60.0	1.5	95	7	27	1	5	4	40	54	0.77	- 2.18	0.66	4	4	0.2	T	2.8	16	38	NW	11	11	15	5	4.6	79
OMAHA	978	980.7	1015.8	74	48	61.0	- 2.0	95	7	33	1	3	0	44	57	3.67	0.19	1.47	13	8	T	T	2.0	15	36	NW	22	10	16	5	4.9	78
SCOTTSBLUFF	3957	878.4	1012.8	77	42	59.8	3.0	93	21	29	12	7	3	35	44	0.27	- 2.43	0.24	3	3	0.2	T	1.3	4	46	33	22	10	10	11	5.4	
VALENTINE	2587			75	41	58.0	0.9	94	21	25	13	4	4			0.45	- 2.22	0.37	3		T	0			42	SW	10	12	13	6	4.3	82
NEVADA																																
ELKO	5050	843.6	1012.2	78	38	57.8	5.8	90	26	23	23	1	9	27	34	0.55	- 0.41	0.51	3	1	T	T	2.6	23	40	14	9	10	13	8	4.9	
ELY	6253	808.0	1011.0	74	37	55.5	5.2	84	26	24	12	0	9	24	34	0.46	- 0.39	0.24	4	2	T	0	6.1	21	32	SW	21	9	15	7	4.7	85
LAS VEGAS	2162	934.0	1008.8	92	63	77.5	3.7	101	26	50	13	25	0	26	17	T	- 0.08	T	0	2	0.0	0	5.3	20	38	SE	20	19	8	4	2.8	92
RENO	4404	864.2	1011.5	81	40	60.7	6.8	91	26+	29	1	3	2	32	36	0.33	- 0.19	0.30	3	2	0.0	0	2.4	28	34	SW	19+	19	7	5	3.5	94
WINNEMUCCA	4299	865.6	1011.5	79	41	60.0	6.3	92	26	27	2	1	3	24	27	0.33	- 0.61	0.29	3	1	0.0	0	1.7	28	35	W	29+	10	13	8	4.9	64
NEW HAMPSHIRE																																
CONCORD	342	1003.1	1015.8	68	39	53.4	- 2.1	85	27+	21	3	0	10	37	56	2.16	- 1.01	0.50	15	1	1.1	1	2.4	25	29	W	13+	3	14	14	6.8	62
MT WASHINGTON OBS	6262			37	23	30.1	- 4.9	58	27	- 2	7	0	20			4.55	- 1.29	1.13	15	1	13.6	12			99Y	W	10	1	9	21	7.9	37
NEW JERSEY																																
ATLANTIC CITY	64	1014.9	1017.3	68	46	56.6	- 4.7	87	6	25	11	0	2	45	69	3.17	- 0.34	0.83	12	3	0.0	0	1.8	17	32	22	6	7	7	17	6.5	49
ATLANTIC CITY U	11			65	52	58.3	- 1.2	81	20	36	10	0	0			4.62	1.46	1.12	14						37	SW	5					
NEWARK	11	1015.6	1016.7	68	50	59.3	- 3.2	83	6	35	10	0	0	44	61	4.86	1.21	2.36	13	4	0.0	0	1.9	25	28	20	5	5	13	13	6.7	
TRENTON U	56			70	51	60.1	- 2.2	85	6	35	10	0	0			4.72	1.10	2.68	13		0.0	0			29	NW	10	7	11	13	6.2	54
NEW MEXICO																																
ALBUQUERQUE	5310	837.8	1011.5	83	51	67.2	2.1	90	17+	37	1	3	0	30	30	0.02	- 0.73	0.01	2	5	0.0	0	1.5	15	54	E	8	20	10	1	2.6	84
CLAYTON	4969			77	45	60.9	1.1	89	22+	28	13	0	3			0.79	- 1.95	0.79	4		0.0	0						15	10	6	3.8	
RATON	6379			77	41	58.7	3.3	89	30	25	13	0	3			0.19	- 2.10	0.14	4		T	0						9	16	6	4.8	
ROSWELL	3617			86	54	70.0	2.0	99	16	44	12	12	0			0.54	- 0.74	0.50	2	3	0.0	0			37	N	8	14	10	7	4.4	71
SILVER CITY	5373			81	50	65.2	0.5	88	31+	40	1	0	0			0.00	- 0.28	0.00	0		0.0	0						21	8	2	2.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1005.8	1016.4	66	42	53.9	- 4.0	85	23	29	11+	0	6	41	64	2.35	- 1.12	0.50	17	1	1.4	T	4.8	25	35	NW	6+	2	12	17	7.5	47
BINGHAMTON	1590	957.3	1016.5	60	42	50.6	- 4.5	78	27	25	10	0	6	39	66	2.56	- 0.93	0.76	13	2	3.4	3	3.3	28	28	NW	3	1	12	18	7.7	55
BUFFALO	705	990.9	1016.6	62	43	52.2	- 2.6	84	24	31	11+	0	2	39	64	1.36	- 1.59	0.66	15	1	0.1	0	5.1	26	38	W	5	2	15	14	7.0	66
NEW YORK U	132	1012.9	1016.1	70	53	61.6	- 0.8	85	23+	36	10	0	0	43	57	4.26	0.59	1.98	13	4	0.0	0	0.7	29	27	NW	4	7	13	11	6.1	55
J.F. KENNEDY	15	1016.3	1016.9	65	48	56.8	- 3.4	79	23	34	10	0	0	45	70	3.51	- 0.16	1.53	13	3	0.0	0	2.6	20	35	19	5	5	15	11	6.6	
NEW YORK LA GUARDIA	11	1014.9	1016.8	66	52	59.0	- 3.1	80	21	38	10	0	0	46	66	3.78	0.20	1.89	14	5	0.0	0	0.9	21	27	SW	6	5	13	13	6.7	
ROCHESTER	547	997.0	1017.2	63	43	53.0	- 3.7	87	27+	28	10	0	5	39	63	1.26	- 1.51	0.59	8	1	T	T	5.0	27	35	SW	5	4	14	13	6.5	57
SYRACUSE	410	1001.0	1016.0	62	41	51.2	- 6.5	85	27	25	7	0	7	37	60	1.79	- 1.48	0.43	14	2	0.9	T	4.4	28	37	W	3	4	13	14	6.7	55
NORTH CAROLINA																																
ASHEVILLE	2140	941.1	1016.7	71	49	60.1	- 2.9	80	29	30	11	0	2	53	83	4.73	1.07	1.47	14	7	0.0	0	1.8	35	29	35	9	7	5	19	7.0	56
CAPE HATTERAS R	7	1016.6	1017.0	71	57	63.9	- 4.1	81	30	40	4	0	0	58	81	7.51	3.53	2.04	16	4	0.0	0	0.8	18	34	N	10	4	6	21	7.6	54
CHARLOTTE	735	988.8	1016.1	78	58	67.6	- 1.4	88	29	40	11+	0	0	56	70	3.61	0.50	1.07	12	5	0.0	0	0.3	10	27	NW	9	7	6	18	7.0	62
GREENSBORO	897	985.1	1016.6	77	56	66.7	- 0.2	89	21	35	11	0	0	57	76	4.15	0.86	1.08	13	5	0.0	0	1.1	18	33	NW	29	5	9	17	7.0	52
RALEIGH	434	1000.7	1016.4	78	56	66.5	- 1.1	89	29	33	11	0	0	55	70	4.95	1.43	1.64	15	4	0.0	0	1.5	17	25	32	1	6	6	19	6.9	52
WILMINGTON	28	1015.6	1016.8	79	60	69.6	- 0.9	90	30	43	11	1	0	61	76	7.50	3.98	1.76	12	7	0.0	0	1.8	17	29	NE	10	4	7	20	7.7	50
NORTH DAKOTA																																
BISMARCK	1647	955.3	1015.0	68	39	53.4	- 2.5	91	21	20	9	2	6	34	53	0.91	- 1.06	0.44	10	3	0.6	T	1.8	12	36	NW	23+	8	10	13	5.9	71
FARGO	896	983.1	1016.1	65	38	51.4	- 4.0	87	21	20	9	0	6	34	55	1.27	- 0.76	0.83	9	3	0.0	0	0.2	6	34	NW	24+	12	9	10	5.2	65
WILLISTON	1899			69	41	54.8	0.1	90	26	25	2	1	5			1.75	0.32	1.08	7		0.5	T			45	NW	18	6	13	12	5.9	65
OHIO																																
AKRON	1208	972.6	1017.2	65	43	53.9	- 5.8	82	24+	24	10	0	5	42	66	2.30	- 1.55	0.63	10	3	3.2	2	2.1	32	24	30	6	8	11	12	6.1	
CINCINNATI OBS	761			72	49	60.2	- 4.0	88	28+	28	10	0	1			2.23	- 1.57	0.81	9		T	T			18	NW	28					60
CLEVELAND	777	987.8	1017.2	65	44	54.2	- 3.3	85	23	25	10	0	1	42	65	2.21	- 1.31	0.74	10	2	T	0	1.3	28	35	SW	5	7	13	11	6.1	59
COLUMBUS	812	987.5	1017.5	67	45	56.1	- 5.4	85	23	25	10	0	3	43	63	3.13	- 0.87	1.17	8	5	T	T	2.1	33	34	SW	5	9	9	13	5.9	66
DAYTON	1002	981.4	1017.4	69	46	57.8	- 3.8	86	27+	29	10	0	2	46	65	2.37	- 1.36	0.56	9	5	T	0	1.2	32	30	SW	5	8	10	13	5.9	67
MANSFIELD	1295			63	42	52.6	- 5.4	80	27+	25	10	0	5			2.84	- 0.88	0.76	10	3	1.4	T						9	11	11	5.8	
TOLEDO	676	992.2	1017.6	66	42	53.8	- 4.5	90	27	27	10	1	3	38	58	1.88	- 1.16	1.17	7	2	T	T	2.1	30	33	W	5	11	12	8	5.0	66
YOUNGSTOWN	1178	974.3	1017.3	64	41	52.2	- 5.7	84	24	24	10	0	7	40	65	1.81	- 2.26	0.54	8	2	5.4	2	2.7	31	30	23	5	6	11	14	6.4	
OKLAHOMA																																
OKLAHOMA CITY	1280	969.2	1015.0	81	56	68.7	0.3	96	17	40	2	7	0	54	61	0.88	- 4.31	0.65	5	7	0.0	0	4.1	12	37	SE	10	13	7	11	4.8	76
TULSA	650	991.5	1015.6	80	55	67.6	- 0.2	90	29+	39	2	5	0	55	65	1.86	- 3.40	0.64	9	9	0.0	0	2.6	13	39	N	17	14	8	9	4.6	78
OREGON																																
ASTORIA	8	1018.6	1019.4	59	42	50.5	- 2.8	68	18+	33	17	0	0	44	80	2.18	- 1.02	1.07	14	0	0.0	0	5.9	29	28	33	28	8	8	15	6.4	
BURNS U	4151	872.0	1014.1	72	40	55.6	2.2	87	26	27	23+	0	7	30	41	0.18	- 0.71	0.07	6		T	T	3.5	31				9	9	13	5.5	
EUGENE	359	1004.4	1018.1	70	41	55.2	- 0.9	85	25	34	27	0	0	45	71	0.54	- 1.60	0.33	3	1	0.0	0	2.6	34	21	35	29+	6	11	14	6.4	
MEACHAM	4050			61	38	49.6	1.6	83	5	29	23+	0	10			1.06	- 1.39	0.33	13		2.0	1						6	7	18	6.6	
MEDFORD	1298	968.5	1016.0	76	43	59.4	1.9	92	25	33	17	2	0	40	54	0.20	- 1.27	0.20	2	3	0.0	0	3.7	32	38	12	4	12	8	11	5.1	
PENDLETON	1482	962.1	1015.3	74	46	59.9	0.3	96	5	36	23	3	0	34	41	0.07	- 1.05	0.05	2	2	0.0	0	4.9	27	35	27	6	7	14	10	5.7	
PORTLAND	21	1016.9	1018.0	70	44	57.0	- 0.4	87	25	37	17	0	0	44	66	0.91	- 1.08	0.45	8	0	0.0	0	5.0	31	25	SW	31+	5	11	15	6.5	60
SALEM	196	1010.8	1018.1	70	40	54.9	- 1.4	86	25	30	27	0	3	44	69	0.78	- 1.33	0.40	8	1	0.0	0	3.2	32	21	20	31+	7	12	12	6.0	
SEXTON SUMMIT R	3836	883.8	1015.6	64	38	51.1	1.1	84	25+	27	31	0	11			0.19	- 2.00	0.05	5		0.0	0	10.4	34	30	33	27	12	8	11	5.0	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	84.1	0.2	91	23	77	27+	12	0			0.53	- 3.82	0.28	6		0.0	0						5	12	14	6.4	
ENIWETOK	13	1010.8	1011.4	88	79	83.3	0.9	91	24	75	5	5	0	75	76	0.87	- 3.70	0.33	9		0.0	0	13.4	7								
TAGUAC GUAM R	361			88	72	79.9	- 0.5	90	27	66	21	1	0			2.51	- 1.68	0.65	15		0.0	0			20	SE	18+					72
JOHNSTON	7	1013.9	1014.4	83	76	79.8	0.6	86	31+	73	20+	0	0	70	73	0.11	- 0.88	0.04	4	0	0.0	0	11.5	9	28	E	6	6	11	14	6.4	54
KOROR R	94	1006.4	1010.2	88	76	82.0	0.7	91	21+	73	30+	10	0	76	84	9.08	- 5.55	1.57	22	2	0.0	0	2.7	7	26	NW	11	0	0	31	9.7	62
KWAJALEIN	8	1010.2	1010.9	87	77	81.6	0.5	88	28+	74	10+	0	0	76	84	13.72	5.54	2.42	25	0	0.0	0	13.6	7	26	8	14+	1	6	24	8.6	
MAJURO	10	1010.5	1010.8	86	78	81.7	1.3	87	28+	74	15	0	0	76	83	8.64	- 4.11	2.48	21	2	0.0	0	10.1	8	32	E	9	1	12	18	7.7	64
MARCUS ISLAND	20	1013.5	1015.5	84	73	78.6	- 0.4	87	31+	67	22	0	0	71	79	1.53	- 0.34	0.85	8		0.0	0	5.2	12	26	NE	19	5	8	18	7.1	77
PAGO PAGO	12	1011.2	1011.5	87	74	80.1		90	25+	68	4	2	0	76	88	20.48		4.40	25	7	0.0	0	4.8	10	26	SE	31	2	10	19	7.5	47
PONAPE R	123	1004.7	1010.3	87	75	80.6	0.2	90	27+	73	25+	2	0	76	87	21.27	0.96	3.08	28	1	0.0	0	5.0	9	19	NE	25	0	4	27	9.1	49
TRUK MOEN ISLAND	5	1009.8	1010.1	86	76	81.3	0.5	90	23	73	25+	1	0	76	84	13.62	- 0.50	5.18	26	3	0.0	0	7.2	9	19	SE	15+	0	3	28	9.0	69
WAKE	11	1014.6	1014.7	84	74	78.8	- 1.0	88	28	70	14	0	0	71	79	3.20	1.16	1.45	20	0	0.0	0	10.4	5	25	6	2	6	15	10	6.1	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1008.1	1010.0	87	77	82.2	0.2	89	27+	74	28+	0	0	76	82	6.71	- 2.81	1.50	18	3	0.0	0	6.3	7	29	SE	19	0	2	29	9.6	29
PENNSYLVANIA																																
ALLENTOWN	387	1002.7	1016.9	68	45	56.5	- 3.9	84	6	30	10	0	4	45	67	2.53	- 1.55	0.85	13	4	T	0	1.9	31	25	33	10+	7	8	16	6.5	
ERIE	732	990.5	1017.4	61	43	51.6	- 4.8	84	27	30	7	0	4	41	68	2.03	- 1.51	1.49	9	4	T	T	2.8	27	26	21	5	7	14	10	6.1	
HARRISBURG	338	1003.7	1016.5	73	50	61.4	- 1.3	88	6	31	11	0	1	47	62	0.98	- 2.92	0.22	12	3	T	0	1.7	31	33	W	28	10	4	17	6.4	61
PHILADELPHIA	5	1015.6	1016.7	70	49	59.5	- 3.1	85	6	28	11	0	1	46	65	2.95	- 0.79	1.16	13	4	0.0	0	0.7	20	29	W	6	7	9	15	6.5	52
PITTSBURGH	1137	972.9	1016.9	68	44	56.1	- 3.7	84	27	27	10	0	3	44	66	2.76	- 1.15	1.09	9	2	3.1	2	3.9	31	37	28	28	5	10	16	7.0	43
READING U	266			71	50	60.5	- 2.8	86	6	33	10	0	0			1.50	- 2.29	0.81	13		T	0			50	W	28	9	9	13	6.2	55
SCRANTON	930	982.7	1016.9	66	45	55.7	- 3.9	81	28+	29	10	0	4	42	64	3.32	- 0.63	1.15	14	2	0.6	T	2.1	27	26	S	9	5	10	16	7.0	55
WILLIAMSPORT	527	997.6	1016.6	67	44	55.9	- 4.5	80	27+	28	5	0	4	42	63	4.16	0.08	1.08	16	3	T	0	1.9	30	32	24	28	5	11	15	6.9	
RHODE ISLAND																																
BLOCK ISLAND	110			57	45	51.0	- 2.9	75	23	36	4	0	0			5.62	2.61	1.71	14		0.0	0						6	9	16	6.6	
PROVIDENCE	51	1014.2	1016.4	64	45	54.4	- 3.1	82	27	36	11+	0	0	41	64	3.85	0.50	1.43	13	1	0.0	0	3.2	23	33	22	5	5	13	13	6.8	50
SOUTH CAROLINA																																
CHARLESTON	41	1014.6	1016.1	79	62	70.6	- 2.3	88	30	47	11	0	0	63	80	7.71	4.10	2.65	18	10	0.0	0	2.5	14	46Y	S	14	0	11	20	7.9	44
CHARLESTON U	9			77	65	71.2	- 2.1	90	30	49	10	1	0			6.67	3.58	2.99	16		0.0	0			30	N	10					
COLUMBIA	217	1007.8	1015.8	80	60	70.2	- 2.0	92	29	39	11	1	0	60	75	6.14	2.60	2.02	12	5	0.0	0	1.1	9	29	24	14	4	10	17	7.5	43
GNVLE-SPARTANBURG	957	981.7	1016.2	77	57	66.9	- 2.5	87	29+	38	11	0	0	57	75	3.06	- 0.16	0.90	15	6	0.0	0	0.6	5	30	SW	1	5	9	17	7.1	49
SOUTH DAKOTA																																
ABERDEEN	1296	968.5	1015.4	70	38	53.8	- 3.5	90	26	21	9	1	6	39	60	0.91	- 1.43	0.44	7	5	0.3	T	1.1	8	33	32	22	9	11	11	5.6	
HURON	1282	968.5	1015.1	71	41	55.6	- 1.9	93	26	24	9	1	5	40	58	1.13	- 1.23	0.46	7	2	0.5	T	2.3	14	40	NW	22	9	12	10	5.5	77
RAPID CITY	3165	903.2	1013.7	72	40	56.0	0.3	92	21	28	13+	2	4	34	49	0.33	- 2.33	0.12	5	2	0.4	T	1.2	4	52	W	14	10	14	7	5.2	70
SIOUX FALLS	1418	964.4	1015.8	69	40	54.3	- 4.0	88	26	25		0	2	38	56	1.94	- 1.44	1.04	9	5	T	T	1.4	16	31	30	15	11	14	6	4.8	
TENNESSEE																																
BRISTOL	1507	963.1	1016.9	75	51	62.9	- 2.8	83	22	32	10	0	1	54	76	1.31	- 2.14	0.55	9	6	0.0	0	0.7	34	18	1	9	6	9	16	6.6	
CHATTANOOGA	670	991.9	1016.3	76	54	64.8	- 5.3	86	29	38	10	0	0	55	75	4.00	0.48	1.20	11	7	0.0	0	1.0	4	26	NE	10	8	10	13	6.4	60
KNOXVILLE	980	981.7	1016.7	76	56	66.1	- 1.6	86	23+	40	10	0	0	54	69	2.92	- 0.58	1.23	10	4	0.0	0	1.6	35	24	N	9	6	9	16	6.8	49
MEMPHIS	255	1006.4	1016.7	78	58	67.9	- 2.4	88	23	40	10	0	0	56	68	5.69	1.46	1.46	7	6	0.0	0	3.1	7	33	NW	16	9	14	8	5.2	77
NASHVILLE	590	994.9	1016.5	77	54	65.3	- 3.3	86	28+	37	10	0	0	54	70	3.99	0.27	1.50	7	6	0.0	0	0.9	36	25	S	18+	10	8	13	5.6	69
OAK RIDGE	905			76	54	64.6	- 1.9	85	23	37	10	0	0			3.52	- 0.21	1.78	10		0.0	0			30Y		9	10	4	17	6.3	
TEXAS																																
ABILENE	1762	953.3	1014.0	82	60	71.0	- 0.7	101	22	43	1	8	0	56	64	0.46	- 3.87	0.13	3	6	0.0	0	3.3	12	34	S	11	8	10	13	6.5	73
AMARILLO	3604	891.3	1012.8	81	51	66.0	- 0.5	98	21+	35	1	7	0	41	47	0.19	- 3.18	0.08	3	5	0.0	0	6.1	18	46	NE	8	13	11	7	4.6	71
AUSTIN	597	992.2	1013.8	83	65	73.9	- 1.2	94	22	54		4	0	64	75	3.13	- 0.58	0.91	13	7	0.0	0	2.3	9	31	N	28	5	10	16	7.0	40
BROWNSVILLE	16	1011.9	1012.5	83	69	76.2	- 2.8	91	30	62		3	0	70	85	6.05	3.69	4.13	9	2	0.0	0	4.7	14	32	SW	29	8	11	12	6.1	62
CORPUS CHRISTI	41	1011.5	1013.1	82	69	75.6	- 1.9	91	25	61	3	3	0	71	87	7.23	4.24	2.27	11	4	0.0	0	5.0	12	30	N	5	5	9	17	7.0	36
DALLAS	481	997.6	1014.8	82	62	72.0	- 0.9	96	17	50	3	6	0	61	71	2.38	- 2.45	0.90	6	6	0.0	0	3.9	13	29	S	11	7	10	14	6.3	57
DEL RIO	1026	977.3	1013.1	85	66	75.3	- 3.1	103	18	54	2	11	0	64	73	2.23	- 0.50	1.10	7	5	0.0	0	4.8	12	23	8	29+	8	4	19	6.6	
EL PASO	3918	881.1	1010.4	88	61	74.5	2.6	97	30	51	13+	15	0	39	32	0.04	- 0.36	0.04	1	2	0.0	0	2.2	23	52	NE	26	19	8	4	3.3	87
FORT WORTH	537	994.6	1015.0	80	61	70.8	- 1.9	95	17	50	4	1	0	61	73	3.13	- 1.46	2.36	5	6	0.0	0	2.7	12	28	20	11	7	10	14	6.2	
GALVESTON U	7			80	71	75.2	- 0.6	87	19	61		0	0			10.34	7.55	3.25	14		0.0	0			37	E	9					39
HOUSTON U	41			83	68	75.5	- 0.7	93	23	60		4	0			7.89	3.46	2.75	12		0.0	0										
HOUSTON	50	1011.9	1014.0	83	68	75.9	- 0.1	92	24+	60	3	3	0	67	78	11.21	6.89	4.21	15	9	0.0	0	3.1	11	26	17	11	2	10	19	7.9	43
LUBBOCK	3254	903.5	1013.1	84	56	69.8	1.6	101	22+	42	12	9	0	45	47	0.67	- 2.51	0.58	3	5	0.0	0	4.1	14	35	2	28	12	7	12	5.3	
MIDLAND	2851	915.7	1012.4	82	58	70.4	- 3.0	99	22	44	1	8	0	51	59	2.86	0.78	2.52	4	4	0.0	0	3.2	11	31	34	26	10	11	10	5.6	
PORT ARTHUR	16	1013.9	1014.5	83	68	75.8	1.1	90	24	58	10	1	0	67	79	9.63	4.69	5.79	15	9	0.0	0	2.8	12	34	NW	24	3	13	15	7.1	55
SAN ANGELO	1903	947.5	1013.1	85	63	73.6	- 0.7	104	22	46	1	10	0	57	64	2.10	- 1.10	1.82	5	6	0.0	0	2.6	13	35	18	10	10	7	14	6.1	
SAN ANTONIO	788	986.1	1013.8	82	65	73.5	- 1.8	93	23	56		3	0	65	80	3.53	0.08	0.82	12	9	0.0	0	2.9	8	33	NE	18	5	10	16	6.8	41
VICTORIA	104	1009.5	1013.8	83	68	75.3	- 0.9	91	24	60		5	0	68	80	4.77	0.65	2.91	9	2	0.0	0	3.0	9	43Y	N	28	2	12	17	7.3	
WACO	500	996.6	1014.5	82	65	73.6	- 0.7	93	30+	54	2	8	0	63	72	2.55	- 2.02	1.84	6	6	0.0	0	2.1	11	27	1	18	6	10	15	6.6	
WICHITA FALLS	994	978.3	1014.3	86	58	71.8	- 0.4	103	22+	41	13	11	0	55	60	0.01	- 4.59	0.01	1	2	0.0	0	4.1	13	32	5	18	9	8	14	6.0	
UTAH																																
MILFORD	5028			80	40	59.8	3.3	89	27+	28	1	0	5			0.28	- 0.41	0.28	1		0.0	0						19	8	4	2.9	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In	In.	M.p.h.		M p.h.							%
UTAH																																
SALT LAKE CITY	4220	869.6	1011.7	79	47	62.7	3.8	90	29+	30	23	2	1	33	36	0.51	- 0.89	0.50	3	3	0.0	0	3.2	14	34	SW	31	13	10	8	4.5	87
WENDOVER	4237			77	52	64.5	3.1	89	6	38	23	0	0			0.26	- 0.40	0.20	3		0.0	0						15	12	4	3.8	
VERMONT																																
BURLINGTON	332	1002.4	1015.0	63	39	51.2	- 2.6	85	27	24	3	0	11	38	65	2.49	- 0.50	0.78	12	3	3.9	2	2.5	22	34	W	3	2	14	15	7.4	61
VIRGINIA																																
LYNCHBURG	916			76	52	64.0	- 1.3	88	6	31	11	0	1			3.16	- 0.05	1.11	13	3	0.0	0			22	SW	12+	9	12	10	5.7	66
NORFOLK	22	1015.9	1016.8	73	54	63.6	- 3.9	87	21	36	11	0	0	55	77	5.95	2.59	1.92	12	5	0.0	0	1.9	13	35	W	19	6	8	17	7.0	56
RICHMOND	162	1010.8	1016.7	74	52	63.1	- 3.9	89	21	32	11	0	1	52	72	2.58	- 1.14	1.05	11	2	0.0	0	1.2	15	25	N	10+	7	9	15	6.3	62
ROANOKE	1149	974.6	1016.1	75	52	63.3	- 2.4	88	8	31	11	0	1	48	62	3.49	- 0.30	1.45	9	1	0.0	0	0.7	22	31	33	9	7	14	10	5.8	
WASHINGTON																																
OLYMPIA	195	1011.2	1018.5	67	39	52.6	- 2.5	82	25	28	28	0	3	40	65	1.30	- 0.71	0.60	5	0	0.0	0	2.9	24	29	26	5	9	12	10	5.9	
SEATTLE TACOMA	400	1001.7	1018.1	64	45	54.5	- 1.0	80	25	37	27	0	0	43	67	1.35	- 0.38	0.76	6	0	0.0	0	1.3	28	28	22	5	7	13	11	6.3	62
SPOKANE	2356	930.9	1014.1	70	42	55.9	- 0.3	92	5	27	17	1	3	34	48	0.49	- 0.72	0.12	8	0	T	T	4.0	22	29	S	30+	9	8	14	6.1	68
STAMPEDE PASS R	3958			52	35	43.7	- 0.2	75	5+	23	27	0	15			4.19	- 0.06	1.08	11		13.7	74						4	9	18	7.2	
TATOOSH ISLAND R	101	1015.6	1018.9	53	45	48.7	- 2.4	57	24	41	17	0	0	44	84	2.61	- 0.39	0.82	14	0	0.0	0	6.4	23	36	NW	12	6	12	13	6.6	51
WALLA WALLA U	949			74	49	61.6	0.6	95	5	42	22+	3	0			0.45	- 1.04	0.11	7		0.0	0			29	NW	12	8	11	12	6.0	72
YAKIMA	1052	976.6	1014.9	75	42	58.3	- 0.2	94	5	32	23	2	1	35	45	0.10	- 0.44	0.10	1	2	0.0	0	5.3	29	35	31	10	8	14	9	5.2	
WEST INDIES																																
SAN JUAN P.R.	15	1014.2	1016.8	84	75	79.5	0.8	87	14	72	17+	0	0	72	79	5.69	- 1.43	1.18	23	1	0.0	0	9.3	9	25	E	31+	2	10	19	7.5	55
SWAN ISLAND	28			86	78	82.2	- 0.3	89	30	75	31+	0	0			1.40	- 1.90	0.80	9		0.0	0						2	16	13	6.4	
WEST VIRGINIA																																
BECKLEY	2504	928.9	1016.5	70	48	59.1		82	28+	23	10	0	2	43	60	1.45		0.87	9	5	T	T	2.8	25	29	26	6	9	8	14	5.9	
CHARLESTON	939	982.4	1016.3	76	49	62.1	- 2.7	90	28+	26	10	2	2	47	62	1.52	- 2.19	0.47	10	3	0.0	0	1.7	28	27	32	21	10	9	12	5.7	
ELKINS	1970	946.2	1017.0	71	42	56.8	- 2.5	87	23	20	10	0	6	43	66	1.68	- 2.89	0.39	13	2	T	T	3.8	30	30	28	6	9	9	13	6.1	
HUNTINGTON	827	986.8	1016.6	74	49	61.2	- 3.4	87	23+	27	10	0	1	46	62	1.58	- 2.31	0.74	8	3	0.0	0	1.6	29	23	27	21	9	9	13	6.0	
PARKERSBURG U	615			73	48	60.4	- 3.6	90	23	29	10	1	1			0.82	- 2.88	0.22	7		0.0	0			26	SW	6+					61
WISCONSIN																																
GREEN BAY	682	991.5	1017.2	63	39	50.9	- 3.9	83	26	21	9	0	8	38	66	1.28	- 1.78	0.92	6	2	T	0	0.8	26	32	N	28	11	10	10	5.4	63
LA CROSSE	651	992.9	1017.5	68	42	55.2	- 4.0	89	26	27	10+	0	4	39	57	2.28	- 1.48	1.32	7	3	T	T	1.0	23	41	25	19	16	8	7	4.5	
MADISON	858	985.8	1017.3	64	36	50.3	- 5.8	84	26	20	9	0	12	38	64	4.31	0.97	3.64	8	2	0.7	T	1.2	28	28	W	19	9	15	7	5.1	68
MILWAUKEE	672	992.9	1018.3	60	39	49.6	- 3.8	82	26	21	10	0	5	39	69	2.00	- 1.16	0.87	8	2	0.1	T	0.7	4	40	SW	23	11	13	7	4.8	72
WYOMING																																
CASPER	5338	836.4	1012.3	74	37	55.8	2.7	87	30	25	12	0	9	27	38	0.30	- 1.73	0.25	4	2	2.1	T	4.8	26	51	26	22	7	14	10	5.6	
CHEYENNE	6126	812.4	1013.2	71	40	55.6	2.7	88	30	26	12	0	5	27	38	0.21	- 2.31	0.12	2	3	T	T	5.0	27	40	N	11	6	14	11	5.8	69
LANDER	5563	828.0	1011.9	72	41	56.7	3.8	86	30	27	12	0	5	28	38	0.80	- 1.85	0.67	3	2	1.4	1	4.4	25	56	SW	14	10	11	10	5.5	77
SHERIDAN	3964	877.1	1013.4	71	37	53.8	0.2	89	30	23	12	0	9			1.08	- 1.49	0.84	5	2	3.4	1	3.2	31	36	NW	14	8	14	9	5.8	72

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No of days: 25 mm or more	Precipitation: No of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	No of days: Partly cloudy, 4-7	No of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	993.9	1016.3	25.6	13.3	19.4	-2.7	30.0	29	3.3	10	0	0	14.4	75	84	- 3	27	10	7	0	0	0.7	5	10.3	N	9	6	11	14	6.5	68
HUNTSVILLE	183	993.6	1016.3	26.7	14.4	20.4	-0.9	32.2	29	4.4	10	1	0	13.3	68	158	72	53	9	8	0	0	1.0	4	13.0	18	18+	7	11	13	6.1	
MOBILE	64	1007.1	1015.1	28.3	19.4	23.9	-0.3	33.3	29+	11.1	10	4	0	17.2	72	118	- 6	40	10	6	0	0	1.5	8	11.2	6	19+	4	10	17	7.3	
MONTGOMERY	59	1008.5	1015.7	27.2	16.7	22.2	-0.3	32.2	9	7.2	10	1	0	16.7	75	60	- 28	13	11	9	0	0	0.7	4	9.4	N	31+	4	9	18	7.2	45
ALASKA																																
ANCHORAGE PRK STRIP	26			10.6	2.8	6.8	-0.9	14.4	1	- 1.7	5	B 0	1			19	5	5	10		10	0										
ANCHORAGE	43	1002.4	1007.4	10.6	2.8	6.8		13.9	21	- 1.7	5	0	3	0.0	64	19		5	9	0	T	T	1.0	19	12.5	17	21+	1	8	22	8.2	38
ANNETTE	34	1011.2	1015.2	11.7	4.4	7.9	-1.6	23.3	31	1.7	21	1	0	3.3	75	373	193	68	22	0	0	0	2.2	16	13.4	14	2+	3	5	23	8.3	
BARROW	7	1013.5	1014.1	- 5.6	-12.2	- 8.8	-1.3	1.7	30	-19.4	16+	0	31	-10.0	89	4	1	3	3	0	76	457	0.4	17	8.0	28	12	5	3	23	8.0	
BARTER ISLAND	12	1011.2	1013.2	- 3.9	-10.6	- 7.1	-0.8	2.2	26	-20.0	2	0	31	- 8.3	88	5	- 2	4	6	0	84	787	0.8	30	20.1	27	9	4	5	22	8.0	
BETHEL	38	1004.7	1010.4	4.4	- 2.8	0.7	-3.2	13.3	31	- 9.4	15	0	29	- 2.2	82	11	- 13	7	6	0	122	51	2.4	30	15.6	32	21	3	6	22	8.1	
COLD BAY	29	1008.5	1012.3	5.6	0.6	3.0	-1.2	11.7	12	- 3.9	11	0	15	0.0	83	63	5	19	19	0	18	T	2.5	27	25.0	16	12	0	2	29	9.5	
FAIRBANKS	133	990.5	1007.5	12.2	2.8	7.4	-0.9	17.2	31+	- 1.1	12	0	3	- 0.6	61	10	- 8	3	10	1	43	76	0.3	23	9.4	18	18	1	7	23	8.1	
JUNEAU	4	1011.5	1012.4	10.0	2.2	6.3	-1.3	17.8	31	- 2.8	9	0	5	4.4	89	161	78	21	27	0	T	0	3.7	11	16.5	11	22	1	3	27	8.9	34
KING SALMON	13	1006.8	1009.0	6.7	- 0.6	3.0	-3.3	12.8	30	- 8.3	17	0	19	- 0.6	78	61	37	14	15	0	66	25	1.9	24	15.6	14	12	2	4	25	8.4	
KOTZEBUE	3	1010.5	1011.1	- 0.6	- 8.3	- 4.6	-3.9	7.2	31	-15.6	16+	0	31	- 6.7	83	1	- 7	1	3	0	33	584	3.2	29	15.6	31	14	7	12	12	6.0	
MC GRATH	106	995.6	1008.4	8.9	0.0	4.4	-2.3	17.8	31	- 5.6	16+	0	14	- 2.8	61	10	- 12	9	5	0	T	127	1.0	29	9.8	17	13	2	8	21	7.9	
NOME	4	1009.8	1010.6	1.7	- 5.0	- 1.7	-3.3	13.3	31	-12.2	16+	0	29	- 5.0	77	3	- 14	2	4	0	20	254	2.1	1	19.7	9	12	8	10	13	5.8	48
ST. PAUL ISLAND	7	1010.2	1011.2	3.3	- 1.7	0.9	-0.7	7.2	30	- 6.7	9+	0	22	- 1.7	82	57	24	20	20	0	30	T	1.3	29	19.7	15	12	0	4	27	9.3	
SHEMYA	37	1007.8	1011.5	5.0	1.1	3.2	-0.2	7.2	23+	- 1.1	21	0	6	1.1	88	77	16	18	16	0	23	T	3.4	23	25.9	23	1	2	2	27	8.8	
YAKUTAT	9	1009.1	1010.2	7.2	0.0	3.5	-3.5	10.0	29	- 4.4	10+	0	17	2.2	88	283	81	53	23	0	13	25	2.0	14	16.1	14	22	2	1	28	8.7	
ARIZONA																																
FLAGSTAFF	2131	788.0	1013.9	22.2	2.2	12.1	1.6	26.1	25	- 2.8	1	0	8	- 2.8	39	T	- 13	T	0	4	0	0	2.0	20	10.3	21	19	16	12	3	3.3	
PHOENIX	340	970.9	1008.9	36.1	17.2	26.7	2.8	39.4	25+	11.7	11	27	0	3.9	24	T	- 3	T	0	0	0	0	0.8	14	17.4Y	SW	20	23	7	1	1.8	95
TUCSON	788	923.5	1009.6	33.3	16.1	24.5	1.4	37.8	25	11.1	10	22	0	2.2	26	3	- 1	3	2	2	0	0	2.2	18	15.2	NW	20+	23	6	2	2.5	94
WINSLOW	1492	850.7	1012.1	29.4	8.3	18.7	0.4	33.9	25	2.2	1	3	0	- 2.8	26	T	- 8	T	0	2	0	0	2.4	19	17.0	24	20	20	8	3	2.5	
YUMA	59	1001.7	1008.8	35.6	18.9	27.3	1.8	40.0	19+	13.3	11	26	0	6.7	30	0	- T	0	0	0	0	0	1.8	19	12.5	E	3	25	6	0	1.4	95
ARKANSAS																																
FORT SMITH	137	999.3	1015.6	26.7	13.3	20.2	-0.9	31.7	23+	8.3	3	0	0	13.9	69	80	- 54	34	9	5	0	0	1.2	8	18.8	NE	17	11	6	14	5.6	73
LITTLE ROCK	78	1007.1	1016.4	26.7	13.9	20.2	-1.2	32.2	29+	7.8	14+	2	0	14.4	71	57	- 77	27	7	4	0	0	0.8	8	13.4	N	16	11	8	12	5.4	69
TEXARKANA	113	1002.7	1015.6	27.2	14.4	20.9	-1.1	31.7	22	6.7	3	0	0	16.1	75	45	- 80	24	8	5	0	0	1.3	10				6	12	13	6.3	
CALIFORNIA																																
BAKERSFIELD	151	994.6	1012.0	30.0	15.0	22.6	1.2	38.9	3	9.4	30	10	0	6.1	38	T	- 6	T	0	0	0	0	2.2	34	11.2	33	29+	25	2	4	2.1	
BISHOP	1252			30.0	8.9	19.3	2.3	35.0	26	2.8	31	7	0			5	- 1	4	2		0	0						20	8	3	3.0	
BLUE CANYON	1609			18.9	8.9	13.9	2.7	25.0	18+	2.8	6	0	0			27	- 52	24	5		0	0			13.4	21	3	16	4	11	4.3	
BURBANK	221	988.8	1013.8	23.9	12.8	18.3	0.3	31.7	2+	8.3	31	0	0	11.7	73	4	- 1	3	3	0	0	0	2.6	16	7.6	16	17	10	11	10	5.4	
EUREKA U	13			12.8	7.8	10.2	-1.4	16.1	18	6.1	23+	0	0			2	- 54	1	3		0	0			11.2	SW	29+	9	7	15	6.4	58
FRESNO	100	1000.3	1011.9	30.6	12.2	21.6	1.5	37.8	20	8.9	1	14	0	8.3	47	3	- 5	3	1	1	0	0	2.0	30	11.2	NW	21	20	6	5	2.8	86
LONG BEACH	10	1013.2	1014.6	22.2	14.4	18.2	0.7	26.7	19+	10.0	31	0	0	10.6	65	1	- 2	1	1	0	0	0	1.5	23	8.0	28	30	9	11	11	6.0	
LOS ANGELES	30	1010.5	1014.2	21.1	13.9	17.5	0.8	23.9	7	11.1	31	0	0	11.7	73	1	- 3	T	2	0	0	0	2.8	25	11.6Y	W	30	3	16	12	6.3	
LOS ANGELES U	82			22.2	13.9	18.1	-0.2	26.1	2	11.7	31	0	0			6	2	6	1		0	0			6.7	SW	30+	9	9	13	6.1	41
MT SHASTA R	1080			22.8	5.6	14.2	2.1	30.0	25+	0.0	15	0	1			6	- 44	5	3		0	0										
OAKLAND	2	1014.2	1014.6	18.3	11.7	15.0	-0.4	24.4	2	10.0	17+	0	0	9.4	72	6	- 10	6	2	0	0	0	3.9	27	10.7	22	5	15	8	8	4.4	
RED BLUFF	104	999.3	1011.7	30.0	13.3	21.5	1.3	37.2	25+	8.3	7+	10	0	5.0	40	2	- 27	1	2	1	0	0	0.8	18	13.0	S	3	15	7	9	4.2	89
SACRAMENTO	5	1011.5	1012.4	27.8	10.6	19.1	1.3	35.6	19	7.8	14	9	0	8.3	60	6	- 9	6	2	1	0	0	3.1	21	13.4	SW	21	20	5	6	3.4	89
SANDBERG R	1377			20.6	10.0	15.2	1.5	28.9	2	2.8	10	0	0			T	- 8	T	0		0	0			13.0	16	3	24	3	4	2.5	
SAN DIEGO	4	1013.2	1014.4	20.0	15.0	17.5	-0.3	21.1	24+	13.3	1	0	0	12.2	75	1	- 3	T	2	0	0	0	2.1	27	8.9	NW	30+	5	12	14	6.8	40
SAN FRANCISCO	2	1014.2	1014.9	18.9	9.4	14.1	-0.6	26.7	18	6.7	2	0	0	7.8	73	3	- 9	3	2	0	0	0	3.8	28	14.3	W	14+	18	5	8	4.0	
SAN FRANCISCO U	16			15.6	10.0	12.8	-1.3	24.4	2	7.8	3	0	0			5	- 11	5	1		0	0			13.0	SW	13					67
SANTA CATALINA	478			18.3	11.1	14.6	-0.4	30.0	2	8.9	30	0	0			5	- 5	4	4	0	0	0						7	8	16	6.6	
SANTA MARIA	72			20.0	8.9	14.6	0.3	23.9	7+	3.9	31+	0	0			T	- 5	T	1		0	0						11	11	9	5.1	
STOCKTON	7	1012.2	1013.2	28.3	11.7	20.0	1.0	36.7	19	8.9	15	8	0	6.7	50	5	- 6	4	2	1	0	0	3.5	30	11.6	27	14	19	4	8	3.3	
COLORADO																																
ALAMOSA	2297			21.7	1.1	11.4	0.9	25.6	7+	- 6.7	13	0	13			8	- 11	6	5		0	0						17	11	3	3.9	
COLORADO SPRINGS	1873	811.4	1013.5	22.2	5.6	13.9	1.2	30.6	30	- 2.8	12	0	4	- 2.2	41	24	- 30	10	8	5	107	51	0.4	9	17.0	23	10	11	11	9	5.1	
DENVER	1610	835.8	1011.8	23.9	5.6	14.8	1.4	31.1	30	- 2.8	12	0	4	- 1.1	41	9	- 60	7	4	4	74	51	1.2	18	14.8	NE	8	4	18	9	5.9	71
GRAND JUNCTION	1480	851.0	1010.9	26.7	10.6	18.6	1.8	32.2	7	4.4	12	1	0	- 1.7	30	18	3	12	6	7	T	T	0.7	14	29.1	NW	11	16	10	5	4.0	80
PUEBLO	1428	855.1	1012.0	27.8	6.1	16.9	1.0	34.4	30	- 1.1	1	5	3	- 0.6	38	10	- 36	7	5	5	5	T	0.2	4	19.2	N	8	15	7	9	4.3	81

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1016.6	1017.3	16.1	7.2	11.7	-3.2	24.4	23	- 0.6	10	0	2	6.7	74	91	- 3	41	15	2	0	0	0.9	25	15.6	32	10	5	10	16	7.1	
HARTFORD	52	1009.5	1016.1	20.0	7.2	13.6	-1.9	30.0	27	0.0	11+	0	2	6.1	65	76	- 10	26	13	0	0	0	1.2	26	13.0	NW	4	4	9	18	7.2	49
NEW HAVEN	2			17.2	7.2	12.2	-1.8	25.0	21	0.6	3	0	0			81	- 14	38	13		0	0			11.2	NW	4	4	11	16	7.1	52
DELAWARE																																
WILMINGTON	24	1013.9	1016.9	21.1	10.0	15.7	-1.3	31.1	6	0.0	11	0	1	8.3	66	85	- 5	31	16	3	0	0	0.5	19	11.2	19	5	6	12	13	6.5	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1014.2	1016.7	24.4	12.2	18.3	-0.4	33.3	6	2.2	11+	1	0	10.6	63	70	- 36	27	15	4	0	0	0.3	21	13.9	W	6	9	9	13	5.7	56
FLORIDA																																
APALACHICOLA U	4			26.7	20.6	23.6	-0.2	30.6	29	15.0	11	0	0			135	62	66	10	4	0	0			15.2	N	23	5	7	19	7.4	43
DAYTONA BEACH	9	1014.6	1016.1	28.9	19.4	24.2	0.8	32.2	19	15.6	16	1	0	19.4	81	172	100	62	20	17	0	0	1.3	13	14.3	13	26	1	13	17	7.6	
FORT MYERS	5	1015.2	1015.4	31.7	20.6	26.1	0.9	32.8	20+	17.8	4	13	0	21.1	78	41	- 57	24	6	5	0	0	1.4	19	10.7	23	9	3	22	6	5.7	
JACKSONVILLE	6	1014.9	1015.8	27.8	18.9	23.4	-0.9	31.7	18+	13.9	16	0	0	18.9	83	265	177	54	18	17	0	0	0.9	14	14.3	W	27+	1	6	24	8.3	46
KEY WEST	1	1014.6	1015.1	28.9	24.4	26.5	0.4	31.1	30	21.7	26+	0	0	21.1	74	70	1	20	7	9	0	0	3.1	14	14.8	E	6	6	17	8	5.7	71
LAKELAND U	65			30.0	20.6	25.2	0.3	33.3	21+	16.7	23	5	0			113	23	53	11		0	0						3	17	11	6.4	69
MIAMI	2	1015.2	1015.5	28.9	21.7	25.3	0.0	31.1	10	19.4	7	0	0	20.6	79	140	- 23	52	10	11	0	0	2.8	13	9.4	26	29+	1	15	15	7.1	
ORLANDO	33	1011.5	1015.7	30.0	20.0	25.2	-0.1	32.8	21	18.9	13+	5	0	19.4	77	167	76	66	15	13	0	0	1.4	17	14.3	26	9	1	17	13	6.9	
PENSACOLA	34	1011.2	1015.3	27.8	18.9	23.5	-0.7	32.2	29	11.1	10	1	0	18.3	75	112	- 4	41	12		0	0	0.4	9	17.4	E	23					46
TALLAHASSEE	17	1012.9	1015.3	28.3	18.3	23.3	-0.5	32.8	30	14.4	11+	2	0	17.8	76	209	105	83	15	11	0	0	0.4	7	8.9	5	10+	2	9	20	7.7	
TAMPA	6	1014.9	1015.2	31.1	21.1	25.8	0.9	32.8	21+	17.2	16	10	0	18.9	71	18	- 54	11	4	6	0	0	0.9	21	12.5	20	9	4	18	9	6.4	73
WEST PALM BEACH	5	1014.9	1015.6	30.0	21.7	25.8	0.5	32.2	8	18.9	23+	1	0	20.0	74	95	- 35	23	13	9	0	0	2.8	15	12.1	9	11	3	12	16	6.7	
GEORGIA																																
ATHENS	244	987.8	1016.5	25.6	14.4	19.9	-1.2	31.7	9	4.4	11	0	0	15.0	79	165	73	62	8	6	0	0	0.3	4	9.4	6	23+	3	8	20	7.5	
ATLANTA	308	979.7	1016.1	25.0	14.4	19.8	-0.8	31.1	9	6.7	10	0	0	13.9	74	148	68	44	9	5	0	0	0.5	2	13.4	NW	9	7	6	18	7.0	50
AUGUSTA	44	1010.5	1015.6	27.2	15.0	21.2	-0.8	32.2	29	3.9	11	1	0	15.0	74	147	71	54	14	3	0	0	0.4	8	15.6	32	27	2	10	19	7.9	
COLUMBUS	117			27.8	16.7	22.3	0.0	33.3	9	7.2	10	2	0	16.1	73	200	111	104	9		0	0	1.0	4	15.6	31	18+	3	8	20	7.7	
MACON	108	1003.1	1016.1	27.2	15.6	21.6	-1.7	33.3	9	6.7	11	2	0	16.1	78	141	56	51	17	6	0	0	0.8	4	10.3	S	20+	1	11	19	7.9	47
ROME	194			26.1	12.2	19.1	-1.3	31.1	29+	3.9	10	0	0			169	72	108	13		0	0										
SAVANNAH	14	1014.2	1016.0	27.2	16.7	22.0	-1.0	32.2	30	10.0	11	1	0	17.8	82	171	75	38	19	13	0	0	0.8	13	9.8	NE	23	0	6	25	8.7	36
HAWAII																																
HILO	9	1015.2	1016.3	28.9	18.9	23.9	1.1	34.4	20	16.1	6	1	0	18.9	75	128	-109	37	21	2	0	0	0.8	13	13.0	14	20	1	11	19	7.5	35
HONOLULU	2	1015.6	1015.9	29.4	20.6	25.1	0.7	32.2	24	18.3	15+	1	0	18.3	67	10	- 15	9	4	0	0	0	2.4	7	11.2	NE	31+	8	16	7	5.3	85
KAHULUI	15	1013.5	1015.8	29.4	20.0	24.7	0.7	32.2	11	15.6	5	1	0			4	- 13	2	4	0	0	0	3.3	6	13.4	NE	2	5	16	10	5.8	64
LIHUE	31	1011.9	1016.9	27.2	20.0	23.4	-0.2	29.4	21	15.6	18+	0	0	18.9	79	18	- 48	4	13	1	0	0	2.5	6	8.5	E	3	5	16	10	6.4	74
IDAHO																																
BOISE	865	913.6	1012.4	25.0	7.8	16.4	1.8	36.7	26	0.0	23	4	1	0.6	39	8	- 25	4	5	1	0	0	1.0	30	14.8	NW	14	10	8	13	5.3	87
IDAHO FALLS 42NW R	1460			23.9	1.1	12.4	0.9	31.7	27	- 5.6	1	0	18			27	4	21	5				1.4	23	17.0	SW	14					
IDAHO FALLS 46W R	1503			22.8	1.7	12.3	0.8	30.6	27	- 8.3	23	0	11			21	- 7	19	3		43	25	1.8	22	17.4	WSW	14					
LEWISTON	431			24.4	8.3	16.2	1.6	35.6	5	2.2	18	5	0			11	- 29	3	6		0	0						10	9	12	5.7	
POCATELLO	1358	861.8	1012.9	23.9	3.3	13.8	1.0	31.7	27	- 5.0	23	0	6	- 2.2	38	24	- 5	19	7	2	T	0	2.6	23	18.8	SW	22	13	9	9	4.8	73
ILLINOIS																																
CAIRO U	96			24.4	13.3	18.9	-1.6	31.1	28+	3.9	10	0	0			241	130	97	11		0	0			14.8	NE	9	12	8	11	5.1	71
CHICAGO O HARE	201	992.9	1017.6	18.3	5.6	11.9	-2.4	29.4	27+	- 4.4	10	0	5	4.4	62	121	26	74	12	3	41	51	0.5	36	14.3	24	23	15	10	6	4.4	
CHICAGO MIDWAY	185	994.9		18.3	7.8	13.1	-2.5	30.6	27	- 1.7	10	0	2	4.4	59	147	52	92	12	4	5	T	0.4	4	13.4	W	19+	17	8	6	4.3	68
MOLINE	177	995.3	1016.8	20.0	7.2	13.5	-2.7	31.1	27	- 3.3	10	0	3	6.7	65	162	66	58	11	5	T	T	0.3	10	28.2	NE	7	17	6	8	4.3	66
PEORIA	199	993.2	1017.3	20.6	7.8	13.9	-2.4	30.6	27	- 3.9	10	0	3	6.7	65	114	6	40	8	7	T	T	0.4	8	13.9	SW	5	16	9	6	4.2	72
ROCKFORD	221	989.8	1017.1	17.2	4.4	10.8	-4.3	27.2	26	- 4.4	10	0	6	3.9	65	121	24	65	9	2	25	25	0.3	4	15.6	31	18	15	9	7	4.5	
SPRINGFIELD	179	994.6	1016.9	20.6	8.3	14.3	-3.4	28.9	27	- 2.2	10	0	3	8.9	71	90	- 9	34	8	7	T	T	0.0	16	14.8	SE	15	15	9	7	4.4	69
INDIANA																																
EVANSVILLE	116	1003.4	1017.3	23.3	9.4	16.2	-3.1	30.6	28+	- 0.6	10	0	1	10.0	67	88	- 18	30	12	7	0	0	0.6	35	12.1	S	12	10	10	11	5.5	65
FORT WAYNE	241	987.5	1017.5	17.8	5.6	11.7	-4.3	28.3	27	- 2.8	10	0	3	5.6	67	83	- 12	30	13	4	T	T	0.8	31	17.0	SW	5	9	12	10	5.3	65
INDIANAPOLIS	241	988.2	1017.3	21.7	7.8	14.7	-1.7	30.6	27+	- 2.2	10	0	2	6.7	60	37	- 64	13	8	4	T	T	0.7	31	12.5	SW	5	12	9	10	4.9	66
SOUTH BEND	236	989.2	1017.2	16.7	5.6	11.2	-3.6	30.0	27	- 2.2	10	0	6	3.3	60	99	7	59	11	4	15	T	0.9	33	11.6	29	20+	15	8	8	4.5	
IOWA																																
BURLINGTON	211			20.6	8.3	14.4	-2.2	30.0	27+	- 1.1	10	0	2	6.7	63	102	- 1		10	8	T		0.4	36	15.6	21	23	15	7	9	4.4	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station		Pressure		Temperature								No. of days				Precipitation			No of days		Snow, Sleet		Wind		Fastest mile (1 6 kilometers)			No of days (sunrise to sunset)				
	Elevation (ground)	Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32 2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M p.s.		M.p.s							%
IOWA																																
DES MOINES	286	981.7	1016.7	20.6	7.8	14.3	-1.6	33.3	7	0.0	10	1	1	6.1	61	136	33	51	9	8	T	0	0.4	10	13.4	SW	19+	13	10	8	4.8	66
DUBUQUE	325			18.3	5.6	11.8	-2.7	28.9	26	-4.4	10	0	4			121	13	63	9		79	76						12	11	8	4.9	
SIOUX CITY	334	976.0	1015.6	22.2	7.2	14.8	-1.5	32.2	7+	-1.7	1	2	1	5.6	57	29	-53	12	11	7	0	0	1.0	14	15.2	NW	23	12	14	5	4.6	76
WATERLOO	265	984.8	1016.6	19.4	5.6	12.6	-2.9	31.7	26	-2.2	1	0	5	5.6	66	122	27	50	10	6	8	T	0.4	15	17.4	27	19	13	12	6	4.5	
KANSAS																																
CONCORDIA	448	962.4	1014.8	26.1	8.9	17.6	0.3	34.4	22	-1.1	1	4	1	6.1	52	7	-92	5	5	5	0	0	2.1	16	15.6	S	15	18	7	6	3.6	77
DODGE CITY	787	924.5	1014.1	26.1	10.0	18.2	0.6	36.1	22	0.0	13	3	1	6.1	50	20	-62	15	4	3	0	0	2.3	17	17.9	N	8	16	8	7	4.0	77
GOODLAND	1111	888.3	1013.4	26.7	7.2	16.9	2.2	35.0	7	-2.2	13+	5	3	2.2	45	14	-47	9	5	5	20	25	2.3	18	17.4	34	11	18	9	4	3.9	
TOPEKA	267	984.1	1015.6	26.1	9.4	17.7	-0.3	32.8	15	0.6	2	2	0	8.3	56	10	-101	6	7	8	0	0	1.0	19	17.9	SW	8	13	12	6	4.3	74
WICHITA	403	967.8	1015.2	26.7	11.1	18.7	-0.2	33.9	28	0.0	13	4	1	9.4	59	19	-82	9	6	6	0	0	1.7	16	19.2	N	23	15	12	4	3.9	76
KENTUCKY																																
COVINGTON	265	985.8	1017.2	22.2	9.4	15.8	-1.2	32.2	28	-2.2	10	1	1	7.2	60	61	-30	28	8	2	T	0	0.6	36	13.0	34	28	10	9	12	5.9	
LEXINGTON	294	982.1	1017.3	22.2	9.4	15.8	-2.2	29.4	23+	-3.3	10	0	1	8.3	63	123	25	50	9	4	0	0	0.2	1	9.4	36	9	11	6	14	5.9	
LOUISVILLE	144	999.3	1016.8	23.3	10.6	16.8	-1.2	30.6	8	-0.6	10	0	1	8.9	63	99	0	36	7	3	0	0	0.6	36	20.6	NW	21	11	6	14	5.7	75
LOUISIANA																																
ALEXANDRIA	28	1010.8	1015.2	27.8	17.8	22.7	0.0	31.7	24	11.7	11+	0	0	17.8	79	82	-58	39	9	3	0	0	1.0	5	9.4	18	17+	3	12	16	7.1	
BATON ROUGE	20	1012.2	1015.0	28.3	19.4	23.9	0.1	31.7	24+	12.8	10	0	0	18.3	73	114	-8	40	10	5	0	0	0.9	6	11.2	24	13	4	12	15	7.1	
LAKE CHARLES	4	1013.5	1014.7	28.3	20.0	24.3	0.1	32.2	24	14.4	10	1	0	19.4	78	160	43	82	12	9	0	0	1.1	10	14.3	4	13	6	11	14	7.0	
NEW ORLEANS	1	1013.5	1014.5	27.8	20.0	23.9	0.3	31.1	23+	12.8	11	0	0	20.6	83	236	125	71	13	10	0	0	1.0	7	12.5	7	4	3	13	15	6.8	
SHREVEPORT	77	1005.8	1015.1	27.8	17.8	22.6	-0.2	32.8	17	11.1	10+	1	0	16.7	73	96	-26	45	9	6	0	0	1.5	9	10.3	17	17+	6	9	16	6.6	51
MAINE																																
CARIBOU	190			15.6	3.3	9.4	-0.5	31.1	24	-6.7	8	0	12			44	-33	12	9		208	102						6	10	15	6.7	
PORTLAND	19	1012.9	1015.4	16.1	4.4	10.2	-1.4	26.7	25+	-4.4	3	0	6	3.9	67	50	-37	15	11	0	51	25	1.4	23	13.4	W	29	7	9	15	6.5	58
MARYLAND																																
BALTIMORE	45	1011.2	1016.7	22.8	10.6	16.5	-1.5	32.2	6	0.0	11	1	1	7.8	61	115	14	37	13	6	0	0	0.2	26	16.5	W	6	9	10	12	5.7	58
MASSACHUSETTS																																
BLUE HILL OBS R	192			18.3	7.2	12.5	-1.2	28.9	27	0.0	10	0	1			78	-10	22	13		0	0			20.6	S	5					55
BOSTON	5	1014.9	1016.0	18.3	9.4	14.1	-0.8	30.0	27	3.3	10	0	0	5.0	59	68	-17	24	11	2	T	T	1.7	24	14.3	SW	5	5	12	14	6.7	63
NANTUCKET	13	1015.9	1016.4	13.9	6.1	9.7	-1.7	25.0	23	1.7	14+	0	0	6.1	82	208	135	73	16	4	0	0	1.6	22	17.0	S	8	4	6	21	7.6	55
PITTSFIELD	357			16.7	3.9	10.3	-2.3	26.1	27	-4.4	3	0	8			64	-35	16	16		T	T										
WORCESTER	301	979.0	1016.2	17.2	6.1	11.6	-1.3	27.8	27	-1.1	11+	0	3	3.3	61	82	-15	16	14	1	T	T	2.2	26	12.1	30	29+	4	14	13	6.6	
MICHIGAN																																
ALPENA	210	991.2	1016.7	15.6	1.1	8.2	-2.1	26.7	23	-6.7		0	12	-1.1	55	27	-47	8	10	2	8	T	0.9	31	13.0	NW	3	5	17	9	5.9	69
DETROIT	189	994.2	1017.2	18.3	6.7	12.4	-2.6	32.2	27	-1.1	10	1	2	2.8	53	59	-31	50	9	1	T	T	1.1	30	14.8	33	28	10	11	10	5.3	
DETROIT M WAYNE CO	193	992.6	1017.0	17.8	4.4	11.1	-3.6	30.6	27	-3.9	10	0	5	4.4	64	55	-35	44	7	1	0	0	0.9	30	14.3	SW	5	11	13	7	4.9	65
DETROIT WILLOW RUN	217	989.2	1017.5	17.2	3.9	10.5	-4.3	30.0	27	-5.0	10	0	6	2.8	59	56	-33	48	7	1	0	0	1.1	30	13.4	27	5	12	10	9	5.0	
FLINT	235	988.8	1016.9	16.1	3.9	10.1	-2.9	27.2	27	-5.6	10	0	6	2.2	59	33	-53	26	6	2	T	T	1.4	27	12.1	23	20+	10	14	7	5.4	
GRAND RAPIDS	239	987.8	1017.2	17.8	4.4	11.1	-2.7	28.3	23	-5.6	10	0	5	2.8	60	55	-33	36	9	1	T	T	1.2	29	15.6	SW	5	13	10	8	4.9	68
HOUGHTON LAKE	351	974.9	1017.4	15.6	2.2	8.7		26.1	26+	-6.1	2	0	14	0.6	58	10		3	7	1	T	T	1.7	28	12.5	26	19	9	10	12	5.7	
LANSING	256	985.1	1017.0	17.2	3.3	10.4	-3.6	29.4	26	-7.2	10	0	7	3.3	61	48	-47	34	8	2	T	T	1.3	29	15.6	W	5	9	13	9	5.1	68
MARQUETTE U	206			13.3	3.9	8.4	-1.6	28.9	22	-3.3	2	0	11			28	-47	10	15		8	T			13.9	SW	24	5	15	11	6.0	68
MUSKEGON	191	994.2	1017.5	16.7	4.4	10.3	-2.9	28.9	23	-5.0	10	0	7	2.8	63	31	-44	12	11	1	0	0	0.9	28	14.3	19	5	14	9	8	4.8	
SAULT STE MARIE	220	989.5	1016.4	12.8	1.7	7.2	-2.6	25.6	22	-7.8	7	0	11	0.6	67	45	-25	15	12	2	114	51	2.3	29	18.8	NW	3	8	11	12	5.7	70
MINNESOTA																																
DULUTH	435	965.1	1017.1	14.4	2.8	8.5	-1.1	28.9	26	-7.2	1	0	7	-0.6	59	39	-45	16	9	0	43	25	0.5	27	20.1	W	24	9	10	12	5.8	69
INTERNATIONAL FALLS	359	973.2	1016.8	14.4	2.2	8.3	-2.1	27.8	21	-8.3	9	0	10	0.6	62	30	-36	11	9	1	53	51	0.5	29	13.9	11	15	8	11	12	6.1	
MINNEAPOLIS	254	986.1	1016.7	18.9	5.6	12.0	-2.1	32.2	26	-2.8		1	4	2.8	55	37	-44	12	11	3	T	T	0.1	28	15.6	S	22	11	10	10	4.9	70
ROCHESTER	395	969.2	1017.0	17.8	3.9	11.0	-2.7	30.6	26	-5.6	9	0	6	2.2	58	39	-54	14	8	3	5	T	0.7	23	16.1	16	22	11	12	8	4.6	
ST CLOUD	315	978.3	1016.3	17.8	4.4	11.0	-2.1	31.1	26	-5.6	1	0	4		57	56	-33	18	9		T	T						14	8	9	4.8	
MISSISSIPPI																																
JACKSON	94	1004.1	1015.8	27.2	16.1	21.6	-1.2	31.7	29	7.8	10	0	0	16.7	77	202	91	83	12	5	0	0	1.2	6	13.4	N	19	6	10	15	6.4	59
MERIDIAN	88	1004.7	1015.9	27.2	15.6	21.3	-1.1	32.2	29	6.7	10	1	0	16.1	77	216	116	86	10	8	0	0	1.1	3	9.4	36	9	5	7	19	7.1	
VICKSBURG U	71			26.7	17.2	22.1	-0.9	31.1	29+	8.3	10	0	0			120	15	63	8		0	0			10.3	N	9	8	6	17	6.6	63

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	988.2	1016.3	23.3	10.6	17.0	-1.0	31.1	17	0.6	10	0	0	7.8	59	56	- 63	21	6	7	0	0	0.6	13	13.0	NW	23+	15	9	7	4.3	78
KANSAS CITY	226	988.8	1015.7	25.6	11.7	18.7	0.0	32.8	7	3.3	2	2	0	8.3	54	63	- 49	28	6	5	T	T	0.5	15	15.2	S	15	14	11	6	4.5	75
SAINT JOSEPH	247			26.7	10.0	18.4	0.6	35.0	7	0.0	2	7	1	5.6	50	34	- 77	17	8	5	0	0	0.9	16	13.0	32	23	16	9	6	4.0	
ST LOUIS	163	997.0	1017.2	22.8	10.6	16.5	-1.4	30.6	8	- 0.6	10	0	1	8.3	61	117	22	52	10	6	0	0	0.1	11	14.3	SE	11	14	10	7	4.6	70
SPRINGFIELD	386	971.6	1016.7	23.9	8.3	16.1	-2.0	28.9	23+	1.1	2	0	0	10.6	72	90	- 44	23	9	9	0	0	1.0	14	17.0	N	17	13	12	6	4.2	70
MONTANA																																
BILLINGS	1087	889.6	1012.9	21.1	5.0	13.0	-0.8	31.1	27	- 4.4	12	0	4	1.1	50	21	- 26	13	7	2	T	T	1.4	30	17.9	W	31	8	17	6	5.2	72
GLASGOW	696			20.6	5.0	12.9	0.1	31.1	26	- 2.2	2	0	4			49	11	17	11		43	25						4	15	12	6.5	
GREAT FALLS	1116	886.6	1012.7	20.6	5.6	13.2	1.6	31.1	26	- 1.7	12	0	2	1.1	48	39	- 14	25	6	5	T	0	2.2	25	19.2	W	29	6	13	12	6.0	83
HAVRE	787			22.2	5.0	13.7	1.1	34.4	27	- 4.4	12	1	5			13	- 25	5	8		0	0			19.2	W	16	5	13	13	6.3	74
HELENA	1167	879.4	1013.5	22.8	4.4	13.6	2.0	32.2	6	- 3.9	12	1	4	0.0	43	11	- 29	7	5	3	T	T	2.6	28	18.3	SW	6	11	7	13	5.7	76
KALISPELL	904	909.9	1014.2	20.0	3.3	11.7	0.4	31.7	26	- 3.9	18	0	8	2.8	57	41	- 1	19	10	5	15	T	0.6	22	14.3	20	26	5	15	11	6.0	
MILES CITY	801	920.4	1012.5	23.3	6.7	15.1	0.9	33.3	31+	- 0.6	12+	5	2	3.9	52	27	- 17		8	2	T		0.4	34								
MISSOULA	972	903.5	1014.8	22.2	3.9	12.8	1.4	32.8	26	- 4.4	17	1	6	1.7	50	13	- 35	7	6	7	T	0	1.3	31	17.9	W	22	11	11	9	5.3	78
NEBRASKA																																
GRAND ISLAND	561	949.2	1015.0	25.0	7.8	16.2	0.3	35.6	27	- 2.8	13	6	3	5.6	54	26	- 72	8	8	9	T	0	1.3	18	13.0	33	23	16	8	7	4.2	
LINCOLN U	351			23.9	8.9	16.3	-0.6	35.0	27+	- 1.1	1	3	1			44	- 44	12	9		0	0			17.9	S	22	13	12	6	4.6	74
NORFOLK	471			22.8	7.2	14.9	-0.8	36.1	7	- 2.2	1	3	3			35	- 58	13	8		0	0						13	11	7	4.5	
NORTH PLATTE	846	916.7	1013.5	25.0	6.1	15.6	0.8	35.0	7	- 2.8	1	5	4	4.4	54	20	- 55	17	4	4	5	T	1.3	16	17.0	NW	11	11	15	5	4.6	79
OMAHA	298	980.7	1015.8	23.3	8.9	16.1	-1.1	35.0	7	0.6	1	3	0	6.7	57	93	5	37	13	8	T	T	0.9	15	16.1	NW	22	10	16	5	4.9	78
SCOTTSBLUFF	1206	878.4	1012.8	25.0	5.6	15.4	1.7	33.9	21	- 1.7	12	7	3	1.7	44	7	- 62	6	3	3	5	T	0.6	4	20.6	33	22	10	10	11	5.4	
VALENTINE	789			23.9	5.0	14.4	0.5	34.4	21	- 3.9	13	4	4			11	- 56	9	3		T	0			18.8	SW	10	12	13	6	4.3	82
NEVADA																																
ELKO	1539	843.6	1012.2	25.6	3.3	14.3	3.2	32.2	26	- 5.0	23	1	9	- 2.8	34	14	- 10	13	3	1	T	T	1.2	23	17.9	14	9	10	13	8	4.9	
ELY	1906	808.0	1011.0	23.3	2.8	13.1	2.9	28.9	26	- 4.4	12	0	9	- 4.4	34	12	- 10	6	4	2	T	0	2.7	21	14.3	SW	21	9	15	7	4.7	85
LAS VEGAS	659	934.0	1008.8	33.3	17.2	25.3	2.1	38.3	26	10.0	13	25	0	- 3.3	17	T	- 2	T	0	2	0	0	2.4	20	17.0	SE	20	19	8	4	2.8	92
RENO	1342	864.2	1011.5	27.2	4.4	15.9	3.8	32.8	26+	- 1.7	1	3	2	0.0	36	8	- 5	8	3	2	0	0	1.1	28	15.2	SW	19+	19	7	5	3.5	94
WINNEMUCCA	1310	865.6	1011.5	26.1	5.0	15.6	3.5	33.3	26	- 2.8	2	1	3	- 4.4	27	8	- 15	7	3	1	0	0	0.8	28	15.6	W	29+	10	13	8	4.9	64
NEW HAMPSHIRE																																
CONCORD	104	1003.1	1015.8	20.0	3.9	11.9	-1.2	29.4	27+	- 6.1	3	0	10	2.8	56	55	- 26	13	15	1	28	25	1.1	25	13.0	W	13+	3	14	14	6.8	62
MT WASHINGTON OBS	1909			2.8	- 5.0	- 1.1	-2.7	14.4	27	-18.9	7	0	20			116	- 33	29	15	1	599	305			44.3Y	W	10	1	9	21	7.9	37
NEW JERSEY																																
ATLANTIC CITY	20	1014.9	1017.3	20.0	7.8	13.7	-2.6	30.6	6	- 3.9	11	0	2	7.2	69	81	- 9	21	12	3	0	0	0.8	17	14.3	22	6	7	7	17	6.5	49
ATLANTIC CITY U	3			18.3	11.1	14.6	-0.7	27.2	20	2.2	10	0	0			117	37	28	14						16.5	SW	5					
NEWARK	3	1015.6	1016.7	20.0	10.0	15.2	-1.8	28.3	6	1.7	10	0	0	6.7	61	123	31	60	13	4	0	0	0.8	25	12.5	20	5	5	13	13	6.7	
TRENTON U	17			21.1	10.6	15.6	-1.2	29.4	6	1.7	10	0	0			120	28	68	13		0	0			13.0	NW	10	7	11	13	6.2	54
NEW MEXICO																																
ALBUQUERQUE	1618	837.8	1011.5	28.3	10.6	19.6	1.2	32.2	17+	2.8	1	3	0	- 1.1	30	1	- 19	T	2	5	0	0	0.7	15	24.1	E	8	20	10	1	2.6	84
CLAYTON	1515			25.0	7.2	16.1	0.6	31.7	22+	- 2.2	13	0	3			20	- 50	20	4		0	0						15	10	6	3.8	
RATON	1944			25.0	5.0	14.8	1.8	31.7	30	- 3.9	13	0	3			5	- 53	4	4		T	0						9	16	6	4.8	
ROSWELL	1102			30.0	12.2	21.1	1.1	37.2	16	6.7	12	12	0			14	- 19	13	2	3	0	0			16.5	N	8	14	10	7	4.4	71
SILVER CITY	1638			27.2	10.0	18.4	0.3	31.1	31+	4.4	1	0	0			0	- 7	0	0		0	0						21	8	2	2.9	
NEW YORK																																
ALBANY	84	1005.8	1016.4	18.9	5.6	12.2	-2.2	29.4	23	- 1.7	11+	0	6	5.0	64	60	- 28	13	17	1	36	T	2.1	25	15.6	NW	6+	2	12	17	7.5	47
BINGHAMTON	485	957.3	1016.5	15.6	5.6	10.3	-2.5	25.6	27	- 3.9	10	0	6	3.9	66	65	- 24	19	13	2	86	76	1.5	28	12.5	NW	3	1	12	18	7.7	55
BUFFALO	215	990.9	1016.6	16.7	6.1	11.2	-1.4	28.9	24	- 0.6	11+	0	2	3.9	64	35	- 40	17	15	1	T	0	2.3	26	17.0	W	5	2	15	14	7.0	66
NEW YORK U	40	1012.9	1016.1	21.1	11.7	16.4	-0.4	29.4	23+	2.2	10	0	0	6.1	57	108	15	50	13	4	0	0	0.3	29	12.1	NW	4	7	13	11	6.1	55
J.F. KENNEDY	5	1016.3	1016.9	18.3	8.9	13.8	-1.9	26.1	23	1.1	10	0	0	7.2	70	89	- 4	39	13	3	0	0	1.2	20	15.6	19	5	5	15	11	6.6	
NEW YORK LA GUARDIA	3	1014.9	1016.8	18.9	11.1	15.0	-1.7	26.7	21	3.3	10	0	0	7.8	66	96	5	48	14	5	0	0	0.4	21	12.1	SW	6	5	13	13	6.7	
ROCHESTER	167	997.0	1017.2	17.2	6.1	11.7	-2.1	30.6	27+	- 2.2	10	0	5	3.9	63	32	- 38	15	8	1	T	T	2.2	27	15.6	SW	5	4	14	13	6.5	57
SYRACUSE	125	1001.0	1016.0	16.7	5.0	10.7	-3.6	29.4	27	- 3.9	7	0	7	2.8	60	45	- 38	11	14	2	23	T	2.0	28	16.5	W	3	4	13	14	6.7	55
NORTH CAROLINA																																
ASHEVILLE	652	941.1	1016.7	21.7	9.4	15.6	-1.6	26.7	29	- 1.1	11	0	2	11.7	83	120	27	37	14	7	0	0	0.8	35	13.0	35	9	7	5	19	7.0	56
CAPE HATTERAS R	2	1016.6	1017.0	21.7	13.9	17.7	-2.3	27.2	30	4.4	4	0	0	14.4	81	191	90	52	16	4	0	0	0.4	18	15.2	N	10	4	6	21	7.6	54
CHARLOTTE	224	988.6	1016.1	25.6	14.4	19.8	-0.8	31.1	29	4.4	11+	0	0	13.3	70	92	13	27	12	5	0	0	0.1	10	12.1	NW	9	7	6	18	7.0	62

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	985.1	1016.6	25.0	13.3	19.3	-0.1	31.7	21	1.7	11	0	0	13.9	76	105	22	27	13	5	0	0	0.5	18	14.8	NW	29	5	9	17	7.0	52
RALEIGH	132	1000.7	1016.4	25.6	13.3	19.2	-0.6	31.7	29	0.6	11	0	0	12.8	70	126	36	42	15	4	0	0	0.7	17	11.2	32	1	6	6	19	6.9	52
WILMINGTON	9	1015.6	1016.8	26.1	15.6	20.9	-0.5	32.2	30	6.1	11	1	0	16.1	76	191	101	45	12	7	0	0	0.8	17	13.0	NE	10	4	7	20	7.7	50
NORTH DAKOTA																																
BISMARCK	502	955.3	1015.0	20.0	3.9	11.9	-1.4	32.8	21	- 6.7	9	2	6	1.1	53	23	- 27	11	10	3	15	T	0.8	12	16.1	NW	23+	8	10	13	5.9	71
FARGO	273	983.1	1016.1	18.3	3.3	10.8	-2.2	30.6	21	- 6.7	9	0	6	1.1	55	32	- 19	21	9	3	0	0	0.1	6	15.2	NW	24+	12	9	10	5.2	65
WILLISTON	579			20.6	5.0	12.7	0.1	32.2	26	- 3.9	2	1	5			44	8	27	7		13	T			20.1	NW	18	6	13	12	5.9	65
OHIO																																
AKRON	368	972.6	1017.2	18.3	6.1	12.2	-3.2	27.8	24+	- 4.4	10	0	5	5.6	66	58	- 39	16	10	3	81	51	0.9	32	10.7	30	6	8	11	12	6.1	
CINCINNATI OBS	232			22.2	9.4	15.7	-2.2	31.1	28+	- 2.2	10	0	1			57	- 40	21	9		T	T			8.0	NW	28					60
CLEVELAND	237	987.8	1017.2	18.3	6.7	12.3	-1.8	29.4	23	- 3.9	10	0	1	5.6	65	56	- 33	19	10	2	T	0	0.6	28	15.6	SW	5	7	13	11	6.1	59
COLUMBUS	247	987.5	1017.5	19.4	7.2	13.4	-3.0	29.4	23	- 3.9	10	0	3	6.1	63	80	- 22	30	8	5	T	T	0.9	33	15.2	SW	5	9	9	13	5.9	66
DAYTON	305	981.4	1017.4	20.6	7.8	14.3	-2.1	30.0	27+	- 1.7	10	0	2	7.8	65	60	- 35	14	9	5	T	0	0.5	32	13.4	SW	5	8	10	13	5.9	67
MANSFIELD	395			17.2	5.6	11.4	-3.0	26.7	27+	- 3.9	10	0	5			72	- 22	19	10	3	36	T						9	11	11	5.8	
TOLEDO	206	992.2	1017.6	18.9	5.6	12.1	-2.5	32.2	27	- 2.8	10	1	3	3.3	58	48	- 29	30	7	2	T	T	0.9	30	14.8	W	5	11	12	8	5.0	66
YOUNGSTOWN	359	974.3	1017.3	17.8	5.0	11.2	-3.2	28.9	24	- 4.4	10	0	7	4.4	65	46	- 57	14	8	2	137	51	1.2	31	13.4	23	5	6	11	14	6.4	
OKLAHOMA																																
OKLAHOMA CITY	390	969.2	1015.0	27.2	13.3	20.4	0.2	35.6	17	4.4	2	7	0	12.2	61	22	-109	17	5	7	0	0	1.8	12	16.5	SE	10	13	7	11	4.8	76
TULSA	198	991.5	1015.6	26.7	12.8	19.8	-0.1	32.2	29+	3.9	2	5	0	12.8	65	47	- 86	16	9	9	0	0	1.2	13	17.4	N	17	14	8	9	4.6	78
OREGON																																
ASTORIA	2	1018.6	1019.4	15.0	5.6	10.3	-1.6	20.0	18+	0.6	17	0	0	6.7	80	55	- 26	27	14	0	0	0	2.6	29	12.5	33	28	8	8	15	6.4	
BURNS U	1265	872.0	1014.1	22.2	4.4	13.1	1.2	30.6	26	- 2.8	23+	0	7	- 1.1	41	5	- 18	2	6		T	T	1.6	31				9	9	13	5.5	
EUGENE	109	1004.4	1018.1	21.1	5.0	12.9	-0.5	29.4	25	1.1	27	0	0	7.2	71	14	- 41	8	3	1	0	0	1.2	34	9.4	35	29+	6	11	14	6.4	
MEACHAM	1234			16.1	3.3	9.8	0.9	28.3	5	- 1.7	23+	0	10			27	- 35	8	13		51	25						6	7	18	6.6	
MEDFORD	396	968.5	1016.0	24.4	6.1	15.2	1.1	33.3	25	0.6	17	2	0	4.4	54	5	- 32	5	2	3	0	0	1.7	32	17.0	12	4	12	8	11	5.1	
PENDLETON	452	962.1	1015.3	23.3	7.8	15.5	0.2	35.6	5	2.2	23	3	0	1.1	41	2	- 27	1	2	2	0	0	2.2	27	15.6	27	6	7	14	10	5.7	
PORTLAND	6	1016.9	1018.0	21.1	6.7	13.9	-0.2	30.6	25	2.8	17	0	0	6.7	66	23	- 27	11	8	0	0	0	2.2	31	11.2	SW	31+	5	11	15	6.5	60
SALEM	60	1010.8	1018.1	21.1	4.4	12.7	-0.8	30.0	25	- 1.1	27	0	3	6.7	69	20	- 34	10	8	1	0	0	1.4	32	9.4	20	31+	7	12	12	6.0	
SEXTON SUMMIT R	1169	883.8	1015.6	17.8	3.3	10.6	0.6	28.9	25+	- 2.8	31	0	11			5	- 51	1	5		0	0	4.6	34	13.4	33	27	12	8	11	5.0	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.9	0.1	32.8	23	25.0	27+	12	0			13	- 97	7	6		0	0						5	12	14	6.4	
ENIWETOK	4	1010.8	1011.4	31.1	26.1	28.5	0.5	32.8	24	23.9	5	5	0	23.9	76	22	- 94	8	9		0	0	6.0	7								
TAGUAC GUAM R	110			31.1	22.2	26.6	-0.3	32.2	27	18.9	21	1	0			64	- 43	17	15		0	0			8.9	SE	18+					72
JOHNSTON	2	1013.9	1014.4	28.3	24.4	26.6	0.3	30.0	31+	22.8	20+	0	0	21.1	73	3	- 22	1	4	0	0	0	5.1	9	12.5	E	6	6	11	14	6.4	54
KOROR R	29	1006.4	1010.2	31.1	24.4	27.8	0.4	32.8	21+	22.8	30+	10	0	24.4	84	231	-141	40	22	2	0	0	1.2	7	11.6	NW	11	0	0	31	9.7	62
KWAJALEIN	2	1010.2	1010.9	30.6	25.0	27.6	0.3	31.1	28+	23.3	10+	0	0	24.4	84	348	141	61	25	0	0	0	6.1	7	11.6	8	14+	1	6	24	8.6	
MAJURO	3	1010.5	1010.8	30.0	25.6	27.6	0.7	30.6	28+	23.3	15	0	0	24.4	83	219	-104	63	21	2	0	0	4.5	8	14.3	E	9	1	12	18	7.7	64
MARCUS ISLAND	6	1013.5	1015.5	28.9	22.8	25.9	-0.2	30.6	31+	19.4	22	0	0	21.7	79	39	- 9	22	8		0	0	2.3	12	11.6	NE	19	5	8	18	7.1	77
PAGO PAGO	4	1011.2	1011.5	30.6	23.3	26.7		32.2	25+	20.0	4	2	0	24.4	88	520		112	25	7	0	0	2.1	10	11.6	SE	31	2	10	19	7.5	47
PONAPE R	37	1004.7	1010.3	30.6	23.9	27.0	0.1	32.2	27+	22.8	25+	2	0	24.4	87	540	24	78	28	1	0	0	2.2	9	8.5	NE	25	0	4	27	9.1	49
TRUK MOEN ISLAND	2	1009.8	1010.1	30.0	24.4	27.4	0.3	32.2	23	22.8	25+	1	0	24.4	84	346	- 13	132	26	3	0	0	3.2	9	8.5	SE	15+	0	3	28	9.0	69
YAP R	19	1008.1	1010.0	30.6	25.0	27.9	0.1	31.7	27+	23.3	28+	0	0	24.4	82	81	29	37	20	0	0	0	4.6	5	11.2	6	2	6	15	10	6.1	
WAKE	3	1014.6	1014.7	28.9	23.3	26.0	-0.6	31.1	28	21.1	14	0	0	21.7	79	170	- 71	38	18	3	0	0	2.8	7	13.0	SE	19	0	2	29	9.6	29
PENNSYLVANIA																																
ALLENTOWN	118	1002.7	1016.9	20.0	7.2	13.6	-2.2	28.9	6	- 1.1	10	0	4	7.2	67	64	- 39	22	13	4	T	0	0.8	31	11.2	33	10+	7	8	16	6.5	
ERIE	223	990.5	1017.4	16.1	6.1	10.9	-2.7	28.9	27	- 1.1	7	0	4	5.0	68	52	- 38	38	9	4	T	T	1.3	27	11.6	21	5	7	14	10	6.1	
HARRISBURG	103	1003.7	1016.5	22.8	10.0	16.3	-0.7	31.1	6	- 0.6	11	0	1	8.3	62	25	- 74	6	12	3	T	0	0.8	31	14.8	W	28	10	4	17	6.4	61
PHILADELPHIA	2	1015.6	1016.7	21.1	9.4	15.3	-1.7	29.4	6	- 2.2	11	0	1	7.8	65	75	- 20	29	13	4	0	0	0.3	20	13.0	W	6	7	9	15	6.5	52
PITTSBURGH	347	972.9	1016.9	20.0	6.7	13.4	-2.1	28.9	27	- 2.8	10	0	3	6.7	66	70	- 29	28	9	2	79	51	1.7	31	16.5	28	28	5	10	16	7.0	43
READING U	81			21.7	10.0	15.8	-1.6	30.0	6	0.6	10	0	0			38	- 58	21	13		T	0			22.4	W	28	9	9	13	6.2	55
SCRANTON	283	982.7	1016.9	18.9	7.2	13.2	-2.2	27.2	28+	- 1.7	10	0	4	5.6	64	84	- 16	29	14	2	15	T	0.9	27	11.6	S	5	5	10	16	7.0	55
WILLIAMSPORT	161	997.6	1016.6	19.4	6.7	13.3	-2.5	26.7	27+	- 2.2	5	0	4	5.6	63	106	2	27	16	3	T	0	0.8	30	14.3	24	28	5	11	15	6.9	
RHODE ISLAND																																
BLOCK ISLAND	34			13.9	7.2	10.6	-1.6	23.9	23	2.2	4	0	0			143	66	43	14		0	0						6	9	16	6.6	
PROVIDENCE	16	1014.2	1016.4	17.8	7.2	12.4	-1.7	27.8	27	2.2	11+	0	0	5.0	64	98	13	36	13	1	0	0	1.4	23	14.8	22	5	5	13	13	6.8	50

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

MAY 1966

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C.	C.	C.	C		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1014.6	1016.1	26.1	16.7	21.4	-1.3	31.1	30	8.3	11	0	0	17.2	80	196	104	67	18	10	0	0	1.1	14	20.6Y	S	14	0	11	20	7.9	44
CHARLESTON U	3			25.0	18.3	21.8	-1.2	32.2	30	9.4	10	1	0			169	91	76	16		0	0			13.4	N	10					
COLUMBIA	66	1007.8	1015.8	26.7	15.6	21.2	-1.1	33.3	29	3.9	11	1	0	15.6	75	156	66	51	12	5	0	0	0.5	9	13.0	24	14	4	10	17	7.5	43
GNVLE SPARTANBURG	292	981.7	1016.2	25.0	13.9	19.4	-1.4	30.6	29+	3.3	11	0	0	13.9	75	78	- 4	23	15	6	0	0	0.3	5	13.4	SW	1	5	9	17	7.1	49
SOUTH DAKOTA																																
ABERDEEN	395	968.5	1015.4	21.1	3.3	12.1	-1.9	32.2	26	- 6.1	9	1	6	3.9	60	23	- 36	11	7	5	8	T	0.5	8	14.8	32	22	9	11	11	5.6	
HURON	391	968.5	1015.1	21.7	5.0	13.1	-1.1	33.9	26	- 4.4	9	1	5	4.4	58	29	- 31	12	7	2	13	T	1.0	14	17.9	NW	22	9	12	10	5.5	77
RAPID CITY	965	903.2	1013.7	22.2	4.4	13.3	0.2	33.3	21	- 2.2	13+	2	4	1.1	49	8	- 59	3	5	2	10	T	0.5	4	23.2	W	14	10	14	7	5.2	70
SIOUX FALLS	432	964.4	1015.8	20.6	4.4	12.4	-2.2	31.1	26	- 3.9		0	2	3.3	56	49	- 37	26	9	5	T	T	0.6	16	13.9	30	15	11	14	6	4.8	
TENNESSEE																																
BRISTOL	459	963.1	1016.9	23.9	10.6	17.2	-1.6	28.3	22	0.0	10	0	1	12.2	76	33	- 54	14	9	6	0	0	0.3	34	8.0	1	9	6	9	16	6.6	
CHATTANOOGA	204	991.9	1016.3	24.4	12.2	18.2	-2.9	30.0	29	3.3	10	0	0	12.8	75	102	12	30	11	7	0	0	0.4	4	11.6	NE	10	8	10	13	6.4	60
KNOXVILLE	299	981.7	1016.7	24.4	13.3	18.9	-0.9	30.0	23+	4.4	10	0	0	12.2	69	74	- 15	31	10	4	0	0	0.7	35	10.7	N	9	6	9	16	6.8	49
MEMPHIS	78	1006.4	1016.7	25.6	14.4	19.9	-1.3	31.1	23	4.4	10	0	0	13.3	68	145	37	37	7	6	0	0	1.4	7	14.8	NW	16	9	14	8	5.2	77
NASHVILLE	180	994.9	1016.5	25.0	12.2	18.5	-1.8	30.0	28+	2.8	10	0	0	12.2	70	101	7	38	7	6	0	0	0.4	36	11.2	S	18+	10	8	13	5.6	69
OAK RIDGE	276			24.4	12.2	18.1	-1.1	29.4	23	2.8	10	0	0			89	- 5	45	10		0	0			13.4Y		9	10	4	17	6.3	
TEXAS																																
ABILENE	537	953.3	1014.0	27.8	15.6	21.7	-0.4	38.3	22	6.1	1	8	0	13.3	64	12	- 98	3	3	6	0	0	1.5	12	15.2	S	11	8	10	13	6.5	73
AMARILLO	1098	891.3	1012.8	27.2	10.6	18.9	-0.3	36.7	21+	1.7	1	7	0	5.0	47	5	- 81	2	3	5	0	0	2.7	18	20.6	NE	8	13	11	7	4.6	71
AUSTIN	182	992.2	1013.8	28.3	18.3	23.3	-0.7	34.4	22	12.2		4	0	17.8	75	80	- 15	23	13	7	0	0	1.0	9	13.9	N	28	5	10	16	7.0	40
BROWNSVILLE	5	1011.9	1012.5	28.3	20.6	24.6	-1.6	32.8	30	16.7		3	0	21.1	85	154	94	105	9	2	0	0	2.1	14	14.3	SW	29	8	11	12	6.1	62
CORPUS CHRISTI	12	1011.5	1013.1	27.8	20.6	24.2	-1.1	32.8	25	16.1	3	3	0	21.7	87	184	108	58	11	4	0	0	2.2	12	13.4	N	5	5	9	17	7.0	36
DALLAS	147	997.6	1014.8	27.8	16.7	22.2	-0.5	35.6	17	10.0	3	6	0	16.1	71	60	- 62	23	6	6	0	0	1.7	13	13.0	S	11	7	10	14	6.3	57
DEL RIO	313	977.3	1013.1	29.4	18.9	24.1	-1.7	39.4	18	12.2	2	11	0	17.8	73	57	- 13	28	7	5	0	0	2.1	12	10.3	8	29+	8	4	19	6.6	
EL PASO	1194	881.1	1010.4	31.1	16.1	23.6	1.4	36.1	30	10.6	13+	15	0	3.9	32	1	- 9	1	1	2	0	0	1.0	23	23.2	NE	26	19	8	4	3.3	87
FORT WORTH	164	994.6	1015.0	26.7	16.1	21.6	-1.1	35.0	17	10.0	4	1	0	16.1	73	80	- 37	60	5	6	0	0	1.2	12	12.5	20	11	7	10	14	6.2	
GALVESTON U	2			26.7	21.7	24.0	-0.3	30.6	19	16.1		0	0			263	192	83	14		0	0			16.5	E	5					39
HOUSTON J	12			28.3	20.0	24.2	-0.4	33.9	23	15.6		4	0			200	88	70	12		0	0										
HOUSTON	15	1011.9	1014.0	28.3	20.0	24.4	-0.1	33.3	24+	15.6	3	3	0	19.4	78	285	175	107	15	9	0	0	1.4	11	11.6	17	11	2	10	19	7.9	43
LUBBOCK	992	903.5	1013.1	28.9	13.3	21.0	0.9	38.3	22+	5.6	12	9	0	7.2	47	17	- 64	15	3	5	0	0	1.8	14	15.6	2	28	12	7	12	5.3	
MIDLAND	869	915.7	1012.4	27.8	14.4	21.3	-1.7	37.2	22	6.7	1	8	0	10.6	59	73	20	64	4	4	0	0	1.4	11	13.9	34	26	10	11	10	5.6	
PORT ARTHUR	5	1013.9	1014.5	28.3	20.0	24.3	0.6	32.2	24	14.4	10	1	0	19.4	79	245	119	147	15	9	0	0	1.3	12	15.2	NW	24	3	13	15	7.1	55
SAN ANGELO	580	947.5	1013.1	29.4	17.2	23.1	-0.4	40.0	22	7.8	1	10	0	13.9	64	53	- 28	46	5	6	0	0	1.2	13	15.6	18	10	10	7	14	6.1	
SAN ANTONIO	240	986.1	1013.8	27.8	18.3	23.1	-1.0	33.9	23	13.3		3	0	18.3	80	90	2	21	12	9	0	0	1.3	8	14.8	NE	18	5	10	16	6.8	41
VICTORIA	32	1009.5	1013.8	28.3	20.0	24.1	-0.5	32.8	24	15.6		5	0	20.0	80	121	17	74	9	2	0	0	1.3	9	19.2Y	N	28	2	12	17	7.3	
WACO	152	996.6	1014.5	27.8	18.3	23.1	-0.4	33.9	30+	12.2	2	8	0	17.2	72	65	- 51	47	6	6	0	0	0.9	11	12.1	1	18	6	10	15	6.6	
WICHITA FALLS	303	978.3	1014.3	30.0	14.4	22.1	-0.2	39.4	22+	5.0	13	11	0	12.8	60	T	-117	T	1	2	0	0	1.8	13	14.3	5	18	9	8	14	6.0	
UTAH																																
MILFORD	1533			26.7	4.4	15.4	1.8	31.7	27+	- 2.2	1	0	5			7	- 10	7	1		0	0						19	8	4	2.9	
SALT LAKE CITY	1286	869.6	1011.7	26.1	8.3	17.1	2.1	32.2	29+	- 1.1	23	2	1	0.6	36	13	- 23	13	3	3	0	0	1.4	14	15.2	SW	31	13	10	8	4.5	87
WENDOVER	1291			25.0	11.1	18.1	1.7	31.7	6	3.3	23	0	0			7	- 10	5	3		0	0						15	12	4	3.8	
VERMONT																																
BURLINGTON	101	1002.4	1015.0	17.2	3.9	10.7	-1.4	29.4	27	- 4.4	3	0	11	3.3	65	63	- 13	20	12	3	99	51	1.1	22	15.2	W	3	2	14	15	7.4	61
VIRGINIA																																
LYNCHBURG	279			24.4	11.1	17.8	-0.7	31.1	6	- 0.6	11	0	1			80	- 1	28	13	3	0	0			9.8	SW	12+	9	12	10	5.7	66
NORFOLK	7	1015.9	1016.8	22.8	12.2	17.6	-2.2	30.6	21	2.2	11	0	0	12.8	77	151	66	49	12	5	0	0	0.8	13	15.6	W	19	6	8	17	7.0	56
RICHMOND	49	1010.8	1016.7	23.3	11.1	17.3	-2.2	31.7	21	0.0	11	0	1	11.1	72	66	- 29	27	11	2	0	0	0.5	15	11.2	N	10+	7	9	15	6.3	62
ROANOKE	350	974.6	1016.1	23.9	11.1	17.4	-1.3	31.1	8	- 0.6	11	0	1	8.9	62	89	- 8	37	9	1	0	0	0.3	22	13.9	33	9	7	14	10	5.8	
WASHINGTON																																
OLYMPIA	59	1011.2	1018.5	19.4	3.9	11.4	-1.4	27.8	25	- 2.2	28	0	3	4.4	65	33	- 18	15	5	0	0	0	1.3	24	13.0	26	5	9	12	10	5.9	
SEATTLE TACOMA	122	1001.7	1018.1	17.8	7.2	12.5	-0.6	26.7	25	2.8	27	0	0	6.1	67	34	- 10	19	6	0	0	0	0.6	28	12.5	22	5	7	13	11	6.3	62
SPOKANE	718	930.9	1014.1	21.1	5.6	13.3	-0.2	33.3	5	- 2.8	17	1	3	1.1	48	12	- 18	3	8	0	T	T	1.8	22	13.0	S	30+	9	8	14	6.1	68
STAMPEDE PASS R	1206			11.1	1.7	6.5	-0.1	23.9	5+	- 5.0	27	0	15			106	- 2	27	11		348	1880						4	9	18	7.2	
TATOOSH ISLAND R	31	1015.6	1018.9	11.7	7.2	9.3	-1.3	13.9	24	5.0	17	0	0	6.7	84	66	- 10	21	14	0	0	0	2.9	23	16.1	NW	12	6	12	13	6.6	51
WALLA WALLA U	289			23.3	9.4	16.4	0.3	35.0	5	5.6	22+	3	0			11	- 26	3	7		0	0			13.0	NW	12	8	11	12	6.0	72
YAKIMA	321	976.6	1014.9	23.9	5.6	14.6	-0.1	34.4	5	0.0	23	2	1	1.7	45	3	- 11	3	1	2	0	0	2.4	29	15.6	31	10	8	14	9	5.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	5	1014.2	1016.8	28.9	23.9	26.4	0.4	30.6	14	22.2	17+	0	0	22.2	79	145	- 36	30	23	1	0	0	4.2	9	11.2	E	31+	2	10	19	7.5	55
SWAN ISLAND	9			30.0	25.6	27.9	-0.2	31.7	30	23.9	31+	0	0			36	- 48	20	9		0	0						2	16	13	6.4	
WEST VIRGINIA																																
BECKLEY	763	928.9	1016.5	21.1	8.9	15.1		27.8	28+	- 5.0	10	0	2	6.1	60	37		22	9	5	T	T	1.3	25	13.0	26	6	9	8	14	5.9	
CHARLESTON	286	982.4	1016.3	24.4	9.4	16.7	-1.5	32.2	28+	- 3.3	10	2	2	8.3	62	39	- 56	12	10	3	0	0	0.8	28	12.1	32	21	10	9	12	5.7	
ELKINS	600	946.2	1017.0	21.7	5.6	13.8	-1.4	30.6	23	- 6.7	10	0	6	6.1	66	43	- 73	10	13	2	T	T	1.7	30	13.4	28	6	9	9	13	6.1	
HUNTINGTON	252	986.8	1016.6	23.3	9.4	16.2	-1.9	30.6	23+	- 2.8	10	0	1	7.8	62	40	- 59	19	8	3	0	0	0.7	29	10.3	27	21	9	9	13	6.0	
PARKERSBURG U	187			22.8	8.9	15.8	-2.0	32.2	23	- 1.7	10	1	1			21	- 73	6	7		0	0			11.6	SW	6+					61
WISCONSIN																																
GREEN BAY	208	991.5	1017.2	17.2	3.9	10.5	-2.2	28.3	26	- 6.1	9	0	8	3.3	66	33	- 45	23	6	2	T	0	0.4	26	14.3	N	28	11	10	10	5.4	63
LA CROSSE	198	992.9	1017.5	20.0	5.6	12.9	-2.2	31.7	26	- 2.8	10+	0	4	3.9	57	58	- 38	34	7	3	T	T	0.4	23	18.3	25	19	16	8	7	4.5	
MADISON	262	985.8	1017.3	17.8	2.2	10.2	-3.2	28.9	26	- 6.7	9	0	12	3.3	64	109	25	92	8	2	18	T	0.5	28	12.5	W	19	9	15	7	5.1	68
MILWAUKEE	205	992.9	1018.3	15.6	3.9	9.8	-2.1	27.8	26	- 6.1	10	0	5	3.9	69	51	- 29	22	8	2	T	T	0.3	4	17.9	SW	23	11	13	7	4.8	72
WYOMING																																
CASPER	1627	836.4	1012.3	23.3	2.8	13.2	1.5	30.6	30	- 3.9	12	0	9	- 2.8	38	8	- 44	6	4	2	53	T	2.1	26	22.8	26	22	7	14	10	5.6	
CHEYENNE	1867	812.4	1013.2	21.7	4.4	13.1	1.5	31.1	30	- 3.3	12	0	5	- 2.8	38	5	- 59	3	2	3	T	T	2.2	27	17.9	N	11	6	14	11	5.8	69
LANDER	1696	828.0	1011.9	22.2	5.0	13.7	2.1	30.0	30	- 2.8	12	0	5	- 2.2	38	20	- 47	17	3	2	36	25	2.0	25	25.0	SW	14	10	11	10	5.5	77
SHERIDAN	1208	877.1	1013.4	21.7	2.8	12.1	0.1	31.7	30	- 5.0	12	0	9			27	- 38	21	5	2	86	25	1.4	31	16.1	NW	14	8	14	9	5.8	72

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season: This month	Current season: Period July through this month	Normals: July through this month
ALABAMA			
BIRMINGHAM	34	3008	2551
HUNTSVILLE	35	3048	3070
MOBILE	1	1611	1560
MONTGOMERY	7	2341	2291
ALASKA			
ANCHORAGE	641	10889	
ANNETTE	575	6941	6748
BARROW	1509	19719	19217
BARTER ISLAND	1408	20013	18938
BETHEL	979	13469	12794
COLD BAY	850	9310	9289
FAIRBANKS	600	15625	14057
JUNEAU	667	9284	8694
KING SALMON	851	12021	10935
KOTZEBUE	1270	16144	15469
MC GRATH	768	15507	14025
NOME	1107	14437	13598
ST. PAUL ISLAND	965	10171	10473
SHEMYA	842	9022	8991
YAKUTAT	822	10465	8657
ARIZONA			
FLAGSTAFF	343	6898	6972
PHOENIX	0	1593	1765
TUCSON	[illegible]	1744	1800
WINSLOW	43	4766	4782
YUMA	0	1123	974
ARKANSAS			
FORT SMITH	30	3185	3292
LITTLE ROCK	42	2985	3219
TEXARKANA	22	2349	2533
CALIFORNIA			
BAKERSFIELD	6	2219	2122
BISHOP	36	4027	4191
BLUE CANYON	245	5219	5312
BURBANK	44	1423	1628
EUREKA U	443	4393	4358
FRESNO	7	2556	2492
LONG BEACH	22	1409	1693
LOS ANGELES	45	1514	1745
LOS ANGELES U	34	1106	1331
MT SHASTA R	227	5387	5563
OAKLAND	176	2488	2780
RED BLUFF	4	2737	2515
SACRAMENTO	36	2626	2767
SANDBERG U	213	4198	4152
SAN DIEGO	40	1408	1403
SAN FRANCISCO	231	3157	2889
SAN FRANCISCO U	300	2862	2821
SANTA CATALINA	213	2139	1947
SANTA MARIA	205	2836	2802
STOCKTON	16	2704	2676
COLORADO			
ALAMOSA	383	8363	8361
COLORADO SPRINGS	249	6173	6339
DENVER	204	5818	6217
GRAND JUNCTION	59	4986	5620
PUEBLO	119	5239	5447
CONNECTICUT			
BRIDGEPORT	366	5738	5590
HARTFORD	275	6081	6148
NEW HAVEN	332	5889	5852
DELAWARE			
WILMINGTON	186	5226	4924
DIST.OF COLUMBIA			
WASH NATL AP	99	4245	4224
FLORIDA			
APALACHICOLA U	0	1424	1308
DAYTONA BEACH	0	841	879
FORT MYERS	0	294	442
JACKSONVILLE	0	1333	1239
KEY WEST	0	58	108
LAKELAND U	0	630	661
MIAMI	0	143	214
ORLANDO	[illegible]	546	766
PENSACOLA	1	1656	1463
TALLAHASSEE	0	1583	1485
TAMPA	0	752	683
WEST PALM BEACH	0	226	253
GEORGIA			
ATHENS	26	3065	2929
ATLANTA	26	3257	2983
AUGUSTA	18	2701	2397
COLUMBUS	8	2461	2383
MACON	13	2636	2136
ROME	43	3490	3326
SAVANNAH	11	2142	1819
IDAHO			
BOISE	172	5420	5728
IDAHO FALLS 42NW R	332	8319	8568
IDAHO FALLS 46W R	337	8033	8283
LEWISTON	160	4847	5452
POCATELLO	253	6865	6892
ILLINOIS			
CAIRO U	79	3755	3821
CHICAGO O HARE	371	6514	6567
CHICAGO MIDWAY	314	6091	6107
MOLINE	287	6461	6369
PEORIA	260	6081	5992
ROCKFORD	417	6938	6770
SPRINGFIELD	242	5472	5411
INDIANA			
EVANSVILLE	149	4711	4435
FORT WAYNE	370	6157	6166
INDIANAPOLIS	223	5430	5660
SOUTH BEND	402	6384	6379
IOWA			
BURLINGTON	246	5906	6081
DES MOINES	256	6356	6769
DUBUQUE	368	7242	7298
SIOUX CITY	236	6700	6912
WATERLOO	336	7247	7266
KANSAS			
CONCORDIA	123	5232	5461
DODGE CITY	116	4851	4977
GOODLAND	149	6015	6099
TOPEKA	107	4875	5170
WICHITA	100	4348	4614
KENTUCKY			
COVINGTON	181	5365	5241
LEXINGTON	167	5021	4683
LOUISVILLE	127	4661	4651
LOUISIANA			
ALEXANDRIA	6	2177	1921
BATON ROUGE	[illegible]	1765	1560
LAKE CHARLES	0	1457	1459
NEW ORLEANS	0	1630	1385
SHREVEPORT	8	2080	2184
MAINE			
CARIBOU	499	9393	9584
PORTLAND	449	7552	7400
MARYLAND			
BALTIMORE	157	5098	4654
MASSACHUSETTS			
BLUE HILL OBS R	330	6475	6299
BOSTON	258	5765	5598
NANTUCKET	471	6363	5762
PITTSFIELD	446	7700	7473
WORCESTER	376	7065	6891
MICHIGAN			
ALPENA	559	8266	8350
DETROIT	335	6178	6190
DETROIT M WAYNE CO	406	6661	6236
DETROIT WILLOW RUN	433	6886	6213
FLINT	459	6853	7287
GRAND RAPIDS	400	6781	6927
HOUGHTON LAKE	535	8218	
LANSING	439	7110	6840
MARQUETTE U	559	8330	8216
MUSKEGON	444	6756	6618
SAULT STE MARIE	615	9032	8847
MINNESOTA			
DULUTH	546	10013	9802
INTERNATIONAL FALLS	560	10850	10432
MINNEAPOLIS	357	8153	8301
ROCHESTER	411	8291	8202
ST CLOUD	410	9017	8774
MISSISSIPPI			
JACKSON	13	2496	2203
MERIDIAN	15	2586	2289
VICKSBURG U	14	2109	2041
MISSOURI			
COLUMBIA	140	4688	5034
KANSAS CITY	95	4324	4711
ST JOSEPH	108	4555	5469
ST LOUIS	156	4819	4885
SPRINGFIELD	153	4453	4555
MONTANA			
BILLINGS	319	7387	6947
GLASGOW	316	9181	8846
GREAT FALLS	304	7579	7564
HAVRE	295	9071	8538
HELENA	267	7434	7934
KALISPELL	373	7949	7984
MILES CITY	251	8246	7624
MISSOULA	304	7328	7906
NEBRASKA			
GRAND ISLAND	188	6278	6485
LINCOLN U	179	5827	5834
NORFOLK	234	7027	6931
NORTH PLATTE	199	6907	6627
OMAHA	185	5741	6188
SCOTTSBLUFF	215	6690	6598
VALENTINE	247	7480	7341
NEVADA			
ELKO	226	7215	7241
ELY	291	7478	7508
LAS VEGAS	0	2416	2709
RENO	135	5569	6143
WINNEMUCCA	172	6086	6608
NEW HAMPSHIRE			
CONCORD	362	7511	7308
MT WASHINGTON OBS	1077	13618	13214
NEW JERSEY			
ATLANTIC CITY	275	5566	4797
ATLANTIC CITY U	217	4906	4717
NEWARK	212	5194	4859
TRENTON U	190	5140	4968
NEW MEXICO			
ALBUQUERQUE	53	4569	4348
CLAYTON	165	5019	5137
RATON	196	5868	6165
ROSWELL	33	3708	3793
SILVER CITY	54	3862	3705
NEW YORK			
ALBANY	347	6891	6830
BINGHAMTON	447	7472	7187
BUFFALO	401	6868	6984
NEW YORK U	166	4738	4862
J.F. KENNEDY	256	5148	5207
NEW YORK LA GUARDIA	214	4926	4805
ROCHESTER	382	6650	6700
SYRACUSE	429	7164	6711
NORTH CAROLINA			
ASHEVILLE	149	4766	4457
CAPE HATTERAS R	104	2981	2612
CHARLOTTE	46	3484	3191
GREENSBORO	71	3909	3805
RALEIGH	72	3621	3393
WILMINGTON	35	2496	2347
NORTH DAKOTA			
BISMARCK	368	9215	8734
FARGO	430	9888	9127
WILLISTON	323	9438	9102
OHIO			
AKRON	344	6192	5998
CINCINNATI OBS	188	4968	4797
CLEVELAND	346	6221	6285
COLUMBUS	286	5708	5633
DAYTON	240	5708	5592
MANSFIELD	381	6585	6343
TOLEDO	348	6605	6434
YOUNGSTOWN	398	6536	6357
OKLAHOMA			
OKLAHOMA CITY	62	3283	3725
TULSA	67	3379	3860
OREGON			
ASTORIA	443	4899	4955
BURNS U	298	6763	6780
EUGENE	295	4310	4591
MEACHAM	473	7241	7535
MEDFORD	182	4418	4930
PENDLETON	194	4575	5064
PORTLAND	249	4239	4530
SALEM	308	4694	4610
SEXTON SUMMIT R	436	5986	5975
PENNSYLVANIA			
ALLENTOWN	272	6058	5786
ERIE	417	6390	6391
HARRISBURG	166	5394	5239
PHILADELPHIA	207	5327	5089
PITTSBURGH	289	6012	5948
PITTSBURGH U	261	5424	5041
READING U	191	5108	4945
SCRANTON	300	6301	6221
WILLIAMSPORT	283	6131	5910
RHODE ISLAND			
BLOCK ISLAND	429	6044	5705
PROVIDENCE	326	5996	5903
SOUTH CAROLINA			
CHARLESTON	15	2344	2033
CHARLESTON U	15	1974	1794
COLUMBIA	19	2802	2484
GNVLE-SPARTANBURG	42	3365	3044
SOUTH DAKOTA			
ABERDEEN	355	8888	8383
HURON	307	8173	8136
RAPID CITY	285	7416	7219
SIOUX FALLS	343	8022	7761
TENNESSEE			
BRISTOL	109	4451	4143
CHATTANOOGA	63	3768	3254
KNOXVILLE	59	3614	3494
MEMPHIS	47	3234	3232
NASHVILLE	78	3656	3578
OAK RIDGE	79	4015	3817
TEXAS			
ABILENE	42	2418	2624
AMARILLO	99	4185	3985
AUSTIN	11	1687	1711
BROWNSVILLE	0	730	600
CORPUS CHRISTI	1	1003	914
DALLAS	24	2219	2363
DEL RIO	9	1410	1504
EL PASO	4	2651	2700
FORT WORTH	26	2227	2405
GALVESTON U	0	1083	1235
HOUSTON U	0	1170	1278
HOUSTON	0	1263	1396
LUBBOCK	48	3046	3578
MIDLAND	46	2687	2591
PORT ARTHUR	0	1391	1447
SAN ANGELO	30	2227	2255
SAN ANTONIO	5	1688	1546
VICTORIA	3	1238	1173
WACO	13	2174	2030
WICHITA FALLS	33	2877	2832
UTAH			
MILFORD	161	6175	6410
SALT LAKE CITY	140	5569	5968
WENDOVER	100	5658	5727
VERMONT			
BURLINGTON	432	8050	8179
VIRGINIA			
LYNCHBURG	102	4480	4166
NORFOLK	121	3866	3421
RICHMOND	133	4374	3865
ROANOKE	118	4557	4150
WASHINGTON			
OLYMPIA	377	5085	5059
SEATTLE TACOMA	321	4428	4986
SPOKANE	291	6326	6520
STAMPEDE PASS R	656	8496	8800
TATOOSH ISLAND R	498	5333	5386
WALLA WALLA U	160	4221	4760
YAKIMA	218	5507	5872
WEST VIRGINIA			
BECKLEY	199	5626	
CHARLESTON	147	4790	4467
ELKINS	254	5950	5627
HUNTINGTON	167	4804	4434
PARKERSBURG U	189	4943	4748
WISCONSIN			
GREEN BAY	437	7879	7930
LA CROSSE	312	7530	7520
MADISON	454	7748	7761
MILWAUKEE	473	7273	7500
WYOMING			
CASPER	289	7240	7281
CHEYENNE	291	6786	7176
LANDER	265	7311	7717
SHERIDAN	345	7459	7533

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

MAY 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS
Alabama														0	0	5	0												
Alaska *																													
Arizona *																													
Arkansas	1	1			3				5			5				4													
California										0	0	4	0																
Colorado	1	1	0	0	0					0	0	°4	C																
Connecticut										0	0	2	0													0	0	4	0
Delaware																										0	0	0	?
Florida	2	2	0	0						0	2	5		1	0	?	?												
Georgia	5	3	0	11	6																					R 1	0	5	5
Hawaii *																													
Idaho								4	6			3		1													2	3	
Illinois	1	1	0	0	5	0	0	°3	C	0	0	°5	C													0	0	L°5	C
Indiana *																													
Iowa	5	2	0	0	5	0	0	4	0	0	0	4	0	0	1	5	0												
Kansas	13	4	0	5	5	0	0	5	6	0	1	5	3	0	0	6	0									0	0	0	6
Kentucky								?	?																				
Louisiana	2	2	0	0	3	0	0	2	3	1	0	5	0	1	4	0	0									0	0	5	0
Maine						0	0	1	0	0	0	3	0	0	0	3	0												
Maryland														0	9	3	0									0	0	?	?
Massachusetts														0	0	4	0									0	0	L 3	0
Michigan	2	2	0	0	3									0	0	4	0									0	0	0	7
Minnesota										0	0	2	0													0	0	5	4
Mississippi	2	1	0	1	4					0	1	5	?	1	1	2	3									0	0	5	?
Missouri	13	5	0	2	4	0	0	4	4	0	1	4	0	1	3	5	0												
Montana						0	0	3	0	0	0	4	0	0	1	2	0												
Nebraska	5	2	0	1	5	0	0	5	5	0	0	5	4																
Nevada										0	6	6	0																
New Hampshire						0	0	1	0	0	0	2	0	0	0	3	0												
New Jersey *																													
New Mexico	5	2	0	0	2	0	0	?	?	0	5	6	3	0	12	0	0												
New York																												4	
North Carolina						0	0	4	6	0	0	4	3	1	4	4	0									0	0	4	4
North Dakota	3	2	0	0	4																								
Ohio	1	1	0	0	0																								7
Oklahoma	10	4	0	3	5	0	0	5	5	0	0	°4	C	0	0	4	0												
Oregon *																													
Pacific Area *																													
Pennsylvania										0	2	5	0													0	0	5	0
Puerto Rico *																													
Rhode Island																										0	0	4	0
South Carolina						0	0	0	6	0	0	4	0	0	0	3	0												
South Dakota	2	1	0	0	3													0	0	?	0					0	0	4	0
Tennessee	2	2	0	0	4	0	0	°5	C	0	0	°4	C	0	0	3	0									0	0	F 4	0
Texas	22	5	0	7	5	0	1	6	4	3	1	5	5	2	1	0	0									2	2	7	0
Utah *																													
Vermont						0	0	1	0	0	0	4	0																
U. S. Virgin Is. *																													
Virginia																										0	0	0	6
Washington *																													
West Virginia						0	0	0	3																				
Wisconsin	1	1	0	2	5					0	2	5	0	0	0	4	0									0	0	0	4
Wyoming *																													

°	Includes crop damage
C	Crop damage
R	Rain
L	Local flooding
F	Flooding

*	No occurrence of storms or unusual weather phenomena.
‡	Includes heavy sleet storm.
#	Freezing drizzle and freezing rain, commonly known as glaze.
∅	For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.
†	Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

MAY 1966

Elmer R. Nelson, Office of Hydrology

The worst flooding since 1961 occurred in the White Basin in Arkansas during May. In the Red River Basin, the Ouachita River and tributaries reached their highest stages since 1958. Smackover Creek at Smackover, Ark., reached a near record stage early in May. In Texas severe flooding occurred in the Sabine and Trinity River Basins. Flash flooding occurred in Georgia on the Oconee River; in Illinois on the Aux Sable Creek; in West Virginia on the West Fork, Cheat, and Tygart Rivers.

HUDSON BAY DRAINAGE

Red River of the North Basin.--The Red Lake River at Crookston, Minn., went out of its banks again on April 29, cresting on May 1, nearly 1 foot above flood stage. This was considerably lower than the 24.34 feet crest occurring on April 3, which approached within 1.5 feet of the record 25.8 feet crest of April 1965. The Red Lake River continued receding during May and went below flood stage early the morning of May 5.

The Red River of the North at Grand Forks, N. Dak., rose above flood stage again on May 1, cresting on May 3 at a stage of 29.5 feet. This was 1.5 feet above flood stage but considerably lower than the earlier crest of 45.63 feet on April 4.

Farther downstream at Drayton, N. Dak., the Red River of the North continued above flood stage for a period of 44 days. It went above bankfull stage on March 28, cresting on April 8 at a record stage of 42.15 feet. It receded within its banks near midnight on May 10.

At Pembina, N. Dak., the main stem had receded to about 1 foot below flood stage by early morning of May 1. It was out of its banks the entire month of April. It crested April 11-12 at a near record stage of 51.3 feet. Flood stage at this point is 42 feet. (A SPECIAL REPORT WILL BE PUBLISHED ON THE RED RIVER OF THE NORTH FLOOD OF MARCH-MAY 1966 IN A LATER ISSUE OF THIS PUBLICATION.)

ST. LAWRENCE DRAINAGE

Lake Erie.--The St. Josephs River at Montpelier, Ohio, was out of its banks from the 14th to the 16th, cresting 1.3 feet above flood stage on the 15th. No damage was reported.

ATLANTIC SLOPE DRAINAGE

The flooding along the upper Neuse River in eastern North Carolina between the 2d and 6th was due to heavy rains ranging from 1 to 2-1/2 inches during the 24-hour period ending at 8 a.m. on the 3d. The Neuse was still at a relatively high stage before the beginning of the heavy rain during the latter part of April. Additional heavy rain of 1 to 2 inches over the upper Neuse during the 24-hour period ending at 8 a.m. on the 22d caused another rise to nearly 2.5 feet above bankfull stage at Smithfield, N. C. The flooding extended downstream to Goldsboro, N. C. No damage was reported from the flooding.

Minor flooding occurred on the Lumber River at Lumberton, N. C., from the 3d to the 7th. Heavy local rains from the 22d through the 27th caused additional flooding on the Lumber River beginning on the 23d and continuing into June. Minor overflow occurred on the north Fork Edisto on the 27th and 28th. Moderate flooding of about 3 feet occurred along the main Edisto at Givhans, S. C., between the 27th and June 5. Several camp sites and approach roads were inundated for several days near Givhans, S. C., on the Edisto.

Flooding occurred on the Savannah River at Clyo, Ga., from the 24th through the end of the month. Flooding occurred mainly in low swampy areas. No damage was reported. The Ogeechee River went out of its banks at Dover and Eden, Ga., on the 28th and continued in flood into June. Flooding occurred mainly in low, swampy areas subject to frequent overflow. No damage was reported.

Severe flash flooding occurred in the headwaters of the Oconee River in Georgia on the 26th and 27th. The Athens area was especially hard hit by extremely heavy rains on the night of the 26-27th. The Weather Bureau cooperative observer at Athens recorded 8.42 inches of rain during the 24-hour period ending at 8 a.m. on the 27th. Most of this rain fell in a period of 8 hours. This was the greatest 24-hour rainfall recorded at Athens during 90 years of record. The heavy rains and resulting flooding of small streams caused extensive damage to streets, roads, bridges, yards, and some buildings in and around Athens. One man lost his life when he drove his car into a stream where a bridge had been washed out. Minor overflow occurred on the Oconee at Milledgeville, Ga., on the 28th, 30th, and 31st. Heavy rains in southern Georgia, totaling 13.60 inches at Folkston, caused the Satilla River to go above bankfull stage on the 27th, cresting more than 2 feet above flood stage on the 31st.

EAST GULF OF MEXICO DRAINAGE

Frequent heavy rains of 1 inch or more during the last half of the month caused the Apalachicola River at Blountstown, Fla., to go above flood stage on the 19th. It crested nearly 2.5 feet above flood stage on the 25th and continued in flood until the 29th. It went above flood stage again on the 31st. Little or no damage resulted in the flooded areas which are heavily wooded and unpopulated. The high water slowed down lumbering operations and interrupted fishing camp industries.

Minor flooding occurred on the Oostanaula River on the 1st and 2d of the month due to general rains during the last 5 days of April. These rains caused the Coosa River at Gadsden, Ala., to go out of its banks on April 28 and continue in flood all of May. These rains were sufficient to fill the reservoir above recently completed Lock 3. Damage was in the form of inundation to farm- and pasturelands. Minor damage resulted to public roads and railroads.

Heavy rains during the last 10 days of April in Mississippi and Alabama caused flooding in the Tombigbee and Pearl River Basins during the latter part of April and the first half of May. Flooding along tributary streams was of short duration and was over by May 3. Flooding along the main stem of the Tombigbee was in progress from the 1st to the 9th. Flooding continued along the Pearl from April 23 to May 16. The crests ranged from 2.4 feet above flood stage at Pearl River, La., to 11 feet above at Jackson, Miss. The Pearl River continued to fall until well below flood stage when a 2-inch rainfall on the 12th and 13th over the headwaters caused the river to start rising again. A heavy thunderstorm on the 18th deposited over 4 inches of rain over Jackson, Miss., and the area immediate to the north. Additional rain of 3 inches followed over a 5-day period causing the Pearl to go out of its banks again at Jackson and Monticello, Miss., between the 20th and 28th. At Pearl River, La., the river went above flood stage on the 25th and continued in flood through the end of the month.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Flooding occurred over the lower Des Moines, the Skunk, and lower Iowa Rivers in Iowa due to heavy rain around the middle of the month. Flooding was confined to low-lying agricultural lands which are normally subjected to flooding during the spring months. The planting of low-lying bottom lands was delayed. No additional damage was reported.

Heavy thunderstorms on the 11th and 12th caused flash flooding at several locations in the Illinois Basin. At Morris, Ill., the Aux Sable Creek flooded portions of the city to depths up to 3 to 4 feet. This was due primarily to debris damming up against a narrow bridge causing the water to be diverted into the city. Flooding developed along the main stem of the Illinois from Morris to Peoria, Ill., and on the Big Muddy at Murphysboro, Ill., between the 12th and 14th. Crests ranged up to 7 feet above flood stage at Morris and LaSalle, Ill. The Fox River at Dayton, Ill., was out of its banks from the 11th to the 14th, cresting on the 12th at 4.7 feet above flood stage. A general period of showers and thundershowers over Illinois and Missouri from the 15th to the 17th caused flooding on the Kaskaskia, Big Muddy, Sangamon, and the Illinois River below Peoria, Ill. Additional heavy rainfall throughout Illinois on the 23d extended the period of flooding on the Illinois River into June in the reach at and below Chillicothe, Ill.

The main stem of the Mississippi River in the reach from Libby, Minn., to Fort Ripley, Minn., was in flood and falling slowly on May 1. It continued in flood at Atkin and Fort Ripley, Minn., until the 9th and at Libby, Minn., until the 24th.

Seven hundred miles further downstream, the Mississippi in the reach from Louisiana, Mo., to Grafton, Ill., was out of its banks between the 18th and 21st.

Missouri Basin.--The James River in South Dakota in the reach from Columbia to Ashton was out of its banks on May 1 due to snowmelt in late March and early April. The James receded below flood stage at Ashton on the 1st and continued to fall slowly the remainder of the month. Some shallow overflow continued above Ashton through May. The main loss from the flooding was agricultural. As much as 40,000 acres of land was flooded during the peak of the flood.

Moderate rains on the 10th through the 12th followed by light to moderate rains on the 15th and 16th caused the Chariton River at Chariton, Iowa, to rise over 1 foot above its banks on the 17th. The flooding began on the 16th and ended on the 17th. Local overflow occurred again at Chariton on the 24th from 1 1/2 to 2 inches of rain.

Ohio Basin.--Moderate to heavy rain showers on April 30 and May 1 caused flash flooding along the West Fork, Cheat, and Tygart Rivers in West Virginia. The heavier amounts (2.75 inches) occurred over the headwater areas of the Monongahela Basin. Crests ranged up to 3.2 feet above flood stage on the West Fork at Weston, W. Va. Flood damages are expected to be minor.

Rainfall totaling near 3 inches over the Little Kanawha Basin in West Virginia from April 27 to May 2 caused up to 5 feet of overflow at Glenville and Creston, W. Va., on May 1. Preliminary estimates by Corps of Engineers indicate about $23,000 damage.

Minor flooding occurred along the lower Scioto River at Piketon, Ohio, in the beginning of the month. The overflow was due to persistent rains during the last 10 days of April. No damage was reported.

The Green River at Calhoun, Ky., was out of its banks from the 2d to the 8th due to persistent rains from April 23 through May 2. No damage was reported from the overflow.

Four feet of overflow occurred on the Muscatuck River at Austin, Ind., between April 30 and May 2. Minor overflow occurred on the White River at Petersburg, Ind., on the 3d and 4th. No damage was reported from the overflow of bottom land.

The Little Wabash River at Wilcox, Ill., and the Saline River at Harrisburg, Ill., which went out of their banks on April 24 receded within their banks on the 2d and 3d respectively. Additional rains of 1.5 inches on the 12th and 13th caused a very slight overflow on the Saline on the 12th and 13th. Rains averaging 1.5 to 2 inches on the 18th caused additional minor overflow on the Skillet Fork, Little Wabash, and Saline Rivers. No damage, other than delaying spring work, was reported from the overflows.

Minor overflow occurred along the main stem of the Ohio River at Point Pleasant, W. Va., and in the lower reach at and below Leavenworth, Ind., between the 1st and 14th. This flooding was due to general heavy rains from April 23 through May 2. These heavy rains produced record rainfall totals for the month of April for Louisville, Ky., and some other portions of the Ohio Basin. The monthly April total of 9.56 inches at Louisville was the greatest in April records dating back to 1872. Streamflow progressively increased throughout the latter part of April to above flood stage on May 1-8. The flow at Louisville was sufficient to produce considerable driftwood and current, cancelling the paddle wheel steamboat race scheduled as part of the Kentucky Derby festival. The overflow necessitated the evacuation from a few summer homes. There was slight damage to early botton-land plantings and minor disruption of business.

White Basin.--Flooding in the White Basin during May was mainly due to rains which occurred during the last 2 weeks of April and May 1. These rains produced the worst flooding in the White Basin in Arkansas since 1961. The Black River at Black Rock, Ark., went above flood stage on April 23 and continued in flood through May. The crest on April 25 was nearly 11 feet above flood stage. Further upstream at Pocahontas, Ark., the Black went out of its banks on April 24 and continued in flood until May 5. It crested on April 28, nearly 5 feet above flood stage. The Cache River at Patterson, Ark., went above bankfull stage on April 21 and continued in flood into June. The main stem of the White began overflowing at Batesville, Ark., on April 24. The entire White River was out of its banks by May 2. It crested between April 24 and May 9 up to 4.3 feet above flood stage. Additional light to heavy rains during May on the 12th, 16th, 18th, and 24th caused minor rises on the already flooded Black and Cache Rivers. These rains lengthened the period of overflow by about 2 weeks. Preliminary estimates of damage from the overflows total nearly $2 million.

Red Basin.--Severe flooding occurred on the Ouachita and tributaries in Arkansas from moderate rains beginning on April 21. The heaviest rains occurred on April 24, 26, 29, 30, and May 1. The Ouachita and tributaries reached their highest stages since 1958. Smackover Creek at Smackover, Ark., (below Camden), approached within 0.3 foot of the record stage on the morning of May 2. Rains on April 30 and May 1 totaled 5 to 6 inches in 24 hours. The Ouachita receded rapidly after May 5 and fell below flood stage at Camden on May 11. Ouachita County and surrounding counties were declared disaster areas. The Little Missouri at Boughton, Ark., and the Little River at Horatio, Ark., topped their banks by nearly 2 feet on May 2.

Seven to 9 inches of rain on April 22-26 and 4 to 5 inches on April 29-30 caused flooding on the Sulphur and Cypress Rivers in Texas and on the lower Red River in Louisiana. The Sulphur River at Hagansport, Tex., was out of its banks from April 24 to May 8, and at Naples, Tex., from April 25 into June. The crests ranged from 11 to over 14 feet above flood stage. The Cypress River at Jefferson, Tex., was in flood from April 25 to May 16. It crested on May 1, 4.2 feet above bankfull stage.

Lower Mississippi Basin.--The St. Francis River at Fisk, Mo., and St. Francis, Ark., rose above flood stage on April 22-24 and continued in flood to May 14 and 19 respectively. The crest at Fisk of 24.8 feet on April 30 and the one at St. Francis, Ark., of 21.8 feet on May 1-3 were 0.2 foot below the March 1964 flood. About 100,000 acres of farmland in the Fisk-St. Francis area were inundated. This flooding was due to heavy rainfall on April 18, 20, 23, and 26. Heavy rains on May 23-24 caused an additional overflow at St. Francis, Ark., on May 27-30. Stages continued only a foot or less below flood stage at the end of the month from below Wappapello Dam to below St. Francis, Ark.

Heavy rain toward the end of April caused flooding on the Big Black River at Bovina, Miss., on April 26 and at Pickens, Miss., on April 29. It crested at Bovina, Miss., 6.6 feet above flood stage on April 30. It receded within its banks early in May. Moderate damage resulted from the overflow.

WEST GULF OF MEXICO DRAINAGE

Excessive rains during the last decade of April caused severe flooding in the Sabine Basin in Texas. Lake Fork Creek at Quitman, Tex., went out of its banks on April 25 and continued in flood to May 7. It crested on May 1, nearly 6 feet above flood stage. Flooding along the Sabine began on April 24 and spread downstream to Logansport, Tex., by April 28. At Milam, Tex., the river reached bankfull stage on May 3 and flood stage on May 5. By May 7 the stream was out of its banks as far downstream as Deweyville, Tex. The Sabine crested at Edgewood and Mineola, Tex., on May 1 and 2, more than 6 feet above flood stage. In the reach from Gladewater, Tex., to Logansport, Tex., a distance of 106 miles, it crested between the 3d and 7th up to 13 feet above flood stage. In the reach below, it crested between the 13th and 22d, 2 to 9 feet above flood stage. In the reach from Edgewood to Milam, Tex., the Sabine was out of its banks from 23 to 34 days, receding below flood stage at Milam on May 29. Flooding continued at Bon Wier and Deweyville, Tex., into June. Extensive lowland flooding near the river necessitated moving livestock to higher ground. Fishing camps along the river were flooded and some overflow into the yards of homes occurred. Some of the roads near the river were flooded and had to be closed.

The Angelina River near Alto, Tex., was in flood from April 26 to May 2. It crested on April 28, 2.4 feet above flood stage. The Neches River near Alto, Tex., was out of its banks from April 25 to May 18. It crested on April 30, 7.4 feet above flood stage. These overflows were due to excessive rains from April 23 to May 2.

Flooding was in progress on May 1 along the Trinity River from Dallas to Midway, Tex. The excessive rains during the last 3 days of April, falling on a basin with already wet soil and swollen streams, resulted in a total runoff comparable to the record floods of 1957 and 1908. The Trinity did not reach the high marks of those floods because of flood control structures and improved floodways in the upper portion. Heavy to excessive rains continued from April 22 to May 2 and ranged from 6 to more than 20 inches. Heavy rains followed during May on the 13th, 14th, 19th, 21st, 24th, and 25th. These recurring heavy rains produced flood conditions below Dallas most of May and into June in the reach at and below Liberty, Tex. Damage from flooding during April and May was heavy.

The only flooding on the Brazos River during May occurred in the lower portion at and below Rainbow, Tex., between the 1st and 8th. High stages occurred upstream to Waco, Tex., but did not reach flood stage.

Moderately heavy rain of 2 to 4 inches during the first week of May caused minor flooding along the Navidad and Guadalupe Rivers in Texas. There was no report of damage from these overflows.

Heavy rains on May 1 caused minor flooding on Turkey Creek from the 2d through the 5th. This water caused bankfull stages with minor flooding along the Nueces above and below Cotulla on the 8th. Heavy showers on May 19-20 caused additional minor flooding on Turkey Creek from the 22d through the 24th. Minor flooding was occurring at the beginning of the month on the middle Nueces near Tilden, Tex. Bankfull stages and minor flooding spread downstream to Three Rivers, Tex., by May 3 and to the mouth of the Nueces at Corpus Christi Bay by May 5. Augmented by runoff from the rains during first week in May minor flooding continued in the reach from Tilden to Corpus Christi Bay through May 17. At Calallen, Tex., the river continued above flood stage through the 21st. Another rise, from locally heavy showers during the night of the 19-20th caused minor flooding at Tilden, Tex., on the 22d which continued the rest of the month. Minor flooding occurred again at Calallen on the 29th. Only minor damage resulted from the overflows.

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.	
Red Lake: Crookston, Minn.	15	Apr. 29	5	15.6	3
Red River of the North: Grand Forks, N. Dak.	28	1	6	29.5	3
Drayton, N. Dak.	32	Mar. 28	10	42.15	Apr. 8
ST. LAWRENCE DRAINAGE					
Lake Erie					
St. Josephs: Montpelier, Ohio	10	14	16	11.3	15
ATLANTIC SLOPE DRAINAGE					
Neuse: Neuse, N. C.	14	2	5	15.4	4
Smithfield, N. C.	13	4 22	6 25	14.7 15.4	5 23
Goldsboro, N. C.	14	26	29	15.2	28
Lumber: Lumberton, N. C.	8	3 23	7 1/	8.2	5-6
North Fork Edisto: Orangeburg, S. C.	8	27	28	#8.1	28
Edisto: Givhans, S. C.	10	27	Jun. 5	12.9	29
Savannah: Clyo, Ga.	11	24	1/	12.7	30,31
Ogeechee: Dover, Ga.	7	28	1/	8.0	30,31
Eden, Ga.	9	28	1/	10.1	29,30
Oconee Milledgeville, Ga.	20	28 30	28 31	25.2 23.6	28 30
Satilla: Atkinson, Ga.	13	27	1/	15.15	31
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	19 31	29 1/	17.4 15.8	25 31
Oostanaula: Resaca, Ga.	23	1	2	23.0	1
Coosa: Gadsden, Ala.	20	Apr. 28	1/	25.2	1
Old Town Creek: Tupelo, Miss.	21	1	1	23.9	1
East Fork Tombigbee: Fulton,Miss.	16	2	3	16.3	3
Tibbee Creek: Tibbee, Miss.	23	Apr. 28	2	25.8	Apr. 29
Tombigbee: Amory, Miss.	20	2	2	20.0	2
Gainesville, Ala.	36	1	6	38.1	3,4
Demopolis, Ala.	48	1	4	51.1	3
Jackson Lock & Dam, Ala.	43	1	9	47.1	5,6
Black Warrior: Warrior Lock & Dam, Ala.	30	29	2	32.8	2
Pearl: Edinburg, Miss.	20	Apr. 7	2	23.1	Apr. 29
Jackson, Miss.	18	Apr. 23 20	9 28	29.0 26.1	Apr. 30 25
Monticello, Miss.	19	Apr. 27 24	9 27	23.0 20.3	Apr. 28 25
Columbia, Miss.	17	Apr. 30	3	17.6	1
Bogalusa, Miss.	15	Apr. 23	14	19.1	3
Pearl River, La.	12	Apr. 26 25	16 1/	14.4 13.6	6 29
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Iowa: Marshalltown, Iowa	13	23	24	14.4	24
North Skunk: Signourney, Iowa	16	(17 (24 (27	20 24 27	19.4 17.7 17.4	17 24 27
Skunk: Oskaloosa, Iowa	15	15 24	15 27	15.9 17.6	17 26
Brighton, Iowa	14	18 28	21 29	15.7 15.4	19 28
South: Ackworth, Iowa	19	15	17	(25.6 (23.5	15 17
Des Moines: Tracy, Iowa	14	16 18	16 18	14.4 14.1	16 18
Eddyville, Iowa	15	17	19	15.9	18
Ottumwa, Iowa	10	18	18	10.4	18
Fox: Dayton, Ill.	12	11	14	16.7	12
Sangamon Monticello, Ill.	11	Apr. 23	3	12.4	Apr. 25
MISSISSIPPI SYSTEM	Ft.			Ft.	
Sangamon: Riverton, Ill.	13	Apr. 22 18	5 28	17.1 19.3	1 19
Illinois: Morris, Ill.	13	12	15	19.8	13
La Salle, Ill.	20	Apr. 29 12	2 26	21.2 26.9	1 13
Chillicothe, Ill.	45	1 13	8 1/	46.0 50.2	4 17
Peoria, Ill.	18	14	29	21.2	17
Havana, Ill.	14	30	1/	17.8	25
Beardstown, Ill.	14	29	1/	19.2	25
Meredosia, Ill.	10	25	1/	18.0	25
Meramec: Pacific, Mo.	11	20	20	13.4	20
Kaskaskia: Shelbyville, Ill.	13	20	20	13.2	20
Vandalia, Ill.	18	18	22	21.9	19
Carlyle Dam, Ill.	21	Apr. 24 20	8 30	23.8 24.7	2 23
Big Muddy: Plumfield, Ill.	16	Apr. 28	3	17.5	Apr. 30
Murphysboro, Ill.	16	Apr. 24 14	9 27	25.1 20.4	Apr. 30 22
Mississippi: Libby, Minn.	13	Apr. 4	24	(13.7 (15.8	Apr. 7 Apr. 25
Aitkin, Minn.	12	Apr. 17	9	13.7	Apr. 30
Fort Ripley, Minn.	10	Apr. 1	9	11.4	1
Louisiana, Mo.	15	18	19	15.2	19
Lock & Dam 24, Clarksville, Mo.	25	19	20	25.2	19
Grafton, Ill.	18	20	21	18.2	21
Missouri Basin					
James: Columbia, S. Dak.	11	Mar. 15	Jun. 11	16.2	Apr. 1-3
Stratford, S. Dak.	14	Mar. 25	1/	16.75	Apr. 11
Ashton, S. Dak.	13	Apr. 9	1	15.2	14,15
Chariton: Chariton, Iowa	12	16 24	17 24	13.15 15.0	17 24
Ohio Basin					
Tygart: Belington, W. Va.	14	Apr. 30	1	14.8	1
Philippi, W. Va.	17	Apr. 30	1	18.5	1
West Fork: Weston, W. Va.	17	Apr. 30	1	20.2	1
Clarksburg, W. Va.	7	1	2	8.0	1
Little Kanawha: Glenville, W. Va.	23	1	1	27.8	1
Creston, W. Va.	20	1	2	#25.1	1
Cheat: Parsons, W. Va.	11	Apr. 30	1	11.1	Apr. 30
Scioto: Piketon, Ohio	16	1	2	18.3	1
Green: Calhoun, Ky.	23	2	8	25.1	6
Muscatuck: Austin, Ind.	16	Apr. 30	3	19.7	2
White: Petersburg, Ind.	16	3	4	16.6	4
Skillet Fork: Wayne City, Ill.	15	19	19	15.1	19
Little Wabash: Wilcox, Ill.	16	Apr. 24 19	2 24	#19.8 18.6	Apr. 29 23
Saline: Harrisburg, Ill.	13	(Apr. 24 (13 (18	3 14 19	20.9 16.0 15.7	Apr. 28 14 18
Ohio: Point Pleasant, W. Va.	40	2	3	40.3	3
Dam 44, Leavenworth, Ind.	53	2	7	55.8	6
Dam 45, Addison, Ky.	47	3	8	49.2	6
Tell City, Ind.	38	2	9	42.3	6
Dam 46, Owensboro, Ky.	41	5	[illegible]	41.5	6
Dam 47, Newburgh, Ind.	38	1	11	43.9	7
Dam 48, Cypress, Ind.	38	2	11	43.2	7
Mt. Vernon, Ind.	35	3	12	40.4	8
Dam 49, Uniontown, Ky.	37	3	12	41.6	8
Shawneetown, Ill.	33	2	13	41.1	9
Dam 50, Fords Ferry, Ky.	34	1	14	43.6	9

FLOOD STAGE DATA

(All dates in May unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Ohio: Dam 51, Golconda, Ill.	40	8	10	40.3	9
Dam 52, Brookport, Ill.	37	5	11	38.6	9
Dam 53, Grand Chain, Ill.	42	5	12	43.5	9
Cairo, Ill.	40	5	12	41.5	9
White Basin					
Black: Pocahontas, Ark.	17	Apr. 24	5	21.8	Apr. 28
		18	27	19.05	22
Black Rock, Ark.	14	Apr. 23	31	(24.9	Apr. 25
				(15.9	14
				(18.4	20
				(18.7	24
Cache: Patterson, Ark.	9	Apr. 21	1/	10.4	Apr. 30- May 4
White: Batesville, Ark.	23	Apr. 24	Apr. 26	26.1	Apr. 24
Newport, Ark.	26	Apr. 26	1	28.6	Apr. 27
Augusta, Ark.	32	Apr. 27	4	33.0	Apr.28, 29
Georgetown, Ark.	21	Apr. 27	15	24.3	1,2
Des Arc, Ark.	24	Apr. 29	15	27.5	2,3
Clarendon, Ark.	26	Apr. 29	31	30.3	5,6
St. Charles, Ark.	25	2	29	27.6	7,8,9
Red Basin					
Little Missouri: Boughton, Ark.	20	1	3	21.8	2
Ouachita: Camden, Ark.	26	Apr. 26	11	39.15	Apr. 30
Little: Horatio, Ark.	27	Apr. 26	5	29.1	2
Sulphur: Hagansport, Texas	38	Apr. 24	8	48.9	1
Naples, Texas	22	Apr. 25	1/	36.3	3
Cypress: Jefferson, Texas	18	Apr. 25	16	22.2	1
Red: Coushatta, La.	31	3	13	34.5	7
Grand Ecore, La.	33	3	15	37.0	7
Alexandria, La.	32	4	16	35.5	10
Lower Mississippi Basin					
St. Francis: Fisk, Mo.	20	Apr. 22	14	(24.8	Apr. 30
				(23.8	9
St. Francis, Ark.	18	Apr. 24	19	21.8	1-3
		27	30	18.1	28-29
Big Black: Pickens, Miss.	16	Apr. 29	--		
Bovina, Miss.	28	Apr. 26	--	34.6	Apr. 30
WEST GULF OF MEXICO DRAINAGE					
Lake Fork Creek: Quitman, Tex.	16	Apr. 25	7	21.8	1
WEST GULF OF MEXICO DRAINAGE	Ft.			Ft.	
Sabine: Edgewood, Tex.	12	Apr. 24	23	18.4	1
Mineola, Tex.	14	Apr. 25	28	20.1	2
Gladewater, Tex.	26	Apr. 24	26	39.1	6
Tatum, Tex.	23	Apr. 24	15	28.8	3
				28.3	7
Carthage, Tex.	30	--	14	30.9	3
Logansport, Tex.	25	Apr. 28	27	36.7	5
Milam, Tex.	35	5	29	43.7	13
Bon Wier, Tex.	17	7	1/	21.5	20-22
Deweyville, Tex.	14	6	1/	16.0	22
Angelina: Alto (nr), Tex.	19	Apr. 26	2	21.4	Apr. 28
Neches: Alto (nr), Tex.	16	Apr. 25	18	23.4	Apr. 30
		21	24	17.2	22
Rockland, Tex.	22	4	13	25.6	8
Beaumont (Bunns Bluff), Tex.	4	12	23	7.0	16
Beaumont (Lawsons Crossing), Tex.	4	13	19	4.8	16
Trinity: Dallas, Tex.	30	(Apr. 28	4	39.7	1
		(7	11	30.9	9
Rosser, Tex.	26	Apr. 25	24	(33.7	Apr. 27
				(36.95	1
Trinidad, Tex.	28	Apr. 24	29	(40.5	Apr. 29
				(42.6	3
Long Lake, Tex.	40	Apr. 26	22	46.1	Apr. 29
				46.05	5
Midway, Tex.	40	Apr. 29	22	45.4	8-9
Riverside, Tex.	40	6	17	45.1	11
Liberty, Tex.	24	25	1/	29.1	15
Moss Bluff, Tex.	4	25	1/	9.3	14-17
Brazos: Rainbow, Tex.	20	1	4	22.8	3
East Columbia, Tex.	30	(Apr. 30	1	30.3	1
		(5	8	30.9	7
Navidad: Ganado, Tex.	21	5	10	27.7	8
Guadalupe: Victoria, Tex.	21	5	6	21.6	5
Turkey Creek: Crystal City, Tex.	8	(2	5	11.7	3
		(22	24	10.4	22
Nueces: Cotulla, Tex.	15	8	8	15.6	8
Tilden, Tex.	14	(1	17	18.6	7-8
		(22	28	17.7	24
		(30	Jun. 4	16.1	Jun. 3
Calallen, Tex.	7	5	22	8.2	8
		29	Jun. 1	7.1	30-31

* Provisional
# Highest stage observed
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	ALBANY, N. Y. 1007 MB						ALBUQUERQUE, N. MEX. 839 MB						AMARILLO, TEXAS 892 MB						ANCHORAGE, ALASKA 1003 MB						* ANNETTE, ALASKA 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	31	86	8.4	80	248	2.9	31	1,619	12.3	45	93	4.5	31	1,095	12.2	66	202	3.7	31	29	4.3	71	197	2.1	31	37	5.7	79	128	4.5
1000	31	142	7.8	74	242	3.7	31	109					31	123					31	65			182	3.7	31	126	5.6	79	133	5.1
950	31	567	7.8	61	260	7.6	31	546					31	563					31	484	2.5	68	178	2.5	31	543	3.0	85	161	9.7
900	31	1,011	5.7	60	276	10.5	31	1,015					31	1,025					31	917	- .2	72	119	3.7	31	981	.5	85	177	13.8
850	31	1,477	3.1	59	274	13.8	31	1,504					31	1,501	13.7	59	224	8.5	31	1,372	- 3.4	79	123	5.1	31	1,438	- 2.3	85	186	15.5
800	31	1,967	.8	58	270	16.5	31	2,015	13.8	35	211	1.6	31	2,011	13.0	48	245	8.0	31	1,848	- 6.8	85	133	7.6	31	1,917	- 5.0	79	196	15.2
750	31	2,483	- 1.1	53	266	20.6	31	2,554	10.8	36	253	6.8	31	2,546	10.1	45	254	10.1	31	2,348	-10.1	87	147	8.2	31	2,418	- 8.0	76	202	16.5
700	31	3,032	- 3.5	49	264	26.0	31	3,126	6.7	37	277	8.9	31	3,121	6.5	41	262	12.0	31	2,878	-13.4	81	149	8.0	31	2,956	-10.9	70	204	16.7
650	31	3,613	- 6.4	48	264	31.9	31	3,725	2.1	40	272	9.1	31	3,720	2.0	39	262	12.0	31	3,436	-16.9	75	155	7.4	31	3,517	-14.0	66	211	18.8
600	31	4,238	- 9.8	47	261	35.9	31	4,370	- 3.0	42	263	9.3	31	4,365	- 2.8	41	267	11.8	31	4,034	-21.0	69	162	7.0	31	4,127	-17.6	66	216	20.0
550	31	4,901	-13.9	43	261	41.4	31	5,045	- 8.3	42	259	10.5	31	5,042	- 7.8	41	272	11.1	31	4,668	-25.3	64	162	7.0	31	4,769	-21.2	63	224	21.4
500	31	5,622	-18.3	42	260	46.0	31	5,785	-13.6	40	252	15.9	31	5,782	-13.2	39	277	13.4	31	5,358	-29.8	62	171	7.0	31	5,473	-25.4	58	232	23.5
450	31	6,397	-23.3	38	258	52.4	31	6,570	-19.1	32	254	18.5	31	6,569	-19.0	35	273	17.1	31	6,095	-35.1	61	188	8.2	31	6,223	-30.1	54	236	25.6
400	31	7,255	-28.8	33	255	58.7	31	7,445	-25.4	29	259	20.8	31	7,443	-25.2	29	270	22.1	31	6,912	-40.9	56	197	9.5	31	7,061	-35.8	51	239	28.6
350	31	8,198	-35.3	32	251	60.4	31	8,399	-32.8	28	264	23.3	31	8,399	-32.3	28	271	28.9	31	7,809	-46.7		206	10.5	31	7,978	-41.7	54	246	30.3
300	31	9,256	-42.6	33	253	65.1	31	9,466	-41.0	34	265	28.0	31	9,467	-40.6	25	269	37.1	31	8,822	-49.8		222	13.0	31	9,010	-47.0		249	33.8
250	31	10,465	-50.9		256	65.5	31	10,683	-49.6		266	38.5	31	10,685	-49.6		267	46.4	31	10,016	-48.7		240	16.3	31	10,207	-50.6		259	28.0
200	29	11,892	-57.0		261	60.0	31	12,117	-57.0		265	44.9	31	12,115	-58.1		271	55.9	31	11,490	-46.6		242	15.0	31	11,656	-51.3		252	22.3
175	29	12,737	-56.6		266	54.4	31	12,956	-59.9		265	46.8	31	12,951	-60.4		276	52.6	31	12,377	-46.4		243	14.0	31	12,525	-50.6		250	19.8
150	29	13,718	-55.5		263	43.5	31	13,917	-60.6		265	42.9	31	13,910	-61.0		275	48.2	31	13,399	-46.9		242	13.6	31	13,530	-50.6		252	19.2
125	28	14,877	-55.8		263	35.9	29	15,051	-61.6		266	39.6	31	15,042	-61.4		275	40.8	31	14,604	-47.7		236	12.6	31	14,716	-51.5		249	15.0
100	28	16,294	-56.7		264	29.3	29	16,430	-62.5		273	29.7	31	16,420	-63.2		280	33.2	31	16,074	-48.7		234	10.3	31	16,160	-52.4		251	11.1
80	28	17,709	-56.5		267	22.7	29	17,797	-64.3		287	18.5	31	17,788	-64.6		284	21.0	31	17,537	-49.8		234	7.6	30	17,604	-53.0		246	8.5
70	28	18,556	-55.9		275	16.9	29	18,614	-63.8		303	10.9	30	18,602	-64.5		290	13.8	31	18,408	-50.3		226	6.0	30	18,464	-53.4		250	9.3
60	28	19,539	-55.2		278	14.2	29	19,562	-62.0		322	7.0	30	19,548	-62.4		294	6.4	31	19,414	-50.6		227	5.8	30	19,456	-53.5		252	6.4
50	28	20,706	-53.9		280	8.4	29	20,699	-58.1		14	4.7	28	20,687	-58.3		333	4.1	31	20,603	-50.6		222	3.7	29	20,630	-53.3		272	4.9
40	27	22,151	-51.7		259	6.0	29	22,112	-55.2		51	4.1	28	22,101	-55.0		28	2.9	31	22,057	-50.6		187	3.1	29	22,066	-53.3		283	3.9
30	26	24,022	-50.1		238	6.0	29	23,964	-50.9		69	7.0	28	23,951	-51.8		79	2.9	29	23,933	-50.1		122	2.9	26	23,937	-52.8		338	2.7
25	26	25,218	-48.6		229	3.7	28	25,156	-48.7		79	7.0	27	25,139	-49.7		83	4.3	28	25,128	-49.5		92	3.7	26	25,116	-51.8		35	4.5
20	25	26,692	-47.3		249	3.9	27	26,627	-46.2		89	5.2	25	26,602	-47.4		91	2.3	25	26,591	-48.3		74	6.6	26	26,567	-50.3		63	7.4
15	21	28,597	-45.9		257	8.2	15	28,547	-43.2				20	28,525	-44.0		119	1.9	24	28,507	-45.2		74	11.3	23	28,454	-47.0		68	7.2
10	12	31,277	-42.4										12	31,265	-39.5				20	31,235	-39.9		81	14.0	17	31,096	-41.7		67	8.4
7																			6	33,782	-33.5				5	33,500	-36.2			

Standard pressure surface (mb.)	ATHENS, GA. 988 MB						* BARROW, ALASKA 1013 MB						BARTER IS., ALASKA 1011 MB						BETHEL, ALASKA 1006 MB						BISMARCK, N. DAK. 956 MB					
SURFACE	31	246	15.4	94	18	1.7	31	[illegible]	-10.2	90	181	1.2	31	15	- 8.[illegible]	90	248	1.9	31	39	- 1.3	87	294	5.8	31	505	5.3	70	81	1.6
1000	31	143					31	108	- 9.7	88	195	1.2	31	101	- 8.1	90	219	1.4	31	84			302	7.0	31	131				
950	31	584	15.9	79	19	2.7	31	507	-10.0	87	251	2.1	31	505	- 6.4	86	330	.8	31	491	- 2.7	81	306	5.6	31	554			99	3.9
900	31	1,039	14.2	73	48	1.9	31	922	- 8.1	73	262	3.1	31	926	- 4.9	76	287	2.1	31	920	- 4.8	80	283	2.9	31	999	7.7	55	217	5.2
850	31	1,521	12.0	72	82	.6	31	1,366	- 8.9	65	248	4.1	31	1,375	- 5.5	65	268	2.9	31	1,368	- 6.9	78	276	2.1	31	1,469	6.4	52	269	6.8
800	31	2,027	9.9	55	279	2.7	31	1,834	-10.4	60	233	4.3	31	1,849	- 7.8	67	231	3.7	31	1,840	- 9.3	74	278	2.3	31	1,964	4.1	50	289	8.9
750	31	2,560	7.4	52	284	5.2	31	2,329	-12.7	54	233	5.6	31	2,346	-10.5	65	199	4.9	31	2,337	-11.8	67	282	2.7	31	2,484	1.1	51	294	13.0
700	31	3,127	3.9	48	286	6.0	31	2,854	-15.6	54	223	6.2	31	2,877	-13.5	61	199	5.6	31	2,862	-14.7	62	282	2.7	31	3,039	- 2.3	52	298	17.9
650	31	3,725	.4	46	291	8.2	31	3,408	-18.9	55	221	7.4	31	3,432	-16.9	56	203	6.8	31	3,418	-18.0	60	292	3.7	31	3,619	- 5.8	52	296	22.3
600	31	4,365	- 3.4	40	284	9.5	31	4,002	-22.8	55	219	7.8	31	4,034	-20.8	58	205	7.2	31	4,014	-21.6	52	296	4.7	31	4,246	- 9.7	48	292	25.1
550	31	5,044	- 7.4	35	276	11.8	31	4,631	-27.0	51	212	8.7	31	4,667	-25.0	56	201	9.1	31	4,644	-25.7	52	291	7.8	31	4,907	-14.2	45	292	28.4
500	31	5,785	-12.0	30	271	15.5	31	5,316	-31.8	52	209	9.7	31	5,359	-29.8	54	200	11.1	31	5,335	-30.4	50	288	10.5	31	5,629	-19.1	44	291	29.9
450	31	6,579	-17.3	32	272	19.4	31	6,050	-37.1	48	202	11.1	31	6,094	-35.[illegible]	52	204	11.5	31	6,073	-35.7	48	289	11.3	31	6,399	-24.3	41	289	34.2
400	31	7,458	-23.2	30	272	23.1	31	6,858	-42.9		198	12.6	31	6,915	-40.6	46	204	15.3	31	6,887	-41.1	48	284	14.6	31	7,254	-30.2	39	289	35.7
350	31	8,422	-30.2	29	271	28.6	31	7,748	-48.7		196	12.6	31	7,813	-46.8		202	19.4	31	7,784	-46.2		286	18.8	31	8,190	-37.5	37	290	39.2
300	31	9,501	-38.4	31	268	31.9	31	8,750	-52.5		201	12.6	31	8,821	-52.0		200	20.8	31	8,801	-49.3		284	23.1	31	9,236	-45.2		291	43.1
250	31	10,728	-48.3		269	37.7	31	9,935	-49.3		205	12.2	31	10,002	-50.9		202	20.0	31	9,996	-49.0		280	23.7	31	10,434	-51.9		293	46.8
200	30	12,165	-58.4		272	43.1	31	11,408	-46.5		207	9.9	31	11,466	-47.1		199	15.5	31	11,465	-47.7		278	20.8	31	11,864	-56.3		293	41.6
175	30	12,998	-61.4		274	46.2	31	12,295	-46.2		211	9.9	31	12,354	-46.5		201	16.7	31	12,348	-47.5		272	16.5	31	12,711	-56.0		293	39.4
150	29	13,952	-61.7		272	44.1	31	13,319	-46.3		204	9.1	30	13,377	-46.5		199	15.3	31	13,366	-47.9		269	16.5	31	13,693	-55.1		294	33.4
125	29	15,084	-61.2		272	40.0	31	14,528	-46.8		201	7.8	30	14,587	-46.8		206	13.4	31	14,567	-48.6		267	15.0	31	14,854	-56.1		294	29.3
100	29	16,466	-62.7		274	34.0	30	16,008	-47.0		189	7.4	30	16,064	-47.2		193	11.1	31	16,032	-49.4		261	11.8	30	16,269	-56.4		297	26.2
80	29	17,837	-64.0		271	23.7	30	17,485	-46.9		183	6.4	30	17,540	-47.6		189	8.0	31	17,492	-50.2		259	8.7	30	17,686	-56.3		301	18.8
70	29	18,656	-63.1		271	18.3	30	18,369	-46.9		178	6.2	30	18,420	-47.7		187	7.2	31	18,362	-50.3		256	6.8	30	18,534	-55.8		303	15.9
60	29	19,610	-61.1		287	8.4	30	19,390	-46.9		173	4.9	30	19,437	-47.5		178	6.8	31	19,369	-50.6		242	5.8	30	19,516	-55.5		302	11.7
50	28	20,746	-58.0		309	2.5	30	20,597	-46.9		162	5.1	30	20,641	-47.8		165	6.0	31	20,557	-50.7		241	3.7	30	20,678	-55.2		315	8.9
40	28	22,163	-54.3		65	5.4	30	22,075	-46.7		128	4.5	30	22,114	-47.7		129	4.5	31	22,010	-50.7		160	1.2	27	22,109	-53.7		330	4.7
30	28	24,019	-51.0		93	10.9	30	23,983	-46.4		98	6.8	30	24,016	-47.1		104	6.8	31	23,885	-50.5		88	2.7	27	23,964	-52.1		315	3.7
25	26	25,209	-48.7		91	13.8	29	25,192	-45.8		86	8.9	30	25,225	-46.3		89	8.7	29	25,078	-50.3		94	3.7	27	25,147	-50.7		295	4.7
20	19	26,676	-46.1		91	14.6	29	26,681	-44.7		86	11.1	29	26,710	-45.1		82	12.0	29	26,536	-49.7		61	5.1	27	26,608	-48.4		283	8.9
15	11	28,594	-43.8		93	17.1	28	28,613	-42.0		81	15.5	25	28,629	-42.9		84	16.7	28	28,435	-47.2		74	9.3	25	28,503	-45.8		281	13.0
10							26	31,397	-37.4		84	18.6	18	31,343	-39.2				22	31,156	-42.5		82	13.2	11	31,244	-41.7			
7							11	33,919	-33.0				6	33,836	-36.1				14	33,660	-37.4		81	13.4						
5																			7	36,147	-30.2									

Standard pressure surface (mb.)	BOISE, IDAHO 914 MB						* BOOTHVILLE, LA. 1014 MB						* BROWNSVILLE, TEXAS 1011 MB						BUFFALO, N. Y. 991 MB						*CANTON IS., PACIFIC AREA + 1010 MB					
SURFACE	31	868	9.9	58	185	2.3	31	1	22.1	89	71	1.9	31	7	21.6	96	160	2.5	31	218	7.4	76	224	2.7	31	4	30.9	65	64	8.0
1000	31	110					31	123	22.2	90	81	3.3	31	105	21.6	96	158	4.5	31	144					31	91	28.6	64	65	8.4
950	31	546					31	570	20.0	83	82	3.9	31	554	20.3	83	169	8.9	31	565	7.3	58	252	6.6	31	535	23.0	69	70	9.5
900	31	998	12.8	47	217	1.7	31	1,034	17.6	76	141	2.5	31	1,017	18.7	69	175	7.4	31	1,010	5.1	56	268	9.9	31	1,013	20.5	63	88	10.1
850	31	1,478	12.6	39	329	4.9	31	1,522	15.0	67	174	2.5	31	1,507	17.1	58	186	5.8	31	1,475	2.2	59	277	13.2	31	1,506	18.3	55	95	11.7
800	31	1,985	9.9	39	321	4.1	31	2,033	12.1	61	194	3.5	31	2,023	15.1	47	205	3.9	31	1,962	.1	53	278	17.9	31	2,023	16.3	45	94	12.2
750	31	2,518	6.4	43	276	5.1	31	2,570	9.1	56	222	2.9	31	2,571	12.3	44	278	2.9	31	2,478	- 1.8	54	278	24.3	31	2,568	13.9	40	92	13.8
700	31	3,080	2.6	43	257	8.9	31	3,140	5.7	57	257	3.9	31	3,143	8.8	39	306	5.4	31	3,025	- 4.2	50	275	30.5	31	3,149	10.8	38	90	14.0
650	31	3,671	- 1.4	39	256	12.0	31	3,743	2.4	51	286	5.8	31	3,750	4.6	41	302	8.0	31	3,603	- 7.3	48	273	32.6	31	3,758	7.2	38	95	15.9
600	31	4,306	- 5.9	42	257	13.4	31	4,386	- 1.3	48	292	8.2	31	4,399	.1	45	303	10.7	31	4,226	-10.8	43	271	34.2	31	4,417	4.0	30	93	15.5
550	31	4,976	-10.8	48	254	15.5	31	5,071	- 5.6	44	292	11.1	31	5,087	- 4.7	46	303	13.2	31	4,890	-14.6	36	272	38.1	31	5,111	.1	25	88	15.3
500	31	5,710	-16.1	46	252	15.7	31	5,815	-10.4	41	285	13.4	31	5,835	- 9.4	42	299	16.3	31	5,607	-19.1	34	270	41.2	31	5,877	- 4.3	21	83	14.6
450	31	6,492	-21.7	44	252	19.4	31	6,617	-15.3	39	288	18.6	31	6,639	-14.6	40	296	18.1	31	6,381	-24.3	29	268	45.5	31	6,695	- 9.4	22	80	15.0
400	31	7,353	-28.2	44	251	21.6	31	7,499	-21.2	36	285	21.2	30	7,526	-20.7	38	293	24.3	31	7,233	-30.1	26	264	47.4	31	7,601	-15.1	22	90	14.6
350	31	8,297	-35.3	36	253	23.7	31	8,470	-28.6	34	287	25.1	30	8,500	-27.6	37	292	28.2	31	8,170	-36.6	30	266	52.6	31	8,598	-21.7	19	102	10.9
300	30	9,350	-43.5		256	26.2	31	9,556	-36.7	31	290	30.3	30	9,591	-35.8	34	286	33.2	31	9,222	-43.7		265	57.5	31	9,714	-30.3	20	115	10.1
250	30	10,554	-51.7		259	29.1	31	10,793	-46.2		288	35.0	30	10,833	-45.5		288	39.6	31	10,430	-49.9		265	63.3	31	10,983	-40.6	21	137	8.7
200	30	11,979	-57.8		261	31.1	31	12,241	-56.5		289	39.8	30	12,284	-56.4		286	46.2	31	11,870	-54.0		266	58.5	31	12,463	-52.8		175	7.6
175	29	12,815	-58.6		263	26.8	30	13,080	-60.2		287	45.5	30	13,122	-60.8		285	49.1	31	12,725	-54.3		264	48.4	31	13,311	-59.8		191	7.8
150	29	13,786	-57.2		267	24.3	30	14,035	-62.1		288	43.3	29	14,077	-64.4		282	45.3	30	13,719	-54.0		261	40.6	31	14,257	-67.2		222	6.6
125	29	14,939	-57.5		268	21.0	30	15,159	-63.3		287	38.7	29	15,184	-66.9		282	35.7	30	14,888	-54.9		263	34.6	30	15,336	-74.5		249	5.6
100	28	16,343	-58.2		276	18.3	30	16,519	-66.5		286	26.6	29	16,518	-71.0		287	20.8	30	16,311	-55.5		267	30.1	30	16,615	-79.9		266	7.6
80	28	17,747	-58.0		283	16.1	30	17,863	-67.9		281	13.6	28	17,833	-71.4		290	5.6	30	17,734	-55.4		271	24.3	30	17,875	-79.6		100	9.5
70	28	18,588	-57.6		287	13.6	30	18,665	-66.8		279	6.2	27	18,625	-69.9		100	2.7	30	18,584	-55.6		273	17.5	30	18,638	-75.1		89	19.8
60	26	19,570	-57.2		303	11.8	30	19,604	-62.9		338	1.9	27	19,552	-65.8		88	7.0	30	19,567	-54.6		273	12.4	30	19,544	-69.4		88	28.4
50	25	20,727	-57.1		323	8.9	30	20,737	-58.9		62	3.7	27	20,671	-61.3		99	7.8	30	20,737	-53.7		283	6.6	30	20,649	-62.9		86	28.7
40	23	22,146	-56.1		349	7.4	29	22,148	-55.6		92	10.9	27	22,067	-57.2		94	13.2	30	22,176	-51.8		284	3.5	30	22,044	-57.0		97	2.7
30	22	23,982	-53.7		4	7.6	28	24,000	-51.8		91	15.9	26	23,905	-52.9		87	20.4	30	24,053	-49.2		293	2.5	30	23,888	-52.0		268	26.6
25	21	25,159	-52.0		339	5.4	27	25,190	-49.3		91	17.9	26	25,087	-50.2		88	23.5	30	25,252	-47.8		289	3.3	30	25,077	-48.7		267	31.3
20	20	26,616	-49.4		318	6.2	27	26,662	-46.2		84	18.5	26	26,553	-47.2		85	23.9	28	26,730	-46.9		293	3.7	29	26,557	-45.0		272	31.3
15	16	28,497	-46.2		273	9.7	24	28,595	-42.4		81	18.3	25	28,476	-43.5		88	25.8	27	28,643	-45.5		293	6.4	27	28,498	-41.7		267	27.2
10	6	31,182	-40.7				19	31,355	-37.5		92	17.1	22	31,238	-38.8		92	22.0	18	31,366	-41.0				21	31,264	-37.7		276	20.4
7																			5	33,905	-34.8				15	33,759	-33.3		253	11.8
5																									7	36,148	-29.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C. 1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	16.7	88	254	1.2
1000	31	139	17.1	77	237	4.3
950	31	577	15.3	74	255	8.7
900	31	1,033	13.2	68	260	9.5
850	31	1,513	11.2	63	254	10.3
800	31	2,018	9.1	57	249	11.8
750	31	2,548	6.7	54	248	14.8
700	31	3,115	3.6	51	249	16.3
650	31	3,708	.1	46	245	18.5
600	31	4,350	- 3.6	44	243	20.0
550	31	5,024	- 7.5	41	247	21.4
500	31	5,769	-12.2	43	246	24.3
450	31	6,560	-17.5	39	250	26.2
400	31	7,440	-23.4	36	247	31.9
350	31	8,403	-30.4	35	247	37.7
300	31	9,481	-38.6	32	246	40.0
250	31	10,707	-48.3		253	45.8
200	30	12,138	-58.8		256	50.9
175	30	12,970	-62.0		262	50.7
150	30	13,922	-61.9		263	43.1
125	30	15,052	-61.4		262	37.1
100	29	16,433	-62.3		265	30.3
80	29	17,808	-62.6		264	22.3
70	29	18,633	-61.5		271	15.5
60	28	19,591	-59.3		271	7.8
50	27	20,735	-56.7		266	3.9
40	27	22,162	-53.2		102	2.7
30	27	24,026	-50.5		94	7.2
25	25	25,214	-48.6		102	9.5
20	24	26,690	-46.4		94	9.1
15	21	28,601	-43.5		86	8.2
10	17	31,343	-39.3		309	5.2
7	7	33,776	-35.2			
5						

* CARIBOU, ME. 992 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	191	5.3	77	237	3.3
1000	30	121				
950	30	542	5.1	62	260	7.2
900	30	981	3.3	58	272	10.1
850	30	1,444	.8	56	273	12.0
800	30	1,927	- 1.8	53	274	14.0
750	30	2,441	- 4.4	51	270	17.3
700	30	2,979	- 7.3	47	264	21.4
650	30	3,552	-10.1	41	259	25.[illegible]
600	30	4,168	-13.2	42	256	31.5
550	30	4,821	-17.3	39	255	35.0
500	30	5,534	-21.8	35	256	38.9
450	30	6,301	-26.9	33	254	47.0
400	30	7,142	-32.7	31	253	54.4
350	30	8,070	-39.1	27	253	56.9
300	30	9,112	-45.5		256	62.2
250	30	10,311	-51.1		257	67.8
200	30	11,755	-52.2		260	59.2
175	30	12,619	-51.8		259	52.6
150	30	13,619	-51.9		258	43.7
125	30	14,799	-52.4		258	36.7
100	30	16,238	-53.0		262	28.0
80	30	17,674	-53.4		261	19.8
70	30	18,533	-53.1		261	16.1
60	30	19,527	-52.4		255	15.0
50	30	20,705	-51.9		251	10.5
40	30	22,154	-50.5		231	6.8
30	30	24,037	-48.8		202	3.1
25	29	25,236	-48.1		221	5.2
20	28	26,709	-47.8		232	4.7
15	26	28,606	-46.2		253	4.5
10	15	31,375	-39.5		75	4.9
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CHARLESTON, S. C. 1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	13	18.2	90	40	.8
1000	31	139	18.4	85	151	1.7
950	31	576	16.8	77	210	3.7
900	31	1,039	14.9	72	214	4.1
850	31	1,521	12.3	70	241	6.2
800	31	2,028	9.8	63	235	9.7
750	31	2,561	6.9	63	241	10.3
700	31	3,126	3.6	63	247	10.7
650	31	3,721	.2	60	256	13.6
600	31	4,363	- 3.3	58	256	14.4
550	31	5,041	- 7.2	50	257	14.8
500	31	5,785	-11.7	49	256	17.1
450	31	6,579	-16.9	48	252	19.0
400	31	7,461	-22.8	46	257	21.4
350	31	8,427	-29.8	39	261	25.1
300	31	9,507	-38.3	36	260	28.4
250	31	10,735	-48.2		266	33.4
200	31	12,170	-58.5		267	36.7
175	31	13,002	-62.0		268	41.2
150	31	13,953	-62.7		270	38.3
125	31	15,079	-61.8		272	33.4
100	31	16,455	-63.8		270	28.2
80	31	17,816	-65.2		271	18.6
70	31	18,631	-64.0		274	13.4
60	31	19,580	-61.3		285	6.6
50	31	20,720	-57.9		356	.6
40	31	22,136	-55.0		88	6.4
30	30	23,986	-51.5		94	8.4
25	29	25,173	-49.6		96	9.9
20	28	26,642	-46.7		79	10.5
15	20	28,588	-42.8		80	10.3
10	7	31,363	-37.7			
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CHIHUAHUA, MEXICO 857 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,428	16.1	57	222	1.2
1000	31	93				
950	31	534				
900	31	1,006				
850	31	1,498	16.8	52	256	1.7
800	31	2,016	16.9	43	247	3.5
750	31	2,561	13.5	44	266	6.0
700	31	3,138	9.5	44	217	4.9
650	31	3,743	4.9	44	240	5.6
600	30	4,394	- .2	48	240	11.1
550	30	5,074	- 5.3	49	244	15.2
500	30	5,825	-10.2	43	247	18.6
450	30	6,622	-15.6	36	256	19.8
400	30	7,507	-21.7	33	262	23.9
350	30	8,477	-28.7	37	267	31.3
300	30	9,561	-36.7	33	261	33.4
250	30	10,799	-45.6		257	41.0
200	27	12,246	-55.5		261	48.6
175	26	13,093	-60.1		266	52.3
150	26	14,048	-62.5		267	42.5
125	25	15,167	-64.5		268	34.4
100	24	16,518	-67.2		269	23.1
80	24	17,860	-68.7		274	15.0
70	22	18,659	-66.9		263	7.4
60	21	19,601	-63.5		244	3.3
50	21	20,734	-59.3		98	5.1
40	18	22,145	-55.7			
30	15	23,999	-52.2			
25	14	25,184	-50.0			
20	12	26,645	-47.0			
15	6	28,577	-43.0			
10						
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* COLD BAY, ALASKA 1009 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	1.8	84	270	5.4
1000	31	101			278	7.4
950	31	512	- 1.0	91	264	10.3
900	31	943	- 3.0	91	266	11.5
850	31	1,394	- 4.9	84	268	12.6
800	31	1,870	- 6.7	78	272	15.5
750	31	2,373	- 8.6	67	270	17.5
700	31	2,906	-10.7	65	268	18.6
650	31	3,468	-13.7	61	266	21.0
600	31	4,078	-17.1	56	268	25.8
550	31	4,721	-21.0	51	269	25.3
500	31	5,424	-25.4	53	269	28.7
450	31	6,176	-30.6	52	272	25.8
400	31	7,009	-36.0	51	281	27.6
350	31	7,924	-42.0	49	287	28.4
300	31	8,955	-47.3		286	24.5
250	31	10,151	-50.3		288	22.9
200	31	11,606	-50.0		273	18.3
175	31	12,480	-49.5		270	18.5
150	31	13,490	-49.6		266	17.5
125	31	14,680	-50.5		272	15.0
100	31	16,133	-51.3		260	14.6
80	31	17,579	-52.0		259	9.7
70	31	18,442	-52.2		247	9.5
60	31	19,438	-52.1		253	8.4
50	31	20,618	-51.7		266	5.1
40	31	22,063	-52.0		261	2.3
30	31	23,927	-51.6		203	1.9
25	29	25,106	-51.1		195	1.6
20	29	26,559	-50.1		63	1.9
15	26	28,457	-47.5		56	3.9
10	20	31,136	-43.1		43	6.6
7	14	33,583	-38.0		38	9.5
5	7	35,960	-34.9			

COLUMBIA, MO. 988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	238	12.0	75	141	1.2
1000	30	136				
950	30	565	13.6	61	227	3.9
900	30	1,023	12.0	57	267	8.4
850	30	1,501	10.7	43	278	11.5
800	30	2,004	8.3	41	282	15.3
750	30	2,531	5.9	38	289	18.3
700	30	3,097	2.9	34	292	20.8
650	30	3,686	- .7	32	293	21.6
600	30	4,327	- 5.1	33	291	23.9
550	30	4,993	-10.0	35	292	26.8
500	30	5,732	-14.6	31	293	28.7
450	30	6,510	-20.0	29	286	30.5
400	30	7,385	-26.5	29	285	32.8
350	30	8,335	-33.8	30	281	36.1
300	30	9,398	-41.9	32	275	40.2
250	30	10,609	-50.9		276	43.3
200	30	12,033	-58.9		279	45.8
175	30	12,867	-60.1		278	45.3
150	30	13,831	-59.1		281	43.9
125	30	14,974	-59.5		284	39.8
100	30	16,370	-59.8		284	31.3
80	30	17,760	-60.9		282	21.4
70	30	18,590	-60.7		283	16.5
60	30	19,551	-58.9		283	10.7
50	30	20,702	-56.5		290	7.0
40	30	22,127	-53.7		284	2.7
30	30	23,990	-50.3		312	1.9
25	28	25,181	-48.5		283	1.0
20	23	26,634	-46.8		250	2.5
15	14	28,569	-44.0		272	6.0
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CORPUS CHRISTI, TEXAS 1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	6	22.4	95	135	2.3
1000	26	101	21.8	95	119	3.1
950	26	545	19.5	92	174	4.7
900	26	1,013	18.7	80	165	6.8
850	26	1,504	16.8	73	180	4.9
800	26	2,020	14.5	68	193	2.3
750	26	2,560	11.9	64	260	4.1
700	26	3,140	8.5	63	307	5.2
650	26	3,745	4.4	62	315	7.4
600	26	4,397	- .2	65	308	9.3
550	26	5,080	- 4.6	63	305	14.2
500	26	5,832	- 9.4	61	306	15.7
450	26	6,630	-14.9	61	299	20.0
400	26	7,522	-20.9	57	293	24.5
350	26	8,496	-27.7	56	291	30.5
300	26	9,585	-36.3	54	288	38.5
250	26	10,825	-45.8		287	48.8
200	26	12,276	-56.1		288	55.4
175	26	13,116	-60.7		289	58.9
150	26	14,068	-63.6		289	57.1
125	26	15,183	-65.1		289	39.8
100	26	16,533	-68.8		290	21.0
80	26	17,866	-69.4			
70	26	18,664	-67.6			
60	26	19,599	-64.5			
50	26	20,726	-59.9			
40	25	22,130	-56.8			
30	25	23,971	-52.5			
25	24	25,161	-50.0			
20	24	26,630	-46.9			
15	23	28,550	-43.8			
10	20	31,314	-37.9			
7	15	33,787	-33.9			
5	6	36,095	-32.2			

DAYTON, OHIO 982 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	297	9.5	80	14	.4
1000	31	147				
950	31	578	10.8	60	257	3.1
900	31	1,025	9.3	58	274	8.5
850	31	1,497	7.5	53	281	13.6
800	31	1,995	5.2	48	280	16.5
750	31	2,518	2.6	45	276	19.6
700	31	3,076	- .2	40	276	23.3
650	31	3,662	- 3.0	41	278	27.6
600	31	4,296	- 7.0	38	277	31.5
550	31	4,964	-11.3	37	277	35.2
500	31	5,695	-15.8	33	276	36.3
450	31	6,474	-21.3	30	273	39.0
400	31	7,340	-27.4	31	271	44.3
350	31	8,288	-34.2	29	273	50.1
300	31	9,349	-42.3	36	272	54.8
250	31	10,557	-51.5		271	59.4
200	31	11,979	-58.5		272	62.4
175	31	12,817	-58.8		273	60.2
150	31	13,788	-57.5		273	49.9
125	31	14,937	-58.6		271	39.8
100	31	16,338	-58.7		271	37.7
80	31	17,737	-59.0		273	28.6
70	31	18,576	-58.1		276	21.0
60	31	19,546	-57.7		274	10.9
50	31	20,701	-56.0		268	6.2
40	31	22,130	-53.0		254	4.9
30	31	23,999	-50.1		258	2.5
25	31	25,192	-49.1		265	.8
20	30	26,658	-47.1		311	1.7
15	27	28,569	-44.8		268	5.2
10	15	31,278	-42.1			
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DEL RIO, TEXAS 977 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	314	20.1	88	107	5.4
1000	31	113				
950	31	558	19.8	85	129	9.7
900	31	1,024	18.2	82	162	11.7
850	31	1,513	17.0	70	181	9.5
800	31	2,029	14.8	61	206	5.6
750	31	2,570	12.2	50	255	3.5
700	31	3,148	8.2	46	315	4.7
650	31	3,748	3.8	48	318	7.4
600	31	4,400	- 1.0	50	310	11.1
550	31	5,080	- 5.9	59	302	14.6
500	31	5,830	-10.9	53	289	18.8
450	31	[illegible],626	-15.9	42	283	22.5
400	31	7,511	-21.9	38	278	25.3
350	31	[illegible],481	-28.8	36	277	31.3
300	31	9,566	-37.0	34	269	39.8
250	31	10,802	-46.1		269	49.3
200	31	12,252	-56.4		271	55.6
175	31	13,090	-60.8		275	59.2
150	31	14,042	-63.0		276	52.6
125	30	15,164	-64.4		275	42.5
100	30	16,518	-67.5		280	28.4
80	28	17,857	-69.4		281	11.1
70	28	18,655	-68.1		278	5.1
60	28	19,587	-64.6		321	1.6
50	28	20,713	-59.8		91	5.4
40	28	22,120	-56.1		89	10.3
30	27	23,966	-51.7		85	11.8
25	27	25,154	-49.4		81	14.0
20	27	26,625	-46.7		88	15.7
15	21	28,534	-43.6		88	18.8
10	[illegible]	31,288	-39.6			
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DENVER, COLO. 837 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,611	7.6	59	185	3.3
1000	31	117				
950	31	550				
900	31	1,008				
850	31	1,487				
800	31	1,993	12.7	39	252	4.5
750	31	2,528	10.0	37	252	6.6
700	31	3,102	6.0	38	261	8.9
650	31	3,698	1.2	40	275	11.5
600	31	4,342	- 3.9	44	275	14.6
550	31	5,017	- 9.1	44	279	17.3
500	31	5,753	-14.3	41	276	18.8
450	31	6,539	-19.9	40	273	20.2
400	31	7,407	-26.1	36	270	23.7
350	31	8,359	-33.7	35	271	26.2
300	31	9,421	-42.2		270	29.7
250	31	10,630	-51.4		273	35.9
200	31	12,051	-58.9		276	40.8
175	31	12,886	-60.2		275	40.4
150	31	13,851	-58.5		273	38.3
125	31	14,994	-59.0		275	32.2
100	31	16,391	-59.9		279	28.2
80	30	17,782	-60.5		286	22.0
70	30	18,614	-59.9		299	14.6
60	30	19,578	-59.5		309	8.7
50	30	20,725	-57.2		323	8.4
40	30	22,147	-54.6		337	4.7
30	30	24,003	-51.3		317	2.5
25	30	25,193	-49.4		334	3.9
20	28	26,660	-46.9		287	4.5
15	20	28,578	-43.7		279	8.4
10	10	31,280	-41.9			
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DODGE CITY, KANS. 925 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	792	11.4	72	190	3.5
1000	31	127				
950	31	560				
900	31	1,016	13.5	59	201	11.7
850	31	1,498	13.4	46	225	13.0
800	31	2,007	11.9	43	233	7.4
750	31	2,538	8.9	40	245	8.0
700	31	3,112	5.4	38	265	9.5
650	31	3,709	.9	41	271	12.8
600	31	4,351	- 3.9	37	264	13.8
550	31	5,025	- 8.8	33	270	16.3
500	31	5,764	-13.9	30	268	19.6
450	31	6,547	-19.6	24	276	21.0
400	31	7,420	-26.3	26	281	23.1
350	31	8,372	-33.6	25	279	27.2
300	31	9,435	-42.0		279	32.8
250	31	10,647	-51.0		275	40.2
200	31	12,070	-59.2		273	49.5
175	31	12,903	-60.5		275	49.1
150	31	13,865	-59.6		277	47.6
125	31	15,005	-60.1		280	40.2
100	31	16,394	-61.3		282	31.7
80	31	17,772	-62.8		281	20.0
70	31	18,595	-62.4		289	14.6
60	31	19,546	-60.4		291	10.3
50	31	20,691	-57.5		316	5.2
40	31	22,107	-55.2		344	3.5
30	31	23,959	-51.3		34	1.6
25	31	25,148	-49.5		45	2.1
20	31	26,618	-46.7		83	2.9
15	29	28,543	-43.6		70	.4
10	15	31,302	-41.1			
7						

EL PASO, TEXAS 882 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,193	17.9	41	308	1.7
1000	31	104				
950	31	550				
900	31	1,021				
850	31	1,512	18.5	41	229	2.3
800	31	2,030	15.5	42	253	8.0
750	31	2,571	11.8	41	256	10.1
700	31	3,147	7.4	42	250	10.5
650	31	3,752	3.2	37	246	11.1
600	31	4,395	- 1.9	42	241	12.0
550	31	5,074	- 7.1	41	243	13.4
500	31	5,818	-12.0	36	243	17.9
450	31	6,613	-17.5	32	251	21.4
400	31	7,488	-24.0	31	254	27.4
350	31	8,449	-31.0	31	256	33.6
300	31	9,525	-38.8	32	259	43.1
250	31	10,753	-47.6		260	52.8
200	31	12,196	-57.0		263	58.1
175	31	13,034	-60.2		263	56.1
150	31	13,991	-62.0		264	49.1
125	31	15,116	-62.9		265	40.8
100	31	16,484	-65.0		268	28.4
80	31	17,835	-67.1		284	11.3
70	31	18,642	-65.9		314	5.2
60	31	19,583	-63.2		343	5.1
50	31	20,714	-59.1		67	3.3
40	31	22,125	-55.6		72	9.3
30	30	23,973	-51.3		85	11.3
25	30	25,165	-48.8		87	10.5
20	30	26,640	-45.9		88	13.6
15	23	28,573	-42.4		99	7.8
10	7	31,350	-38.6			
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ELY, NEV. 808 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,908	5.1	48	197	7.0
1000	31	125				
950	31	560				
900	31	1,019				
850	31	1,491				
800	31	1,992	9.2	39	189	6.6
750	31	2,530	8.9	34	187	6.6
700	31	3,096	4.9	36	219	10.1
650	31	3,693	.4	39	230	13.8
600	31	4,332	- 4.7	44	229	15.2
550	31	5,004	- 9.9	43	235	14.2
500	31	5,738	-15.2	37	238	13.6
450	31	6,520	-20.6	30	241	14.4
400	31	7,388	-26.8	30	241	15.9
350	31	8,335	-34.5	30	246	17.7
300	31	9,393	-43.2		246	18.3
250	31	10,597	-52.1		250	20.6
200	31	12,015	-59.1		251	23.1
175	31	12,849	-60.5		250	25.3
150	31	13,811	-59.5		250	24.7
125	30	14,953	-59.1		258	23.3
100	30	16,347	-60.5		261	20.2
80	30	17,737	-60.4		268	16.1
70	30	18,567	-60.7		285	11.3
60	28	19,528	-59.9		306	8.0
50	26	20,672	-58.4		360	2.9
40	25	22,083	-56.2		6	4.3
30	25	23,926	-52.3		22	2.7
25	24	25,113	-50.0		15	3.1
20	22	26,569	-47.7		342	2.7
15	21	28,485	-44.5		297	5.8
10	11	31,217	-40.7		285	8.9
7	6	33,718	-35.0			

EMPALME, MEXICO 1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	20.7	65	5	3.3
1000	31	99	23.4	57	11	2.3
950	31	545	24.3	37	13	.6
900	31	1,020	22.4	31	219	3.3
850	31	1,514	19.7	32	197	5.8
800	31	2,033	16.4	32	192	9.5
750	31	2,578	12.5	34	203	11.1
700	31	3,152	8.3	38	210	14.6
650	31	3,758	3.8	39	220	16.7
600	31	4,404	- .7	38	226	19.0
550	31	5,090	- 5.2	35	230	20.6
500	31	5,836	-10.1	32	238	23.5
450	31	[illegible],637	-15.7	27	241	26.0
400	31	7,519	-21.8	32	247	29.1
350	31	8,488	-29.0	32	249	35.5
300	31	9,571	-37.3	33	253	41.4
250	31	10,805	-46.5		256	47.8
200	31	12,253	-56.2		254	59.8
175	31	13,092	-60.4		254	60.4
150	31	14,045	-63.0		254	51.3
125	31	15,160	-65.3		258	41.4
100	31	16,509	-68.4		258	23.9
80	31	17,842	-69.4		264	7.2
70	31	18,639	-68.1		24	2.9
60	31	19,575	-64.8		78	6.8
50	30	20,698	-60.5		83	8.9
40	29	22,102	-56.4		83	10.9
30	26	23,943	-52.3		85	15.7
25	25	25,130	-50.2		87	15.7
20	20	26,603	-46.6		83	18.8
15	12	28,523	-43.3			
10						
7						

* FAIRBANKS, ALASKA 991 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	135	4.5	70	337	1.9
1000	31	61				
950	31	482	3.9	61	328	1.7
900	31	917	1.1	62	226	4.1
850	31	1,374	- 2.2	65	215	4.3
800	31	1,853	- 5.9	72	199	4.3
750	31	2,353	- 9.8	78	204	4.9
700	31	2,884	-13.5	76	202	4.9
650	31	3,440	-17.2	72	197	5.8
600	31	4,038	-21.4	69	195	6.6
550	31	4,670	-25.8	63	192	7.4
500	31	5,358	-30.7	60	190	8.4
450	31	6,090	-35.9	56	193	11.3
400	31	6,907	-41.5	61	193	13.2
350	31	7,802	-47.0		203	18.6
300	31	8,813	-51.5		200	23.1
250	31	9,996	-50.4		206	19.4
200	31	11,464	-46.9		210	14.8
175	31	12,350	-46.7		217	14.8
150	31	13,372	-46.8		215	13.8
125	31	14,579	-47.4		220	11.8
100	31	16,052	-48.0		220	11.3
80	31	17,519	-48.8		219	9.9
70	30	18,397	-49.0		218	7.2
60	30	19,408	-49.1		208	4.1
50	30	20,604	-49.2		172	4.9
40	30	22,065	-49.3		143	4.7
30	30	23,951	-48.9		96	3.9
25	28	25,157	-47.8		71	7.0
20	27	26,631	-46.4		75	11.3
15	23	28,551	-43.7		73	15.7
10	18	31,291	-39.0		74	20.4
7	10	33,847	-33.2			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1966

FLINT, MICH.
989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	234	6.9	71	241	2.3
1000	31	143				
950	31	564	6.9	58	264	5.2
900	31	1,008	5.3	56	279	9.7
850	31	1,473	3.0	56	287	13.6
800	31	1,963	1.0	49	287	17.1
750	31	2,479	-1.1	42	283	22.0
700	31	3,027	-3.9	45	283	26.4
650	31	3,606	-7.0	47	279	30.7
600	31	4,230	-10.5	44	281	34.0
550	31	4,891	-14.4	38	280	38.3
500	31	5,612	-18.8	32	278	44.1
450	31	6,382	-24.4	32	278	47.8
400	31	7,236	-30.7	32	277	52.1
350	31	8,171	-37.1	33	276	56.9
300	31	9,220	-44.2		275	61.8
250	31	10,425	-50.5		273	67.6
200	31	11,863	-55.0		275	67.2
175	31	12,716	-54.6		275	58.7
150	31	13,704	-54.1		275	46.0
125	31	14,872	-54.9		271	36.1
100	30	16,294	-55.8		271	31.7
80	30	17,714	-55.9		275	21.4
70	30	18,563	-55.4		275	17.3
60	30	19,547	-55.3		275	11.7
50	30	20,713	-54.0		270	7.8
40	30	22,151	-51.8		270	5.4
30	28	24,025	-49.0		253	3.9
25	28	25,225	-47.8		253	8.7
20	20	26,689	-45.9		263	9.5
15	13	28,614	-44.0		248	13.4
10						
7						
5						

FORT WORTH, TEXAS
994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	180	17.5	87	132	1.0
1000	31	131				
950	31	574	17.7	77	152	4.7
900	31	1,033	16.7	66	197	5.8
850	31	1,520	15.1	57	232	4.9
800	31	2,031	12.9	47	267	4.5
750	31	2,573	9.8	40	262	2.5
700	31	3,141	6.2	38	265	3.9
650	31	3,745	2.1	37	275	6.4
600	31	4,386	-2.7	39	284	8.5
550	31	5,065	-7.6	36	286	11.7
500	31	5,806	-12.3	31	285	13.8
450	31	6,605	-17.6	30	286	16.9
400	31	7,477	-23.6	28	285	20.8
350	31	8,439	-30.8	28	283	27.2
300	31	9,516	-38.9	27	278	36.3
250	31	10,742	-48.3		274	49.0
200	31	12,179	-57.8		275	58.1
175	31	13,014	-60.7		278	53.6
150	31	13,969	-62.0		279	48.2
125	31	15,095	-62.3		280	40.2
100	31	16,466	-64.4		281	27.6
80	30	17,819	-67.4		283	17.3
70	30	18,626	-65.4		288	11.3
60	30	19,569	-62.8		307	4.9
50	30	20,704	-58.3		64	1.7
40	30	22,116	-55.5		85	5.8
30	30	23,967	-51.2		83	8.7
25	30	25,156	-49.6		83	10.1
20	29	26,629	-46.8		89	9.9
15	21	28,539	-43.4		79	9.1
10	12	31,298	-40.9			
7						
5						

GLASGOW, MONT.
933 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	696	6.5	70	89	5.8
1000	31	115				
950	31	540				
900	31	989	10.1	51	162	5.1
850	31	1,464	9.1	49	257	4.9
800	31	1,964	5.9	52	291	7.2
750	31	2,485	2.4	54	298	11.3
700	31	3,043	-1.7	59	295	13.0
650	31	3,621	-5.6	55	288	16.9
600	31	4,251	-9.6	53	286	21.2
550	31	4,906	-14.2	50	291	24.7
500	31	5,633	-19.2	44	296	25.6
450	31	6,400	-24.8	37	296	27.2
400	31	7,254	-31.3	38	294	30.3
350	31	8,187	-38.1	32	291	34.0
300	31	9,233	-45.0		292	37.7
250	31	10,431	-52.3		293	37.5
200	30	11,849	-56.8		293	37.5
175	30	12,695	-56.6		291	33.2
150	30	13,676	-55.3		293	30.1
125	30	14,837	-55.7		295	25.4
100	30	16,255	-56.6		296	20.8
80	30	17,671	-56.6		300	17.5
70	30	18,517	-56.4		304	13.8
60	30	19,496	-55.7		310	10.7
50	30	20,659	-55.0		316	9.9
40	30	22,086	-54.3		327	7.2
30	30	23,937	-52.5		343	4.3
25	30	25,116	-51.5		325	5.2
20	29	26,574	-49.6		304	6.6
15	28	28,463	-46.4		297	8.7
10	25	31,176	-41.0		295	10.5
7	19	33,589	-36.2		286	16.3
5	15	35,939	-30.4			

* GRAND JUNCTION, COLO.
851 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,474	12.5	40	120	5.2
1000	31	97				
950	31	539				
900	31	1,001				
850	31	1,488			111	5.8
800	31	1,999	13.2	35	163	5.2
750	31	2,536	10.2	35	233	5.4
700	31	3,108	5.9	39	260	9.5
650	31	3,704	1.2	44	262	13.0
600	31	4,348	-4.3	49	263	15.2
550	31	5,019	-9.7	54	258	17.5
500	31	5,756	-15.1	52	256	19.2
450	31	6,538	-20.4	41	262	21.0
400	31	7,407	-26.4	34	261	21.8
350	31	8,358	-33.8	34	262	23.1
300	31	9,421	-41.9	33	266	24.9
250	31	10,631	-51.2		269	27.2
200	31	12,054	-58.6		269	32.4
175	31	12,888	-60.6		270	34.8
150	31	13,850	-59.4		271	31.7
125	31	14,991	-60.0		272	28.2
100	30	16,384	-60.5		276	24.7
80	30	17,771	-61.2		284	17.3
70	30	18,600	-61.2		298	13.6
60	28	19,561	-59.6		328	10.1
50	28	20,704	-58.3		333	7.0
40	26	22,120	-55.8		353	6.6
30	26	23,966	-51.9		346	4.1
25	26	25,153	-49.7		352	2.1
20	24	26,619	-46.7		247	2.5
15	21	28,553	-43.0		275	4.9
10	18	31,299	-40.2		310	3.5
7						
5						

* GREAT FALLS, MONT.
886 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,123	6.9	63	226	7.2
1000	31	109				
950	31	540				
900	31	994				
850	31	1,466	9.7	44	246	13.4
800	31	1,967	6.7	47	264	11.8
750	31	2,487	3.0	49	267	12.4
700	31	3,049	-.5	47	269	13.2
650	31	3,634	-4.3	46	270	16.5
600	31	4,265	-8.3	42	274	17.1
550	31	4,929	-12.9	44	273	22.7
500	31	5,656	-17.8	42	271	24.7
450	31	6,430	-23.2	42	276	26.6
400	31	7,289	-29.1	38	277	30.7
350	31	8,229	-36.3	38	277	33.2
300	31	9,281	-44.5		275	33.8
250	31	10,480	-52.2		274	33.8
200	30	11,899	-57.1		273	32.6
175	30	12,745	-56.4		276	31.1
150	30	13,725	-55.5		278	27.6
125	30	14,888	-55.9		281	21.6
100	30	16,304	-56.7		285	17.9
80	30	17,719	-56.6		291	15.2
70	29	18,570	-56.4		298	12.6
60	29	19,550	-55.2		306	9.7
50	29	20,714	-54.8		318	8.2
40	29	22,143	-53.9		347	6.8
30	28	23,995	-52.5		336	4.5
25	28	25,176	-51.1		4	2.5
20	27	26,628	-49.2		310	3.1
15	25	28,537	-45.5		288	8.7
10	21	31,277	-38.9		278	6.8
7	10	33,749	-34.3			
5						

GREEN BAY, WIS.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	210	5.6	83	280	1.7
1000	31	140				
950	31	560	6.8	57	300	5.8
900	31	1,002	4.5	55	304	8.5
850	31	1,466	1.8	53	304	12.2
800	31	1,952	-.9	47	303	14.8
750	31	2,462	-2.7	42	297	20.2
700	31	3,011	-5.4	44	295	25.3
650	31	3,583	-8.3	46	294	31.1
600	31	4,206	-11.8	46	297	35.4
550	31	4,864	-15.8	44	295	38.9
500	31	5,580	-20.4	38	292	42.5
450	31	6,343	-25.8	35	292	45.6
400	31	7,195	-32.1	34	292	50.9
350	31	8,124	-38.8	35	290	58.5
300	31	9,168	-45.1		292	65.7
250	31	10,369	-51.3		289	69.0
200	31	11,806	-54.6		288	64.5
175	31	12,662	-53.8		287	52.8
150	31	13,653	-53.9		286	42.5
125	31	14,822	-54.8		282	37.1
100	31	16,247	-55.3		283	30.9
80	31	17,669	-55.7		284	22.7
70	31	18,518	-55.5		288	17.7
60	29	19,509	-54.8		294	10.7
50	29	20,675	-54.4		277	5.4
40	29	22,109	-52.6		311	3.3
30	28	23,976	-50.5		269	3.7
25	26	25,174	-48.5		271	6.0
20	25	26,642	-46.8		250	8.4
15	21	28,555	-44.4		254	12.4
10	6	31,336	-40.4			
7						

GREENSBORO, N. C.
985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	273	15.0	91	320	1.0
1000	31	145				
950	31	584	14.5	74	297	3.9
900	31	1,038	13.2	65	302	5.1
850	31	1,518	10.7	63	286	7.4
800	31	2,022	8.4	61	277	8.9
750	31	2,554	6.1	51	273	11.1
700	31	3,116	3.2	43	272	11.5
650	31	3,710	-.4	43	272	12.8
600	31	4,349	-4.3	37	276	15.0
550	31	5,023	-8.4	35	271	17.3
500	31	5,764	-12.9	29	266	20.6
450	31	6,556	-18.4	29	269	24.3
400	31	7,429	-24.4	26	269	26.6
350	31	8,389	-31.5	25	266	32.4
300	31	9,462	-39.8	28	266	38.7
250	31	10,683	-49.3		268	44.7
200	31	12,113	-58.7		268	47.8
175	31	12,946	-61.3		269	45.8
150	31	13,901	-61.8		268	44.1
125	31	15,035	-60.4		271	37.1
100	31	16,422	-61.4		272	30.1
80	31	17,801	-62.3		268	21.8
70	31	18,626	-61.5		271	15.2
60	31	19,587	-59.4		272	9.9
50	31	20,736	-56.5		273	4.5
40	31	22,162	-53.5		71	1.9
30	31	24,024	-50.9		98	4.9
25	29	25,210	-48.8		109	6.2
20	29	26,685	-46.0		85	7.2
15	23	28,602	-43.5		65	4.7
10	6	31,353	-41.4			
7						

GUAM, MARIANA IS.
1000 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	111	25.2	88	94	7.0
1000	31	110			92	7.6
950	31	559	22.8	87	94	15.5
900	31	1,032	20.1	81	101	15.3
850	31	1,524	17.7	71	101	12.4
800	31	2,041	15.5	56	98	11.1
750	31	2,586	13.1	44	96	10.5
700	31	3,164	10.3	38	94	9.5
650	31	3,775	6.8	36	95	9.1
600	31	4,430	3.1	34	93	9.5
550	31	5,130	-.6	27	94	9.7
500	31	5,886	-4.6	22	85	8.5
450	31	6,700	-9.8	17	80	9.9
400	31	7,607	-15.7	20	82	8.4
350	31	8,600	-23.0	24	80	6.0
300	31	9,711	-31.4	21	9	1.4
250	31	10,975	-41.5		268	7.2
200	31	12,450	-53.4		259	10.5
175	31	13,295	-60.1		265	10.5
150	31	14,241	-67.3		268	8.0
125	31	15,320	-74.1		296	2.1
100	31	16,604	-78.9		67	9.1
80	30	17,868	-78.9		76	17.3
70	30	18,632	-75.6		80	22.1
60	30	19,538	-68.7		86	27.4
50	29	20,642	-64.7		91	32.2
40	29	22,019	-60.3		86	34.8
30	28	23,836	-54.2		86	31.9
25	28	25,015	-50.3		86	28.6
20	28	26,479	-47.7		86	25.8
15	24	28,401	-44.7		84	26.4
10	10	31,135	-41.4			
7						

HILO, HAWAII
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	21.0	87	228	4.7
1000	31	142	21.3	82	213	4.3
950	31	586	18.3	86	134	4.5
900	31	1,048	15.3	87	123	5.8
850	31	1,531	12.6	87	127	5.1
800	31	2,040	10.9	69	126	4.1
750	31	2,581	9.3	50	101	1.4
700	31	3,147	7.6	40	293	2.9
650	31	3,754	4.8	31	277	6.4
600	31	4,403	1.4	29	265	9.3
550	31	5,096	-2.7	27	270	12.2
500	31	5,847	-7.6	27	268	15.3
450	31	6,656	-13.2	26	269	17.9
400	31	7,546	-19.3	30	272	21.4
350	31	8,525	-26.2	29	270	27.8
300	31	9,620	-34.9	29	273	36.1
250	31	10,866	-44.7		276	46.0
200	31	12,320	-56.1		275	60.0
175	31	13,158	-61.9		275	66.4
150	31	14,099	-67.3		276	65.3
125	31	15,185	-71.7		274	49.5
100	31	16,497	-72.6		267	29.9
80	30	17,813	-70.1		253	5.6
70	30	18,611	-67.8		107	8.7
60	29	19,542	-65.4		95	16.5
50	28	20,662	-62.2		92	24.1
40	28	22,052	-59.0		89	28.0
30	28	23,876	-54.3		89	33.8
25	28	25,054	-51.0		91	32.4
20	25	26,518	-47.4		85	33.0
15	23	28,438	-44.2		90	32.8
10	10	31,167	-41.2			
7						

* INTERNAT. FALLS, MINN.
973 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	360	3.5	64	329	.2
1000	31	138				
950	31	556	4.4	58	236	.8
900	31	995	2.5	60	283	5.2
850	31	1,455	.1	59	298	9.9
800	31	1,939	-2.3	58	310	12.6
750	31	2,445	-5.3	58	307	15.0
700	31	2,988	-7.9	52	311	17.9
650	31	3,555	-10.8	49	311	20.6
600	31	4,173	-13.9	45	312	25.8
550	31	4,824	-17.7	42	308	30.3
500	31	5,537	-22.2	40	308	34.2
450	31	6,295	-27.4	39	307	37.7
400	31	7,142	-33.4	38	307	41.2
350	31	8,067	-40.1	34	307	47.6
300	31	9,103	-46.8		305	49.9
250	31	10,297	-52.0		303	49.3
200	31	11,733	-53.5		300	42.9
175	31	12,593	-52.8		299	38.5
150	31	13,588	-52.8		294	30.9
125	31	14,762	-53.7		297	26.0
100	31	16,194	-54.1		294	22.7
80	31	17,626	-54.1		297	17.9
70	31	18,481	-54.3		297	15.2
60	31	19,470	-54.3		299	13.4
50	31	20,640	-53.9		302	8.2
40	31	22,076	-53.0		319	5.2
30	30	23,943	-51.4		315	3.3
25	30	25,130	-50.1		297	2.7
20	30	26,593	-48.7		275	4.7
15	28	28,515	-45.2		264	5.2
10	19	31,281	-39.3		19	3.7
7	6	33,684	-34.9			

JACKSON, MISS.
1004 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	94	18.1	88	69	1.9
1000	31	131			81	3.3
950	31	571	18.1	73	105	3.7
900	31	1,034	16.1	71	59	.6
850	31	1,518	13.3	67	303	2.3
800	31	2,027	11.0	52	292	3.9
750	31	2,560	8.1	48	295	5.1
700	31	3,129	4.4	48	291	5.1
650	31	3,723	.6	47	285	5.2
600	31	4,367	-3.5	47	290	8.4
550	31	5,043	-7.9	52	288	9.9
500	31	5,785	-12.4	50	283	13.2
450	31	6,575	-17.5	44	282	16.7
400	31	7,455	-23.5	43	284	21.4
350	31	8,418	-30.3	40	280	26.0
300	31	9,496	-38.6	37	279	31.7
250	31	10,722	-48.3		278	40.6
200	31	12,157	-58.3		280	47.6
175	30	12,987	-61.7		284	49.3
150	30	13,939	-62.2		285	45.3
125	30	15,064	-62.7		283	37.7
100	30	16,434	-64.6		281	27.4
80	30	17,787	-66.9		283	18.5
70	30	18,596	-65.4		281	11.1
60	30	19,538	-63.1		292	4.9
50	30	20,671	-58.6		51	2.1
40	29	22,082	-55.8		83	6.2
30	29	23,929	-51.8		87	11.1
25	29	25,115	-49.8		87	12.6
20	28	26,585	-46.9		85	12.0
15	28	28,504	-44.0		79	11.8
10	7	31,249	-41.2			

* JACKSONVILLE, FLA.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	20.5	93	303	.2
1000	31	143	20.1	89	93	.4
950	31	584	18.5	78	212	4.5
900	31	1,046	16.2	70	219	7.0
850	31	1,532	13.4	69	226	8.7
800	31	2,040	10.6	61	230	10.1
750	31	2,571	7.8	54	234	11.3
700	31	3,142	4.7	48	239	11.8
650	31	3,741	1.3	48	242	14.2
600	30	4,383	-2.0	42	244	14.6
550	30	5,062	-6.2	37	249	15.9
500	30	5,808	-11.0	38	256	16.7
450	30	6,606	-15.8	36	259	18.3
400	30	7,488	-21.8	34	263	19.4
350	30	8,456	-29.0	32	267	21.2
300	30	9,539	-37.6	29	269	23.1
250	30	10,770	-47.5		267	25.3
200	29	12,206	-58.0		273	31.9
175	29	13,039	-61.4		274	37.5
150	29	13,993	-62.1		277	36.3
125	29	15,118	-62.8		273	29.1
100	29	16,485	-65.1		277	20.8
80	29	17,837	-66.7		279	13.2
70	29	18,646	-65.3		282	8.4
60	29	19,590	-62.2		302	3.1
50	29	20,725	-58.8		79	3.5
40	28	22,137	-55.5		105	8.9
30	28	23,986	-51.6		93	14.0
25	27	25,171	-49.8		96	15.0
20	26	26,637	-46.9		88	15.9
15	21	28,555	-43.3		81	15.5
10	8	31,301	-38.5			

JOHN F. KENNEDY INT. ARPT.NY
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	11.5	73	299	3.5
1000	31	147	11.3	68	304	5.1
950	31	579	10.0	61	303	6.0
900	31	1,024	8.2	58	282	8.4
850	31	1,494	6.5	55	278	13.2
800	31	1,990	4.2	50	273	19.0
750	31	2,516	2.1	49	271	22.7
700	31	3,069	-.7	54	265	28.6
650	31	3,661	-3.8	56	264	32.1
600	31	4,287	-7.2	54	264	35.4
550	31	4,960	-11.0	53	261	40.0
500	31	5,687	-15.4	47	260	44.1
450	31	6,475	-20.4	42	261	48.8
400	31	7,337	-26.4	39	257	53.4
350	31	8,288	-33.5	37	257	56.7
300	31	9,352	-41.5	43	261	61.2
250	31	10,565	-50.7		260	67.2
200	30	11,996	-57.9		263	69.9
175	30	12,835	-59.0		262	61.0
150	30	13,805	-57.5		263	50.5
125	30	14,957	-57.3		263	42.2
100	29	16,364	-58.2		262	33.4
80	29	17,770	-57.4		265	23.9
70	29	18,613	-57.5		265	18.3
60	29	19,590	-56.3		266	9.9
50	29	20,753	-54.5		266	5.1
40	29	22,189	-52.1		239	2.3
30	28	24,059	-49.8		52	1.2
25	27	25,257	-48.6		62	1.6
20	23	26,733	-46.6		45	3.3
15	9	28,628	-44.0			
10						

JOHNSTON IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	25.3	77	86	9.7
1000	31	132	24.1	80	85	11.5
950	31	585	20.4	85	84	12.0
900	31	1,047	17.7	80	87	10.9
850	31	1,535	15.7	67	85	8.7
800	31	2,048	14.1	51	80	5.6
750	31	2,592	12.1	41	75	3.3
700	31	3,166	9.1	38	289	2.7
650	31	3,777	5.6	41	260	4.5
600	31	4,426	1.8	39	256	7.4
550	31	5,119	-2.4	39	260	11.3
500	31	5,873	-6.8	38	255	14.8
450	31	6,687	-12.0	39	252	18.5
400	30	7,578	-18.3	40	259	21.2
350	30	8,562	-25.2	39	259	26.2
300	30	9,663	-33.6	37	259	33.6
250	30	10,916	-43.4		258	43.9
200	30	12,379	-55.2		258	54.2
175	30	13,219	-61.5		258	55.6
150	30	14,159	-68.1		260	55.2
125	30	15,238	-73.6		265	44.9
100	29	16,531	-75.8		264	25.4
80	28	17,829	-73.3		269	6.4
70	28	18,615	-70.2		80	6.0
60	28	19,540	-66.5		92	17.1
50	28	20,653	-63.2		90	22.7
40	26	22,035	-60.1		87	30.5
30	26	23,851	-55.3		87	31.3
25	25	25,030	-51.8		85	29.5
20	25	26,490	-48.3		88	29.9
15	23	28,402	-44.9		87	26.6
10	5	31,117	-41.8			

KING SALMON, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	15	.7	88	242	2.7
1000	31	72			249	1.6
950	31	484	-.6	75	282	4.1
900	31	914	-3.2	76	268	4.1
850	31	1,364	-6.1	79	259	4.7
800	31	1,837	-8.6	75	268	3.5
750	31	2,336	-11.3	74	261	4.1
700	31	2,862	-13.9	65	278	6.6
650	31	3,421	-17.0	66	275	8.0
600	31	4,019	-20.6	58	278	8.9
550	31	4,655	-24.8	56	279	11.7
500	31	5,344	-29.3	48	283	15.5
450	31	6,087	-34.5	47	283	18.1
400	31	6,904	-39.8	44	284	21.8
350	31	7,806	-44.7		290	24.5
300	30	8,822	-48.5		289	26.6
250	30	10,021	-48.2		288	25.6
200	30	11,493	-47.4		280	22.0
175	30	12,376	-47.3		278	20.4
150	30	13,395	-47.5		275	18.6
125	30	14,597	-48.4		265	16.9
100	30	16,061	-49.7		260	15.0
80	29	17,511	-50.5		253	10.3
70	29	18,381	-50.7		253	8.7
60	29	19,386	-51.0		246	6.6
50	29	20,571	-51.1		247	5.4
40	29	22,022	-51.3		241	3.1
30	29	23,891	-51.2		139	1.4
25	29	25,077	-50.7		119	2.5
20	25	26,546	-49.6		89	2.5
15	17	28,451	-47.4		66	8.0
10	8	31,257	-41.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

+ KOROR, CAROLINE IS.
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	28.4	79	57	3.3
1000	31	96	27.4	76	57	3.9
950	31	543	23.5	75	70	5.6
900	31	1,020	21.0	66	64	5.6
850	31	1,514	18.3	63	77	5.2
800	31	2,032	15.7	59	94	5.8
750	31	2,574	12.9	54	99	7.0
700	31	3,155	10.1	46	113	5.4
650	31	3,765	6.6	46	107	6.2
600	31	4,421	2.8	48	108	7.2
550	31	5,115	-1.0	47	113	8.4
500	31	5,876	-5.1	42	99	7.8
450	31	6,691	-9.7	37	100	7.6
400	31	7,599	-15.0	34	95	6.8
350	31	8,596	-21.7	28	86	4.7
300	31	9,712	-30.1	26	93	5.2
250	31	10,982	-40.6	36	101	5.2
200	31	12,460	-53.2		64	6.4
175	31	13,306	-60.5		45	9.3
150	31	14,249	-67.6		34	10.9
125	30	15,327	-74.8		41	10.1
100	30	16,603	-80.5		60	14.2
80	30	17,857	-80.9		77	22.5
70	29	18,617	-76.0		83	28.9
60	29	19,523	-68.8		89	35.2
50	28	20,630	-63.1		92	40.4
40	27	22,020	-57.3		88	25.4
30	26	23,858	-52.0		94	11.7
25	24	25,049	-48.8		89	7.4
20	16	26,528	-46.1		92	8.7
15	14	28,458	-43.1		115	11.5
10	5	31,172	-38.6			
7						
5						

KOTZEBUE, ALASKA
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	-6.0	86	288	5.6
1000	31	[illegible]6	-4.6	80	291	6.0
950	31	491	-3.7	67	333	4.7
900	31	917	-5.5	67	331	2.5
850	31	1,364	-7.4	66	295	1.7
800	31	1,834	-9.7	63	201	1.2
750	31	2,330	-12.5	59	180	1.7
700	31	2,854	-15.6	59	182	3.1
650	31	3,407	-19.0	54	178	3.3
600	31	4,001	-23.1	54	188	3.9
550	31	4,627	-27.5	54	194	4.7
500	31	5,312	-32.6	54	201	4.7
450	31	6,041	-38.0	53	201	5.4
400	31	6,849	-43.6		207	7.2
350	31	7,736	-48.7		219	8.0
300	31	8,743	-51.4		247	7.0
250	31	9,929	-49.5		249	7.0
200	31	11,401	-46.7		258	6.6
175	30	12,292	-46.6		250	5.8
150	30	13,314	-46.8		253	6.0
125	30	14,521	-47.5		253	7.0
100	30	15,993	-48.0		248	5.4
80	30	17,463	-48.2		234	5.1
70	30	18,342	-48.3		218	3.1
60	30	19,358	-48.3		190	3.1
50	30	20,558	-48.4		160	2.1
40	29	22,028	-48.4		117	3.5
30	29	23,922	-48.1		94	4.9
25	29	25,125	-47.7		82	7.2
20	29	26,601	-46.7		81	10.1
15	20	28,495	-44.8		76	12.4
10						
7						
5						

KWAJALEIN, MARSHALL IS.
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	26.8	86	68	11.7
1000	31	108	26.1	85	70	13.2
950	31	559	23.0	90	76	16.1
900	31	1,030	20.3	86	85	15.2
850	31	1,523	17.9	82	89	14.8
800	31	2,040	15.4	75	90	13.0
750	31	2,586	12.6	69	92	12.2
700	31	3,165	9.7	64	93	10.7
650	31	3,775	6.2	63	99	8.5
600	31	4,427	2.7	57	99	8.0
550	31	5,125	-1.2	56	91	6.0
500	31	5,884	-5.4	49	66	4.3
450	31	6,698	-10.4	40	56	1.9
400	31	7,600	-16.1	36	54	1.6
350	31	8,589	-22.9	33	271	5.1
300	31	9,705	-31.3	34	254	9.9
250	31	10,969	-41.7		246	13.0
200	31	12,441	-53.9		258	21.4
175	31	13,279	-60.9		260	23.1
150	31	14,224	-68.7		268	24.5
125	29	15,292	-75.5		273	21.8
100	25	16,568	-80.8		283	14.4
80	21	17,829	-78.1		104	6.4
70	20	18,596	-74.9		86	20.6
60	20	19,503	-69.3		88	30.9
50	20	20,614	-63.3		87	37.5
40	20	21,996	-58.7		84	26.2
30	19	23,831	-53.5		82	14.0
25	19	25,004	-50.7		87	11.1
20	16	26,476	-47.5		79	10.1
15	13	28,400	-43.0		70	9.3
10	11	31,139	-40.5		[illegible]	16.1
7	8	33,570	-37.2			
5	7	35,900	-33.0			

LAKE CHARLES, LA.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	20.7	90	44	3.3
1000	30	123	20.7	87	60	4.7
950	30	568	19.1	82	116	6.0
900	30	1,031	17.4	69	146	4.5
850	30	1,518	14.8	64	197	2.7
800	30	2,028	11.8	63	232	2.7
750	30	2,564	9.0	56	274	3.1
700	30	3,135	5.6	53	301	4.9
650	30	3,734	1.9	52	330	5.6
600	30	4,379	-2.0	53	314	7.8
550	30	5,059	-6.3	53	307	10.5
500	29	5,807	-11.0	50	298	12.2
450	29	6,606	-16.0	41	295	15.9
400	29	7,488	-22.1	38	294	21.0
350	29	8,456	-29.2	35	293	26.8
300	29	9,539	-37.3	30	292	35.4
250	29	10,773	-47.0		287	42.3
200	29	12,216	-56.8		287	43.9
175	29	13,054	-60.6		287	46.0
150	28	14,006	-61.8		288	41.6
125	28	15,131	-63.4		285	36.7
100	28	16,494	-66.0		285	24.1
80	28	17,839	-67.7		294	12.2
70	28	18,645	-65.9		294	7.0
60	28	19,585	-63.4		344	1.9
50	28	20,718	-58.7		95	5.1
40	28	22,128	-55.6		89	9.1
30	27	23,976	-51.9		85	13.4
25	27	25,164	-49.5		91	14.2
20	27	26,634	-46.7		84	16.7
15	20	28,558	-43.3		81	14.2
10	7	31,324	-40.4			
7						
5						

LANDER, WYO.
829 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,696	7.9	50	239	2.5
1000	31	110				
950	31	540				
900	31	1,001				
850	31	1,483				
800	31	1,987	10.0	40	259	2.3
750	31	2,514	7.2	37	271	2.9
700	31	3,085	3.4	40	257	9.3
650	31	3,677	-.8	41	265	15.5
600	31	4,316	-5.4	39	276	19.6
550	31	4,985	-10.1	37	278	21.0
500	31	5,721	-15.4	37	274	22.3
450	31	6,499	-21.1	30	272	24.3
400	31	7,368	-27.6	31	268	26.2
350	31	8,314	-35.1	33	270	27.8
300	31	9,370	-43.5		274	31.3
250	31	10,572	-52.2		274	33.6
200	31	11,992	-58.7		272	37.1
175	31	12,828	-59.3		273	37.9
150	31	13,795	-58.6		277	34.2
125	31	14,942	-58.4		275	28.0
100	31	16,343	-59.1		279	22.1
80	31	17,743	-58.7		288	19.4
70	31	18,581	-58.4		294	16.5
60	31	19,553	-57.8		300	13.4
50	31	20,704	-56.9		311	8.9
40	31	22,121	-55.7		326	5.4
30	31	23,965	-52.5		321	4.9
25	31	25,150	-50.0		303	5.4
20	30	26,621	-47.2		290	6.6
15	17	28,544	-44.7		264	13.8
10						
7						
5						

LAS VEGAS, NEV.
935 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	660	18.8	25	213	5.8
1000	31	70				
950	31	517				
900	31	986	22.0	26	202	5.1
850	31	1,479	19.3	27	209	5.8
800	31	1,996	15.2	29	196	8.2
750	31	2,531	10.8	31	192	9.5
700	31	3,109	6.3	33	185	10.7
650	31	3,704	1.3	35	182	9.9
600	31	4,349	-3.5	35	189	11.5
550	31	5,022	-8.2	29	206	11.8
500	31	5,764	-13.4	27	224	13.6
450	31	6,549	-19.3	28	229	15.9
400	31	7,421	-26.0	29	227	16.7
350	31	8,373	-33.5	32	231	16.5
300	31	9,436	-41.8	31	237	18.1
250	31	10,649	-50.0		239	21.4
200	31	12,080	-57.5		242	31.5
175	31	12,919	-59.2		245	32.8
150	31	13,885	-58.8		247	33.2
125	30	15,032	-59.2		252	28.7
100	30	16,427	-60.4		253	23.7
80	30	17,812	-61.3		262	12.6
70	30	18,639	-61.8		273	8.5
60	30	19,593	-60.9		322	4.1
50	30	20,732	-58.9		40	3.1
40	29	22,140	-56.4		49	6.4
30	28	23,983	-52.0		56	6.2
25	28	25,170	-49.6		61	6.0
20	26	26,643	-46.0		80	4.7
15	25	28,570	-42.8		105	2.5
10	7	31,273	-39.1			
7						
5						

* LIHUE, HAWAII
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	36	21.0	85	28	2.3
1000	30	148	21.7	84	45	4.1
950	30	589	18.5	90	81	7.6
900	30	1,055	15.5	87	92	7.8
850	30	1,539	13.1	78	106	5.8
800	30	2,048	11.2	60	141	3.5
750	30	2,581	9.4	41	246	2.3
700	30	3,155	7.1	34	258	5.1
650	30	3,756	3.9	34	268	7.6
600	30	4,407	.4	30	270	11.7
550	30	5,092	-3.4	28	268	15.7
500	30	5,848	-8.1	26	270	18.5
450	30	6,653	-13.7	26	270	21.0
400	30	7,543	-19.8	26	271	23.9
350	30	8,520	-27.1	27	273	27.0
300	30	9,611	-35.7	28	271	34.0
250	30	10,853	-45.3		272	44.3
200	30	12,303	-56.6		272	54.8
175	30	13,139	-61.9		273	57.5
150	30	14,083	-65.8		273	54.2
125	30	15,179	-68.9		270	43.3
100	29	16,509	-69.8		268	27.6
80	29	17,843	-67.9		259	12.6
70	29	18,648	-65.7		148	1.9
60	28	19,589	-63.5		102	9.7
50	28	20,716	-60.7		92	14.6
40	28	22,113	-58.2		88	20.4
30	28	23,942	-53.9		89	26.4
25	28	25,123	-51.6		91	28.4
20	28	26,579	-47.9		87	28.0
15	27	28,492	-44.5		90	29.7
10	19	31,244	-39.6		96	24.9
7	15	33,709	-35.5		79	21.2
5	11	36,056	-32.3			

LITTLE ROCK, ARK.
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	15.2	85	10	2.9
1000	31	139	15.8	77	21	3.7
950	31	577	16.5	60	28	4.3
900	31	1,036	15.0	61	351	2.7
850	31	1,519	12.9	56	304	2.7
800	31	2,027	10.6	48	277	3.5
750	31	2,557	8.0	42	283	6.0
700	31	3,128	4.5	41	292	7.0
650	31	3,722	.5	43	296	8.5
600	31	4,366	-3.5	39	292	10.7
550	31	5,039	-8.1	41	288	14.2
500	31	5,782	-12.8	37	290	17.1
450	31	6,567	-18.3	40	283	20.4
400	31	7,448	-24.6	39	279	24.1
350	31	8,406	-31.6	38	279	30.7
300	31	9,479	-39.7	38	278	34.4
250	31	10,701	-49.1		275	37.3
200	31	12,133	-58.4		280	47.8
175	31	12,968	-61.0		278	49.9
150	31	13,924	-60.9		281	50.5
125	31	15,055	-61.4		281	43.5
100	31	16,435	-63.1		282	32.1
80	31	17,800	-64.6		282	21.2
70	31	18,615	-64.2		283	16.1
60	31	19,565	-61.2		288	9.3
50	31	20,706	-57.9		311	3.9
40	30	22,117	-54.7		69	1.6
30	30	23,972	-51.4		94	3.7
25	30	25,161	-49.4		87	3.9
20	27	26,634	-47.0		90	5.2
15	21	28,559	-43.8		74	4.9
10	6	31,236	-40.1			
7						
5						

MCGRATH, ALASKA
996 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	103	2.0	72	297	3.1
1000	31	68				
950	31	479	1.8	67	324	3.3
900	31	916	-1.1	72	295	.8
850	31	1,370	-4.3	76	192	3.3
800	31	1,845	-7.4	78	189	4.9
750	31	2,341	-10.5	76	181	5.8
700	31	2,873	-13.9	68	183	6.6
650	31	3,429	-17.5	66	180	8.5
600	31	4,027	-21.4	61	178	8.4
550	31	4,658	-25.5	58	177	7.2
500	31	5,348	-30.3	62	190	8.4
450	31	6,081	-35.5	61	196	6.6
400	31	6,900	-41.3	57	216	6.2
350	31	7,796	-46.9		227	9.3
300	31	8,808	-50.4		228	10.1
250	31	10,001	-48.9		246	11.7
200	31	11,478	-46.1		249	11.3
175	31	12,367	-46.0		251	12.0
150	31	13,392	-46.3		244	11.3
125	31	14,601	-47.2		245	10.3
100	31	16,075	-47.9		235	10.3
80	31	17,546	-48.4		235	8.7
70	31	18,424	-48.7		234	7.2
60	29	19,433	-48.8		213	5.4
50	29	20,630	-49.0		197	4.9
40	29	22,094	-49.0		153	2.5
30	28	23,981	-48.9		106	3.9
25	28	25,179	-48.6		93	4.5
20	26	26,641	-47.8		74	6.0
15	22	28,565	-44.8		75	10.3
10	14	31,326	-39.1		83	12.4
7	5	33,792	-34.7			
5						

+ MAJURO, MARSHALL IS.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	28.7	81	74	9.1
1000	31	104	27.1	77	74	10.9
950	31	551	22.8	76	81	13.8
900	31	1,027	20.2	73	89	14.4
850	31	1,520	17.8	69	95	13.4
800	31	2,037	15.6	61	93	13.8
750	31	2,583	13.0	56	94	13.0
700	31	3,161	10.1	51	90	12.2
650	31	3,773	6.7	48	90	11.5
600	31	4,428	2.7	49	92	9.5
550	31	5,120	-1.2	46	97	6.8
500	31	5,883	-5.0	37	103	5.1
450	31	6,701	-9.7	34	122	4.1
400	31	7,606	-15.2	30	206	3.5
350	31	8,603	-21.9	29	251	6.8
300	31	9,720	-30.1	27	250	10.3
250	31	10,992	-40.3	25	238	16.1
200	31	12,474	-52.7		257	18.5
175	31	13,323	-59.6		264	21.0
150	31	14,270	-67.2		265	21.6
125	31	15,348	-75.0		267	22.3
100	31	16,623	-80.4		276	15.5
80	31	17,885	-78.3		61	6.4
70	31	18,654	-74.3		88	19.6
60	31	19,562	-68.1		90	30.5
50	31	20,671	-63.3		92	36.7
40	30	22,062	-57.9		94	24.3
30	29	23,902	-51.7		101	7.8
25	26	25,094	-49.2		87	3.9
20	17	26,555	-46.0		287	.8
15	6	28,444	-44.3			
10						
7						
5						

+ MARCUS IS., N. PACIFIC
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	9	26.8	75	122	5.4
1000	31	136	24.6	71	123	5.8
950	31	582	20.6	66	139	6.2
900	31	1,049	18.1	58	155	5.6
850	31	1,537	15.7	55	176	4.3
800	31	2,050	13.4	50	198	4.5
750	31	2,590	11.0	44	210	4.3
700	31	3,164	8.2	37	228	5.4
650	31	3,772	4.9	35	250	6.8
600	31	4,422	1.6	33	261	7.6
550	31	5,113	-2.1	29	264	9.3
500	31	5,869	-6.4	25	267	10.3
450	31	6,680	-11.5	23	276	13.4
400	31	7,578	-17.6	23	275	16.5
350	31	8,564	-24.5	23	282	17.9
300	31	9,668	-32.8	23	282	18.1
250	31	10,925	-42.9		278	19.6
200	31	12,391	-54.6		285	23.3
175	30	13,235	-60.6		289	27.2
150	30	14,182	-66.1		285	24.9
125	30	15,274	-70.5		281	22.1
100	30	16,589	-73.3		290	12.2
80	30	17,894	-72.5		2	4.5
70	30	18,684	-69.4		57	7.6
60	29	19,612	-64.7		83	10.7
50	28	20,738	-60.2		86	13.0
40	27	22,140	-56.7		91	19.2
30	24	23,978	-52.6		95	23.3
25	20	25,164	-49.5		100	25.3
20	12	26,643	-46.3			
15						
10						
7						

* MEDFORD, OREG.
970 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	401	7.8	74	313	1.4
1000	31	144				
950	31	573	10.7	61	296	2.5
900	31	1,021	9.4	61	307	2.7
850	31	1,494	7.6	62	42	1.4
800	31	1,993	6.3	48	61	1.6
750	31	2,520	4.0	40	275	2.7
700	31	3,078	1.0	40	252	5.2
650	31	3,666	-2.3	40	256	8.2
600	31	4,302	-6.2	40	259	9.7
550	31	4,970	-10.8	40	257	10.9
500	31	5,704	-15.8	37	260	13.4
450	31	6,480	-21.4	33	257	16.3
400	31	7,348	-27.8	34	257	19.0
350	31	8,294	-35.1	38	255	20.8
300	31	9,350	-43.2		261	22.7
250	31	10,555	-52.0		264	22.1
200	31	11,973	-58.7		264	23.9
175	31	12,811	-58.8		264	23.7
150	31	13,782	-57.4		261	22.1
125	30	14,935	-57.8		256	18.6
100	30	16,341	-58.4		262	17.5
80	30	17,744	-58.1		265	13.0
70	30	18,584	-57.9		268	10.7
60	30	19,557	-57.4		271	8.2
50	29	20,707	-57.3		298	5.1
40	29	22,120	-56.3		342	4.1
30	29	23,956	-53.7		6	4.1
25	29	25,132	-51.6		320	4.5
20	27	26,589	-49.0		297	6.4
15	25	28,491	-45.1		282	10.7
10	21	31,244	-39.4		268	12.4
7	14	33,696	-35.2		270	9.5

MERIDA, MEXICO
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	21.7	96	106	4.9
1000	31	128	23.1	93	122	9.1
950	31	578	21.8	81	144	13.2
900	31	1,046	19.9	65	143	10.9
850	31	1,537	17.2	64	148	7.0
800	31	2,053	14.1	61	169	4.5
750	31	2,592	11.4	48	214	2.3
700	31	3,169	8.5	44	267	2.5
650	31	3,773	4.9	44	314	5.4
600	31	4,427	1.1	38	325	8.0
550	31	5,115	-2.3	27	320	9.1
500	31	5,875	-6.9	25	316	11.7
450	31	6,683	-11.9	21	306	14.8
400	31	7,583	-18.0	20	306	17.7
350	31	8,566	-25.3	22	301	22.7
300	31	9,666	-33.5	22	300	26.2
250	31	10,919	-43.3		304	31.9
200	31	12,383	-54.4		304	35.0
175	31	13,226	-60.2		306	35.9
150	31	14,175	-65.3		312	28.4
125	31	15,271	-69.3		317	19.6
100	30	16,590	-73.1		349	12.8
80	30	17,893	-73.5		58	14.2
70	30	18,677	-70.2		74	16.9
60	30	19,605	-65.7		93	18.8
50	30	20,724	-61.0		86	17.5
40	30	22,121	-57.9		91	26.2
30	30	23,954	-52.7		91	31.7
25	28	25,132	-49.3		95	32.2
20	27	26,608	-46.3		93	32.2
15	20	28,542	-42.4		95	29.7
10	9	31,298	-37.8			
7	5	33,755	-35.2			

* MIAMI, FLA.
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	22.5	90	132	3.1
1000	31	133	23.1	83	132	4.7
950	31	578	20.3	83	160	9.1
900	31	1,046	17.3	76	165	9.1
850	31	1,533	14.6	67	178	6.8
800	31	2,044	12.1	55	190	5.2
750	31	2,584	9.4	45	206	4.7
700	31	3,152	6.4	38	229	5.2
650	31	3,753	2.9	38	240	6.4
600	31	4,401	-.9	35	236	8.0
550	31	5,083	-4.9	33	246	8.4
500	31	5,834	-9.4	32	258	8.9
450	31	6,636	-14.7	32	258	11.3
400	31	7,523	-20.9	32	277	12.4
350	31	8,496	-28.0	32	279	13.8
300	31	9,584	-36.5	30	271	16.5
250	30	10,822	-46.3		274	20.4
200	28	12,270	-56.6		284	30.3
175	28	13,108	-60.5		292	34.6
150	27	14,062	-63.5		293	33.0
125	27	15,174	-66.4		288	23.5
100	26	16,516	-68.7		293	13.6
80	26	17,846	-69.8		340	4.3
70	25	18,645	-67.5		34	3.1
60	24	19,582	-64.4		71	8.7
50	23	20,707	-60.7		82	14.8
40	21	22,111	-57.1		87	20.0
30	21	23,949	-52.8		91	25.8
25	19	25,133	-50.0		96	26.8
20	19	26,605	-45.9		89	26.2
15	13	28,524	-42.8		86	24.3
10	5	31,321	-39.3			
7						

* MIDLAND, TEXAS
915 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	874	15.7	81	126	2.9
1000	31	113				
950	31	554				
900	31	1,018	16.6	73	148	5.4
850	31	1,506	16.6	62	198	5.6
800	31	2,021	14.5	52	236	5.4
750	31	2,562	11.8	40	269	6.6
700	31	3,137	8.0	38	285	8.2
650	31	3,741	3.5	36	282	10.5
600	31	4,388	-1.8	42	276	14.0
550	31	5,066	-6.9	43	282	16.5
500	31	5,811	-11.9	38	280	16.5
450	31	6,604	-17.3	31	273	20.0
400	31	7,484	-23.2	29	270	26.6
350	31	8,448	-30.3	30	268	31.1
300	31	9,525	-38.6	30	267	40.8
250	31	10,753	-47.6		266	52.3
200	31	12,195	-57.1		271	60.6
175	31	13,032	-60.7		272	60.6
150	31	13,986	-62.4		273	54.2
125	31	15,110	-62.7		275	42.2
100	31	16,478	-65.2		276	27.6
80	30	17,829	-67.1		278	14.6
70	30	18,635	-66.3		287	8.4
60	30	19,575	-63.7		336	3.7
50	30	20,705	-59.0		66	5.8
40	30	22,116	-55.5		84	8.4
30	30	23,968	-51.4		92	11.8
25	29	25,158	-49.0		82	11.5
20	26	26,634	-46.6		88	13.6
15	26	28,558	-42.8		79	13.6
10	23	31,303	-39.2		82	14.4
7	5	33,722	-36.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

	MONTERREY, MEXICO 964 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	423	20.2	91	310	1.6
1000	29	105				
950	29	552	20.2	87	322	2.1
900	29	1,017	18.7	81	329	3.5
850	29	1,508	17.6	66	337	2.1
800	29	2,025	15.9	54	243	1.7
750	29	2,578	13.0	50	282	4.3
700	29	3,148	9.3	49	300	7.4
650	29	3,760	5.2	52	306	9.7
600	29	4,407	.3	56	301	10.9
550	29	5,092	- 4.8	56	295	12.2
500	29	5,842	- 9.7	51	286	15.7
450	29	6,650	-14.9	48	282	17.1
400	29	7,532	-20.7	47	274	21.6
350	29	8,506	-27.5	39	266	26.0
300	29	9,597	-35.8	32	270	27.6
250	29	10,838	-45.7		270	35.2
200	29	12,289	-56.3		269	48.8
175	29	13,127	-61.4		271	49.3
150	28	14,075	-64.7		270	45.5
125	28	15,179	-67.5		271	33.6
100	28	16,511	-70.9		274	17.7
80	26	17,832	-71.7		278	3.7
70	25	18,624	-69.7		93	2.7
60	25	19,553	-65.4		77	7.4
50	25	20,675	-61.0		92	11.3
40	25	22,076	-56.8		85	12.2
30	23	23,913	-53.0		78	16.1
25	23	25,096	-50.3		82	22.5
20	19	26,556	-47.0		79	25.8
15	10	28,458	-43.6			
10						
7						

	MONTGOMERY, ALA. 1009 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	61	17.8	88	35	2.1
1000	31	137	18.0	85	56	2.7
950	31	577	17.5	77	77	3.5
900	31	1,039	15.8	68	25	1.9
850	31	1,523	13.7	59	324	2.9
800	31	2,032	11.0	55	306	4.1
750	31	2,565	8.3	48	312	4.7
700	31	3,135	5.2	43	303	6.0
650	31	3,733	1.5	38	298	7.4
600	31	4,377	- 2.4	38	299	7.2
550	31	5,055	- 6.7	36	286	9.3
500	31	5,800	-11.4	37	287	11.3
450	31	6,596	-16.6	39	278	16.1
400	31	7,476	-22.5	35	278	19.6
350	31	8,443	-29.5	33	279	23.3
300	31	9,524	-37.8	32	277	28.4
250	31	10,754	-47.6		276	30.9
200	31	12,194	-57.4		278	38.1
175	31	13,030	-60.7		280	41.6
150	30	13,987	-60.9		282	36.9
125	30	15,118	-61.5		276	33.6
100	30	16,496	-63.5		279	28.4
80	30	17,857	-65.1		277	17.9
70	30	18,671	-64.4		276	11.8
60	30	19,618	-61.8		292	6.4
50	30	20,757	-57.8		35	1.6
40	30	22,176	-54.3		83	5.2
30	30	24,035	-50.3		86	8.4
25	29	25,228	-48.1		88	9.7
20	29	26,706	-45.4		86	10.1
15	19	28,634	-41.8		80	10.3
10	9	31,402	-38.7			
7						

	* NANTUCKET, MASS. 1015 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	14	9.3	85	244	1.4
1000	31	140	9.3	73	240	3.3
950	31	565	9.6	54	258	7.4
900	31	1,014	7.8	55	261	10.1
850	31	1,484	6.0	49	255	14.4
800	31	1,979	3.6	48	255	18.5
750	31	2,498	1.5	46	257	23.5
700	31	3,055	- .9	50	258	28.6
650	31	3,637	- 4.1	50	254	32.4
600	31	4,270	- 7.5	46	254	36.9
550	31	4,936	-11.3	39	253	38.3
500	31	5,669	-15.7	36	253	41.6
450	31	6,448	-20.9	34	255	43.9
400	31	7,317	-26.9	32	253	47.8
350	31	8,266	-33.9	32	252	53.2
300	31	9,328	-41.9	35	250	59.1
250	31	10,538	-50.6		253	65.5
200	31	11,963	-58.3		254	66.0
175	31	12,801	-59.1		253	56.9
150	31	13,770	-57.6		258	49.1
125	31	14,921	-57.7		257	39.4
100	31	16,326	-58.0		258	32.2
80	31	17,733	-57.6		260	23.5
70	31	18,577	-56.7		258	18.6
60	31	19,555	-56.1		258	14.4
50	30	20,720	-54.4		255	10.9
40	29	22,151	-51.9		248	5.1
30	28	24,020	-49.9		217	4.3
25	28	25,216	-48.5		212	1.9
20	27	26,692	-46.7		350	1.9
15	22	28,594	-45.4		344	4.5
10	18	31,338	-39.8		275	6.4
7	5	33,889	-32.5			

	* NASHVILLE, TENN. 996 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	177	13.4	85	115	1.4
1000	29	143				
950	29	577	14.4	66	101	2.7
900	29	1,034	13.3	60	285	2.7
850	29	1,513	11.1	55	281	7.0
800	29	2,017	8.5	51	286	10.5
750	29	2,547	5.7	50	280	11.8
700	29	3,109	2.8	47	281	13.4
650	29	3,701	- .7	44	287	15.9
600	29	4,341	- 4.6	45	283	17.1
550	29	5,014	- 8.9	43	280	18.5
500	29	5,752	-13.7	41	277	22.3
450	29	6,540	-18.9	39	273	24.9
400	29	7,413	-25.0	37	270	28.7
350	29	8,369	-32.2	34	269	34.0
300	29	9,438	-40.4	40	270	39.0
250	29	10,656	-49.6		272	46.4
200	28	12,085	-58.7		270	49.7
175	28	12,917	-61.2		270	53.4
150	28	13,875	-60.2		275	48.8
125	28	15,013	-60.2		277	38.5
100	27	16,395	-61.3		277	34.0
80	27	17,777	-61.7		271	22.9
70	27	18,603	-61.7		269	19.0
60	27	19,562	-59.4		275	11.7
50	27	20,710	-56.4		274	5.8
40	27	22,136	-53.4		254	2.7
30	27	23,999	-50.4		101	1.9
25	27	25,192	-48.7		80	3.1
20	25	26,665	-46.4		82	6.8
15	23	28,584	-43.8		81	8.0
10	16	31,335	-39.7		358	4.3
7	5	33,735	-35.4			

	NOME, ALASKA 1010 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	7	- 3.0	80	10	5.4
1000	30	86	- 2.7	72	12	4.9
950	30	490	- 4.0	74	58	3.9
900	30	918	- 5.9	68	58	1.9
850	30	1,365	- 7.6	62	47	.8
800	30	1,835	- 9.8	59	328	.8
750	30	2,327	-12.3	52	52	.6
700	30	2,856	-15.0	46	229	1.0
650	30	3,409	-18.3	45	252	2.1
600	30	4,007	-22.2	44	256	2.5
550	30	4,632	-26.6	44	259	3.3
500	30	5,323	-31.5	45	260	5.2
450	30	6,056	-36.6	42	270	6.0
400	30	6,869	-42.1	42	285	7.2
350	30	7,763	-47.3		289	10.1
300	30	8,774	-50.4		289	14.4
250	30	9,964	-49.3		287	14.6
200	30	11,436	-46.7		280	13.0
175	30	12,322	-46.6		277	10.9
150	30	13,345	-46.9		275	10.5
125	30	14,550	-47.8		268	9.7
100	30	16,021	-48.3		272	8.0
80	30	17,489	-48.7		257	5.4
70	30	18,366	-48.9		251	4.1
60	30	19,379	-49.0		241	2.7
50	30	20,577	-48.9		162	1.6
40	30	22,043	-49.0		116	2.7
30	30	23,931	-49.0		84	3.5
25	30	25,130	-48.6		76	7.4
20	29	26,600	-47.5		77	8.5
15	27	28,517	-45.2		77	12.4
10	23	31,260	-40.7		79	18.6
7	7	33,836	-36.2			

	* NORTH PLATTE, NEBR. 917 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	848	7.7	74	85	1.6
1000	31	122				
950	31	549				
900	31	1,002	10.7	56	168	1.7
850	31	1,480	12.5	42	233	9.1
800	31	1,987	10.3	39	251	12.4
750	31	2,519	7.3	42	264	15.2
700	31	3,086	3.8	42	273	15.7
650	31	3,678	- .6	44	279	16.7
600	31	4,317	- 5.6	49	285	19.8
550	31	4,987	-10.7	50	281	21.6
500	31	5,720	-15.9	43	278	23.5
450	31	6,499	-21.4	37	274	25.1
400	31	7,364	-27.6	30	281	28.9
350	31	[illegible],310	-34.9	29	282	32.8
300	31	9,367	-43.1		281	38.1
250	31	10,571	-51.9		282	40.8
200	31	11,991	-58.7		281	43.1
175	31	12,827	-59.7		281	40.2
150	31	13,794	-58.1		281	37.3
125	31	14,939	-59.0		281	33.4
100	31	16,336	-59.7		284	28.2
80	31	17,732	-59.3		284	19.6
70	31	18,567	-59.4		287	15.2
60	31	19,535	-58.5		293	9.9
50	31	20,686	-56.8		299	8.0
40	31	22,108	-54.4		304	5.2
30	31	23,965	-51.0		311	3.7
25	31	25,156	-49.2		289	3.5
20	31	26,631	-46.1		275	6.2
15	29	28,555	-44.4		265	8.5
10	11	31,265	-40.3			
7						

	* OAKLAND, CALIF. 1013 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	6	12.7	79	260	5.4
1000	31	118	11.0	82	247	5.4
950	31	547	11.1	72	240	5.6
900	31	999	13.3	49	269	4.5
850	31	1,480	12.8	36	250	2.7
800	31	1,987	10.7	31	207	3.5
750	31	2,516	7.5	32	207	4.3
700	31	3,087	3.9	33	210	5.6
650	31	3,675	.2	34	203	7.0
600	31	4,323	- 4.1	33	207	7.6
550	31	4,990	- 8.9	34	205	6.8
500	31	5,736	-14.1	32	213	8.2
450	31	6,517	-19.9	32	224	7.4
400	31	7,392	-26.7	35	224	10.5
350	31	8,342	-34.2	34	232	11.1
300	31	9,402	-42.6		232	11.8
250	31	10,608	-51.7		242	12.6
200	31	12,031	-58.2		254	13.8
175	31	12,870	-58.5		248	17.7
150	31	13,842	-57.6		249	20.4
125	31	14,990	-58.4		250	19.2
100	30	16,387	-59.1		248	18.1
80	30	17,783	-59.9		253	11.7
70	30	18,616	-60.1		254	8.2
60	29	19,575	-59.8		278	4.7
50	27	20,714	-59.3		9	2.9
40	25	22,119	-57.8		55	3.5
30	25	23,948	-53.8		43	5.1
25	24	25,132	-51.0		36	3.3
20	24	26,593	-47.9		33	2.9
15	23	28,516	-44.1		302	1.9
10	19	31,250	-40.1		262	7.8
7	7	33,703	-36.0			

	OKLAHOMA CITY, OKLA. 969 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	392	14.9	78	118	1.7
1000	31	125				
950	31	564	16.3	68	137	4.3
900	31	1,022	15.1	60	185	6.8
850	31	1,506	14.4	46	216	6.0
800	31	2,016	12.3	41	241	7.6
750	31	2,550	9.2	40	261	7.4
700	31	3,122	5.3	41	269	8.4
650	31	3,719	1.2	38	276	9.5
600	31	4,362	- 3.4	35	283	10.9
550	31	5,035	- 8.4	35	287	13.0
500	31	5,776	-13.6	30	283	15.2
450	31	6,562	-19.0	27	282	18.5
400	31	7,435	-25.3	27	277	22.7
350	31	8,391	-32.5	26	276	26.4
300	31	9,460	-40.5	28	279	37.9
250	31	10,678	-49.8		273	49.1
200	31	12,108	-58.5		274	56.9
175	31	12,943	-60.4		276	57.1
150	31	13,902	-60.5		279	50.3
125	31	15,035	-61.3		280	41.2
100	31	16,414	-63.0		283	33.4
80	31	17,781	-64.6		283	21.4
70	31	18,595	-64.3		285	12.8
60	31	19,543	-61.6		292	7.6
50	31	20,684	-57.7		317	3.3
40	31	22,102	-54.8		339	1.7
30	31	23,955	-51.2		74	4.1
25	31	25,145	-49.3		84	6.4
20	29	26,616	-46.9		79	7.4
15	26	28,528	-43.8		90	5.6
10	14	31,265	-40.6			
7	6	33,745	-38.2			

	OMAHA, NEBR. 968 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	403	10.0	71	137	3.1
1000	31	132				
950	31	560	11.6	59	168	4.5
900	31	1,013	12.2	48	232	6.0
850	31	1,491	10.6	46	271	9.1
800	31	1,994	8.1	46	281	13.2
750	31	2,522	5.6	43	291	18.6
700	31	3,085	1.9	45	294	22.3
650	31	3,672	- 2.0	45	295	25.1
600	31	4,310	- 6.1	43	292	27.0
550	31	4,977	-11.0	44	290	29.1
500	31	5,711	-16.0	38	291	32.6
450	31	6,487	-21.6	29	287	33.2
400	31	7,354	-27.7	31	285	38.3
350	31	8,300	-35.0	30	284	39.8
300	31	9,357	-43.2		285	40.6
250	31	10,563	-51.5		284	43.1
200	31	11,986	-58.5		281	43.9
175	31	12,823	-59.2		281	42.9
150	31	13,791	-58.3		281	41.6
125	31	14,940	-57.8		284	36.9
100	31	16,344	-58.4		287	29.7
80	31	17,747	-58.5		288	20.0
70	31	18,584	-58.8		284	15.7
60	31	19,553	-57.7		298	11.8
50	31	20,708	-56.0		300	8.4
40	31	22,134	-53.7		294	5.4
30	31	23,996	-50.9		288	6.4
25	30	25,192	-49.0		290	5.4
20	29	26,665	-46.6		281	7.6
15	28	28,584	-44.1		272	13.2
10	10	31,298	-42.3			
7						

	+ PAGO PAGO AMERICAN SAMOA 1011 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	29.0	80	102	6.8
1000	31	106	27.5	79	97	7.6
950	31	565	23.5	80	79	8.2
900	31	1,031	20.5	77	70	7.4
850	31	1,525	18.2	70	55	6.2
800	31	2,043	15.8	60	29	4.7
750	31	2,591	13.3	56	1	4.5
700	31	3,168	10.2	51	346	3.7
650	31	3,783	6.6	51	321	3.5
600	31	4,435	2.9	49	306	6.0
550	31	5,131	- .9	41	289	7.0
500	31	5,890	- 5.4	38	277	6.8
450	31	6,709	-10.4	34	273	9.3
400	31	7,609	-16.0	30	281	11.1
350	31	8,601	-22.9	29	282	12.4
300	31	9,711	-31.2	28	269	13.8
250	31	10,976	-41.1	28	255	15.7
200	30	12,453	-52.8		254	18.1
175	30	13,300	-59.6		255	22.5
150	30	14,248	-66.6		259	23.5
125	30	15,330	-73.5		264	22.9
100	30	16,616	-78.3		270	14.8
80	30	17,891	-76.3		32	3.3
70	30	18,668	-72.2		78	10.1
60	30	19,588	-66.6		86	16.1
50	29	20,701	-62.5		85	18.6
40	29	22,087	-59.2		79	18.5
30	29	23,912	-53.7		79	10.7
25	27	25,094	-50.5		72	3.9
20	18	26,553	-46.2		263	4.7
15	13	28,493	-41.8		269	13.8
10						
7						

	* PEORIA, ILL. 994 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	200	8.9	81	76	1.4
1000	31	146				
950	31	576	11.0	57	275	1.2
900	31	1,023	9.7	50	292	6.0
850	31	1,497	8.4	44	286	13.6
800	31	1,996	6.3	42	285	17.5
750	31	2,523	3.6	41	281	20.2
700	31	3,080	.7	40	284	22.5
650	31	3,668	- 2.5	39	285	26.2
600	31	4,303	- 6.3	36	290	31.7
550	31	4,975	-10.3	31	292	35.2
500	31	5,707	-14.9	31	288	37.5
450	31	6,488	-20.6	30	287	39.6
400	31	7,356	-26.8	30	284	43.1
350	31	8,305	-33.9	29	278	47.2
300	31	9,368	-41.6	27	275	52.3
250	31	10,580	-50.7		274	58.5
200	31	12,009	-57.7		278	58.7
175	31	12,851	-57.5		280	51.9
150	31	13,828	-56.4		281	48.0
125	31	14,984	-56.6		280	38.5
100	31	16,398	-56.9		279	29.7
80	31	17,808	-57.6		275	21.6
70	31	18,651	-57.1		280	15.9
60	31	19,630	-55.9		292	9.9
50	31	20,793	-54.4		292	5.6
40	31	22,231	-51.8		264	3.1
30	31	24,109	-48.5		299	2.5
25	30	25,311	-47.6		299	1.0
20	30	26,792	-45.4		265	3.1
15	30	28,721	-43.0		265	4.9
10	23	31,484	-39.3		308	6.0
7	6	33,981	-32.8			
5						
4						

	* PITTSBURGH, PA. 975 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	353	8.6	76	292	1.6
1000	31	146				
950	31	573	9.4	61	283	3.1
900	31	1,019	8.0	54	282	9.1
850	31	1,489	6.0	57	277	14.4
800	31	1,984	3.8	52	275	18.1
750	31	2,504	1.3	45	274	21.4
700	31	3,059	- 1.5	45	275	25.8
650	31	3,643	- 4.7	46	277	28.2
600	31	4,272	- 8.2	44	274	32.6
550	31	4,937	-12.2	34	273	36.1
500	31	5,665	-16.8	34	271	40.2
450	31	6,445	-22.0	35	272	42.9
400	31	7,306	-28.0	31	270	48.4
350	31	8,252	-34.9	35	268	54.8
300	31	9,310	-42.6		268	60.2
250	31	10,519	-50.9		270	64.3
200	31	11,947	-57.3		270	62.2
175	31	12,790	-57.4		270	55.2
150	31	13,764	-57.4		266	45.1
125	31	14,914	-57.9		267	40.6
100	31	16,321	-57.8		271	33.0
80	31	17,729	-57.6		269	24.7
70	31	18,572	-57.3		271	16.3
60	31	19,546	-56.9		272	10.1
50	31	20,706	-54.8		281	5.6
40	31	22,141	-52.3		271	4.1
30	30	24,014	-49.9		257	3.3
25	30	25,211	-48.2		273	3.5
20	29	26,690	-46.8		289	1.6
15	29	28,607	-44.5		290	3.3
10	27	31,355	-39.9		263	2.3
7	17	33,809	-34.5		264	8.2
5	9	36,182	-29.8			
4	5	37,913	-24.0			

	+ PONAPE, CAROLINE IS. 1006 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	39	28.2	81	73	6.8
1000	31	93	27.7	80	78	8.4
950	31	540	24.0	78	88	12.6
900	31	1,019	20.8	76	94	14.6
850	31	1,512	18.1	71	93	14.0
800	31	2,030	15.8	67	98	12.0
750	31	2,575	13.2	62	102	12.0
700	31	3,155	10.1	59	103	12.2
650	31	3,765	6.8	55	99	11.5
600	31	4,423	3.2	52	92	10.7
550	31	5,118	- .7	50	88	9.9
500	30	5,881	- 4.8	45	91	9.9
450	30	6,698	- 9.3	37	91	9.1
400	30	7,606	-14.9	35	85	7.2
350	30	8,604	-21.5	33	102	3.1
300	30	9,722	-29.7	27	225	3.5
250	30	10,995	-39.9	25	229	8.9
200	30	12,479	-52.3		233	12.6
175	30	13,329	-59.5		245	15.0
150	30	14,276	-66.9		257	14.0
125	30	15,357	-74.5		273	10.9
100	29	16,634	-80.0		314	4.7
80	29	17,895	-78.8		69	12.0
70	29	18,662	-74.6		87	22.5
60	28	19,572	-68.7		91	33.2
50	26	20,680	-62.6		92	38.5
40	26	22,071	-57.3		92	26.8
30	19	23,914	-51.8		87	7.8
25	16	25,099	-48.6		82	5.4
20	11	26,585	-45.8		76	4.3
15	7	28,511	-43.0			
10						
7						
5						
4						

	PORTLAND, ME. 1015 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	20	8.2	78	257	3.1
1000	31	138	8.7	63	261	4.5
950	31	560	8.4	55	277	7.2
900	31	1,008	6.2	51	276	9.3
850	31	1,475	3.6	53	263	11.7
800	31	1,965	.8	53	261	14.4
750	31	2,481	- 1.7	51	255	20.2
700	31	3,028	- 4.2	46	259	25.8
650	31	3,607	- 6.9	44	256	30.5
600	31	4,231	-10.2	44	254	35.9
550	31	4,892	-14.1	41	254	38.9
500	31	5,615	-18.5	37	251	43.3
450	31	6,389	-23.8	35	249	49.1
400	31	7,245	-29.5	36	251	56.1
350	31	8,185	-35.8	36	253	65.3
300	31	9,241	-43.3		253	69.7
250	31	10,448	-50.9		251	66.2
200	31	11,882	-55.7		253	62.0
175	31	12,732	-55.5		254	54.4
150	31	13,716	-54.7		257	47.4
125	31	14,882	-55.0		257	38.7
100	31	16,305	-55.7		255	31.5
80	31	17,725	-55.7		260	22.9
70	31	18,575	-55.1		260	17.7
60	31	19,560	-54.5		263	11.5
50	30	20,736	-53.2		252	8.4
40	30	22,177	-51.6		244	5.6
30	29	24,057	-49.3		222	2.7
25	29	25,254	-48.5		231	1.9
20	27	26,732	-47.4		234	1.9
15	22	28,658	-45.1		268	2.9
10	15	31,418	-38.8		172	5.4
7	9	33,961	-32.0			
5	5	36,345	-27.9			
4						

	RAPID CITY, S. DAK. 904 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	966	7.6	63	320	1.6
1000	31	120				
950	31	548				
900	31	999			40	1.0
850	31	1,473	9.8	46	245	5.8
800	31	1,976	8.0	45	264	10.3
750	31	2,502	5.5	46	283	14.6
700	31	3,067	1.7	46	289	15.9
650	31	3,650	- 2.9	48	290	18.5
600	31	4,288	- 7.6	49	290	21.2
550	31	4,947	-12.3	49	285	25.3
500	31	5,680	-17.7	48	285	27.2
450	31	6,453	-23.1	38	286	28.9
400	31	7,312	-29.6	38	286	31.9
350	31	8,251	-36.6	39	283	37.5
300	31	9,301	-44.3		285	40.0
250	31	10,500	-52.5		285	41.8
200	31	11,919	-58.5		281	39.2
175	31	12,757	-58.9		281	39.6
150	30	13,729	-57.9		286	33.4
125	30	14,877	-58.7		285	28.7
100	30	16,279	-58.4		290	24.5
80	30	17,682	-58.6		294	19.2
70	30	18,521	-57.9		300	13.6
60	30	19,494	-57.9		301	9.5
50	30	20,647	-56.7		308	7.8
40	30	22,068	-54.6		322	5.6
30	29	23,921	-52.3		309	5.8
25	29	25,105	-50.3		300	7.4
20	28	26,571	-48.7		284	8.9
15	25	28,475	-45.5		279	12.6
10	15	31,176	-42.4			
7						
5						
4						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb)	ST. CLOUD, MINN. 979 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	316	5.5	76	173	2.5
1000	31	137				
950	31	560	8.0	58	169	2.9
900	31	1,004	6.1	54	244	4.3
850	31	1,471	4.2	54	281	9.1
800	31	1,963	1.7	56	293	14.0
750	31	2,481	-1.0	53	297	17.5
700	31	3,029	-3.6	55	299	22.0
650	31	3,609	-6.4	48	298	26.0
600	31	4,235	-10.2	45	299	29.7
550	31	4,897	-14.3	42	301	33.6
500	31	5,617	-19.0	38	301	36.1
450	31	6,387	-24.5	38	299	38.3
400	31	7,241	-30.8	39	298	42.2
350	31	8,176	-37.6	38	298	46.6
300	31	9,222	-45.1		297	51.3
250	31	10,421	-52.1		294	53.4
200	31	11,850	-55.8		292	52.1
175	31	12,701	-55.4		294	44.7
150	31	13,687	-54.7		293	37.7
125	31	14,852	-55.3		294	33.8
100	31	16,274	-55.5		293	26.2
80	31	17,697	-55.7		295	20.0
70	31	18,547	-55.5		298	16.1
60	31	19,531	-55.2		299	12.2
50	31	20,697	-54.4		299	7.0
40	30	22,132	-53.6		307	4.9
30	29	23,993	-51.1		301	5.1
25	29	25,183	-49.4		287	6.6
20	27	26,648	-47.8		273	9.3
15	24	28,554	-45.5		262	13.0
10	9	31,179	-43.7			
7						

Standard pressure surface (mb)	ST. PAUL IS., ALASKA 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	10	.0	85	276	1.7
1000	31	95			331	1.9
950	31	498	-2.5	92	254	4.5
900	31	932	-4.5	83	256	6.8
850	31	1,381	-5.8	72	263	8.0
800	31	1,855	-7.5	68	262	7.8
750	31	2,352	-9.6	62	266	9.3
700	31	2,886	-12.2	59	273	11.1
650	31	3,446	-15.1	56	273	12.6
600	31	4,052	-18.5	56	271	15.0
550	31	4,690	-22.4	56	272	18.6
500	31	5,391	-26.6	54	273	21.6
450	31	6,138	-31.0	48	273	21.8
400	31	6,975	-36.3	45	277	25.3
350	31	7,888	-41.9	39	272	23.7
300	31	8,919	-47.4		280	21.8
250	31	10,113	-50.4		283	25.3
200	30	11,566	-49.3		288	21.6
175	30	12,443	-48.6		285	17.7
150	30	13,455	-49.1		280	15.9
125	30	14,649	-49.8		284	13.2
100	30	16,106	-50.4		280	10.9
80	30	17,559	-51.3		272	9.5
70	30	18,426	-51.3		271	7.0
60	30	19,427	-51.4		271	6.0
50	30	20,612	-51.4		262	4.9
40	30	22,062	-51.3		253	3.1
30	30	23,932	-50.9		16	1.4
25	29	25,119	-50.3		77	2.3
20	29	26,579	-49.4		85	1.7
15	27	28,478	-47.1		49	2.7
10	20	31,200	-42.2		69	7.8
7	9	33,670	-38.0			

Standard pressure surface (mb)	SALEM, OREG. 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	61	6.8	87	254	1.0
1000	31	153	8.4	75	346	1.9
950	31	575	8.2	65	358	7.4
900	31	1,023	7.3	58	357	6.2
850	31	1,492	5.8	51	331	5.2
800	31	1,987	4.1	47	317	5.4
750	31	2,507	1.7	46	279	6.4
700	31	3,063	-1.1	38	273	8.9
650	31	3,646	-4.3	38	269	12.0
600	31	4,278	-7.9	38	265	15.3
550	31	4,943	-12.3	36	261	17.7
500	31	5,672	-16.8	37	260	19.4
450	31	6,445	-22.3	39	265	22.0
400	31	7,309	-28.6	38	263	23.9
350	31	8,251	-35.9	38	262	25.1
300	30	9,304	-43.8		262	27.2
250	30	10,504	-52.8		266	29.7
200	30	11,918	-58.4		260	29.9
175	30	12,758	-58.5		261	28.4
150	30	13,731	-56.4		261	25.4
125	30	14,887	-57.0		258	20.8
100	30	16,298	-57.7		259	16.3
80	30	17,704	-57.7		267	13.6
70	30	18,545	-57.3		274	11.8
60	29	19,524	-56.7		276	8.4
50	29	20,679	-56.4		287	5.4
40	28	22,097	-56.0		337	5.1
30	27	23,936	-54.0		358	5.1
25	27	25,109	-52.4		346	3.7
20	25	26,559	-50.0		308	5.6
15	22	28,456	-46.0		289	9.5
10	7	31,181	-40.4			
7						

Standard pressure surface (mb)	SALT LAKE CITY, UTAH 870 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,288	11.3	48	142	5.8
1000	31	103				
950	31	539				
900	31	999				
850	31	1,482	15.1	33	149	8.0
800	31	1,994	12.7	30	189	8.9
750	31	2,525	9.0	32	222	8.0
700	31	3,099	4.5	36	247	8.9
650	31	3,691	-.2	40	250	10.9
600	31	4,333	-4.8	42	260	13.8
550	31	5,001	-10.3	49	258	16.5
500	31	5,737	-15.8	47	260	17.1
450	31	6,512	-21.4	41	259	19.2
400	31	7,382	-27.3	34	258	20.8
350	31	8,329	-34.7	35	261	20.4
300	31	9,387	-43.0		265	23.1
250	31	10,591	-51.9		262	24.7
200	31	12,010	-59.2		259	28.9
175	31	12,844	-60.2		261	29.5
150	30	13,805	-59.3		266	27.0
125	30	14,946	-59.7		266	24.5
100	30	16,341	-60.0		273	22.1
80	29	17,733	-59.4		274	18.6
70	28	18,566	-59.7		286	14.6
60	28	19,530	-59.2		311	9.9
50	28	20,675	-57.9		335	6.8
40	25	22,085	-56.3		356	6.0
30	25	23,925	-52.9		344	2.9
25	23	25,103	-50.1		294	4.5
20	22	26,564	-46.3		279	7.4
15	20	28,483	-43.7		262	10.7
10						
7						

Standard pressure surface (mb)	SAN ANTONIO, TEXAS 986 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	243	19.2	92	38	1.6
1000	31	119				
950	31	557	18.8	88	107	2.7
900	31	1,027	17.3	83	161	5.1
850	31	1,514	15.8	69	164	5.1
800	31	2,028	13.8	58	214	2.3
750	31	2,567	10.8	51	303	1.9
700	31	3,143	7.3	47	327	6.8
650	31	3,744	3.5	48	326	9.7
600	31	4,393	-1.2	51	318	11.5
550	31	5,074	-6.0	50	311	14.0
500	31	5,822	-10.5	45	297	16.7
450	31	6,622	-15.7	41	286	21.4
400	31	7,504	-21.8	40	283	24.9
350	31	8,474	-28.8	38	282	33.2
300	31	9,558	-37.2	34	277	40.6
250	31	10,793	-46.6		276	49.7
200	31	12,238	-57.1		275	56.3
175	31	13,074	-61.5		276	58.9
150	31	14,025	-63.0		279	51.9
125	31	15,144	-64.5		279	40.2
100	30	16,499	-67.2		280	24.1
80	29	17,834	-69.2		276	11.3
70	29	18,632	-67.8		294	5.4
60	29	19,567	-64.6		15	2.3
50	29	20,692	-60.2		86	6.0
40	29	22,099	-55.9		86	9.1
30	29	23,945	-51.9		82	14.2
25	28	25,129	-50.1		83	16.3
20	24	26,601	-47.2		80	15.9
15	9	28,507	-44.0			
10						
7						

Standard pressure surface (mb)	SAN DIEGO, CALIF. 999 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	124	14.5	85	298	1.2
1000	31	118			333	3.1
950	31	551	12.2	86	230	1.0
900	31	1,004	12.4	69	156	.6
850	31	1,484	13.2	44	253	2.1
800	31	1,993	11.8	36	211	4.7
750	31	2,528	9.7	30	193	6.2
700	31	3,100	6.3	29	186	8.0
650	31	3,701	2.6	26	190	8.5
600	31	4,347	-1.8	25	203	9.7
550	31	5,027	-6.5	24	214	9.3
500	31	5,770	-12.1	25	224	13.4
450	31	6,562	-18.4	27	224	17.9
400	31	7,435	-25.3	31	229	19.4
350	31	8,389	-32.7	30	230	21.4
300	31	9,457	-40.5	31	232	29.9
250	31	10,678	-48.5		236	38.7
200	31	12,118	-56.2		239	46.6
175	31	12,962	-58.2		240	47.8
150	31	13,930	-58.6		242	43.1
125	30	15,070	-59.7		245	37.3
100	30	16,459	-61.5		249	23.7
80	30	17,835	-63.3		249	10.3
70	30	18,654	-63.3		244	3.7
60	30	19,601	-62.7		95	1.6
50	30	20,731	-60.1		72	5.4
40	30	22,135	-56.5		82	8.5
30	30	23,976	-52.6		71	8.2
25	30	25,162	-49.3		82	9.5
20	29	26,637	-46.1		82	7.8
15	27	28,556	-42.8		95	8.5
10	27	31,313	-39.2		95	10.7
7	25	33,776	-35.6		126	5.1
5	18	36,113	-31.8			

Standard pressure surface (mb)	* SAN JUAN, P. R. 1016 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	6	25.1	83	105	6.4
1000	31	147	24.1	82	101	13.4
950	31	594	20.7	82	98	20.2
900	31	1,062	17.9	77	104	18.8
850	31	1,549	15.1	73	106	17.1
800	31	2,062	13.0	63	108	15.3
750	31	2,599	10.6	54	108	11.8
700	31	3,175	7.6	49	109	6.6
650	31	3,775	4.2	48	100	3.5
600	31	4,430	.4	45	142	2.1
550	31	5,118	-3.2	43	219	2.1
500	31	5,873	-7.2	39	242	4.5
450	31	6,679	-12.5	35	251	7.2
400	31	7,578	-18.5	36	259	13.0
350	31	8,560	-25.2	32	260	18.1
300	31	9,662	-33.5	28	263	24.7
250	31	10,915	-43.5		263	33.4
200	31	12,379	-55.2		266	45.5
175	31	13,218	-61.6		267	48.4
150	31	14,159	-67.2		269	45.3
125	31	15,246	-71.5		274	33.4
100	31	16,555	-73.8		285	16.9
80	30	17,860	-72.2		6	5.8
70	30	18,651	-69.2		63	11.3
60	29	19,578	-64.5		82	19.2
50	29	20,704	-60.8		85	25.1
40	27	22,098	-58.5		87	33.0
30	27	23,924	-53.8		92	36.9
25	25	25,105	-50.2		90	34.4
20	25	26,578	-45.5		91	31.9
15	22	28,506	-41.5		90	28.2
10	17	31,280	-37.3		98	23.9
7	5	33,766	-32.8			
5						

Standard pressure surface (mb)	SAN NICOLAS, CALIF. 994 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	174	11.6	92	303	5.2
1000	30	117				
950	30	548	11.1	81	309	5.2
900	30	1,001	12.9	53	312	3.1
850	30	1,482	13.4	33	283	1.4
800	30	1,990	11.7	24	203	3.7
750	30	2,526	8.9	21	188	6.4
700	30	3,093	5.3	22	186	7.4
650	30	3,694	1.7	18	192	7.0
600	30	4,333	-2.8	20	199	8.4
550	30	5,016	-8.0	21	208	9.1
500	30	5,748	-13.7	23	218	10.5
450	30	6,540	-19.3	28	221	11.7
400	30	7,405	-25.0	29	227	14.8
350	30	8,356	-33.6	31	229	15.9
300	30	9,421	-41.7	27	232	16.5
250	30	10,635	-49.7	24	241	23.9
200	30	12,069	-56.8	21	242	32.1
175	30	12,912	-58.2	20	240	34.2
150	30	13,882	-58.3	18	243	34.0
125	30	15,026	-59.9		243	29.5
100	30	16,414	-61.4		246	23.3
80	30	17,791	-63.3		236	9.7
70	30	18,610	-63.6		262	1.4
60	30	19,559	-62.1		95	1.4
50	30	20,690	-60.4		79	5.8
40	30	22,094	-56.4		78	8.9
30	29	23,937	-52.1		74	9.1
25	29	25,123	-49.4		78	9.3
20	29	26,597	-46.0		77	8.7
15	29	28,524	-42.8		101	7.4
10	27	31,278	-39.1		70	6.0
7	19	33,748	-34.0		94	2.3
5	8	36,071	-30.5			

Standard pressure surface (mb)	* SAULT STE. MARIE, MICH. 989 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	221	3.7	80	321	2.7
1000	31	133				
950	31	551	3.8	65	307	5.2
900	31	989	1.8	60	305	9.1
850	31	1,448	-.7	58	302	12.6
800	31	1,930	-3.5	56	299	14.4
750	31	2,434	-6.2	51	299	16.5
700	31	2,975	-8.8	50	293	20.2
650	31	3,543	-11.6	46	289	23.3
600	31	4,156	-14.7	41	288	26.0
550	31	4,808	-18.5	42	288	29.9
500	31	5,515	-23.1	37	286	32.4
450	31	6,273	-27.9	35	288	37.1
400	31	7,115	-33.6	34	285	40.6
350	31	[illegible],039	-39.8	33	280	45.8
300	31	9,079	-45.6		277	49.0
250	31	10,280	-50.3		274	51.9
200	31	11,731	-51.5		273	49.1
175	31	12,598	-51.3		275	41.8
150	31	13,600	-51.2		274	37.5
125	31	14,781	-52.1		273	31.3
100	31	16,221	-53.3		273	24.5
80	31	17,653	-54.1		279	20.6
70	30	18,506	-53.8		282	15.9
60	30	19,497	-53.4		278	10.3
50	30	20,671	-53.2		273	8.9
40	30	22,112	-52.0		281	5.2
30	30	23,984	-49.9		260	4.3
25	30	25,179	-48.6		262	6.4
20	29	26,652	-47.0		251	7.4
15	29	28,567	-44.7		254	7.6
10	25	31,304	-40.0		254	6.0
7	19	33,804	-32.7		304	.8
5	9	36,225	-25.4			

Standard pressure surface (mb)	SHEMYA, ALASKA 1007 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	38	2.6	90	225	4.9
1000	31	89			242	4.5
950	31	500	-.8	92	247	8.0
900	31	932	-2.4	83	238	9.7
850	31	1,385	-3.7	76	260	10.3
800	31	1,862	-4.9	66	267	12.8
750	31	2,369	-6.6	64	267	15.2
700	31	2,905	-9.1	65	265	17.9
650	31	3,475	-11.9	62	266	19.2
600	31	4,085	-15.1	61	271	22.0
550	31	4,735	-19.0	58	274	22.1
500	31	5,442	-23.0	50	281	25.1
450	31	6,206	-27.6	47	279	27.0
400	31	7,045	-33.2	46	275	29.9
350	31	7,971	-39.7	45	279	34.6
300	31	9,011	-45.5		279	39.6
250	31	10,214	-49.7		286	37.1
200	31	11,667	-51.4		283	37.3
175	31	12,534	-51.2		282	34.4
150	31	13,536	-51.5		280	29.9
125	31	14,716	-52.6		282	25.8
100	31	16,154	-53.4		281	18.8
80	30	17,594	-54.3		278	15.5
70	30	18,449	-54.3		276	11.7
60	30	19,436	-54.4		274	7.0
50	30	20,605	-54.0		283	3.7
40	30	22,039	-53.4		279	1.2
30	29	23,889	-52.8		222	1.2
25	28	25,074	-52.1		245	1.4
20	27	26,522	-51.1		125	1.9
15	22	28,419	-48.4		113	2.9
10	20	31,136	-43.4		141	2.7
7	5	33,594	-38.4			
5						

Standard pressure surface (mb)	* SHREVEPORT, LA. 1006 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	79	17.9	88	42	2.7
1000	31	129	18.1	86	58	3.5
950	31	575	17.8	77	121	4.9
900	31	1,033	15.6	76	187	3.9
850	31	1,517	13.7	65	238	5.2
800	31	2,027	11.6	57	253	5.2
750	31	2,562	8.6	52	284	4.5
700	31	3,132	5.0	44	297	3.9
650	31	3,733	1.4	41	312	5.2
600	31	4,373	-2.9	47	304	7.4
550	31	5,053	-7.5	47	292	9.9
500	31	5,793	-12.1	40	285	13.0
450	31	6,588	-17.5	39	278	17.3
400	31	7,465	-23.5	38	279	20.8
350	31	8,428	-30.3	32	283	26.8
300	31	9,506	-38.4	29	283	35.4
250	31	10,733	-47.8		281	44.5
200	31	12,171	-57.6		283	54.8
175	31	13,005	-61.2		281	52.8
150	31	13,959	-61.9		281	50.9
125	31	15,083	-62.9		282	42.9
100	30	16,453	-64.5		284	32.2
80	30	17,808	-66.3		283	17.9
70	30	18,617	-65.4		284	10.7
60	30	19,561	-62.3		298	4.5
50	29	20,696	-58.5		62	2.1
40	29	22,110	-54.7		96	6.0
30	29	23,964	-51.3		85	9.9
25	29	25,152	-49.5		83	12.6
20	29	26,623	-46.5		85	12.8
15	28	28,551	-42.9		81	13.4
10	23	31,309	-39.4		87	11.5
7	15	33,741	-35.9		42	6.8

Standard pressure surface (mb)	SPOKANE, WASH. 932 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	717	7.6	61	179	5.1
1000	31	123				
950	31	549				
900	31	1,001	10.8	44	224	6.8
850	31	1,476	8.8	42	245	7.8
800	31	1,975	5.2	45	242	9.3
750	31	2,495	1.8	46	250	11.3
700	31	3,052	-1.6	49	253	12.4
650	31	3,632	-5.5	50	253	16.3
600	31	4,263	-8.9	44	254	21.2
550	31	4,925	-13.3	45	256	23.7
500	31	5,651	-18.2	44	256	26.6
450	31	6,424	-23.6	45	253	29.7
400	31	7,282	-29.6	45	255	31.5
350	31	8,220	-37.1	47	254	32.2
300	31	9,268	-44.9		253	35.2
250	31	10,465	-52.3		261	34.0
200	31	11,890	-57.0		261	34.4
175	30	12,735	-56.0		262	28.9
150	30	13,718	-54.9		262	26.6
125	30	14,883	-55.6		265	20.4
100	30	16,299	-57.3		272	17.7
80	30	17,709	-57.2		279	12.8
70	30	18,554	-56.3		285	12.0
60	30	19,534	-55.3		293	10.9
50	30	20,697	-55.0		304	9.5
40	30	22,122	-54.7		318	6.6
30	30	23,967	-52.6		338	5.8
25	29	25,148	-51.3		347	5.6
20	28	26,598	-49.8		321	5.2
15	24	28,487	-46.1		293	7.6
10	16	31,219	-40.1			
7						

Standard pressure surface (mb)	SWAN ISLAND, W. I. 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	10	26.5	84	107	7.6
1000	31	109	25.7	85	102	9.5
950	31	560	22.2	88	113	12.6
900	31	1,031	19.5	79	115	13.0
850	31	1,523	16.9	68	116	11.3
800	31	2,038	14.3	60	116	8.5
750	31	2,583	11.5	52	126	5.1
700	31	3,156	8.4	48	152	5.1
650	31	3,763	5.2	41	165	2.5
600	31	4,415	1.8	37	299	1.7
550	31	5,104	-1.8	34	308	5.4
500	31	5,865	-6.2	31	313	7.4
450	31	6,676	-11.4	29	320	11.5
400	31	7,576	-17.4	30	315	14.2
350	31	[illegible],562	-24.7	30	310	17.5
300	31	9,664	-33.0	28	308	22.1
250	31	10,920	-42.9		299	24.9
200	31	12,387	-54.3		298	26.4
175	31	13,231	-60.6		295	28.0
150	30	14,175	-66.5		293	28.9
125	29	15,261	-71.6		298	23.5
100	28	16,569	-74.4		330	12.2
80	28	17,867	-74.2		57	11.5
70	28	18,648	-71.5		77	16.9
60	28	19,568	-67.3		85	20.2
50	27	20,677	-63.3		89	24.1
40	26	22,057	-59.3		89	32.4
30	26	23,876	-54.6		91	35.4
25	26	25,052	-51.0		93	33.4
20	24	26,512	-47.0		93	31.1
15	18	28,448	-42.6		83	26.4
10						
7						

Standard pressure surface (mb)	TAMPA, FLA. 1015 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	8	22.5	89	134	2.3
1000	31	132	22.0	86	140	4.1
950	31	579	19.6	80	184	7.8
900	31	1,042	17.1	72	200	7.8
850	31	1,528	14.5	65	207	8.2
800	31	2,039	11.7	61	216	8.2
750	31	2,578	8.9	51	228	8.0
700	31	3,146	5.9	45	240	8.0
650	31	3,752	2.5	40	247	8.2
600	31	4,393	-1.1	36	246	11.1
550	31	5,080	-5.1	35	252	12.4
500	31	5,826	-9.7	33	256	13.0
450	31	6,635	-14.8	31	263	15.2
400	31	7,516	-20.9	26	273	17.3
350	31	8,488	-28.1	27	272	20.6
300	31	9,576	-36.8	28	269	21.8
250	31	10,813	-46.3		276	25.1
200	31	12,263	-56.1		282	33.0
175	31	13,104	-60.0		283	36.1
150	31	14,059	-62.4		283	36.1
125	31	15,180	-64.3		280	28.7
100	31	16,538	-66.4		286	19.8
80	31	17,881	-68.2		298	8.4
70	31	18,684	-66.8		306	4.1
60	31	19,623	-63.1		34	2.1
50	31	20,753	-59.7		77	6.6
40	31	22,159	-56.3		90	12.2
30	31	24,004	-51.7		92	18.3
25	30	25,186	-49.5		92	18.8
20	24	26,654	-46.3		85	22.1
15	15	28,558	-43.0		84	23.7
10						
7						

Standard pressure surface (mb)	* TATOOSH IS., WASH 1015 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	31	8.3	90	220	4.7
1000	31	151	8.0	83	239	5.2
950	31	573	6.1	79	266	6.8
900	31	1,015	4.3	70	267	8.5
850	31	1,479	2.5	64	266	10.1
800	31	1,967	.6	55	252	11.5
750	31	2,483	-1.7	52	253	13.8
700	31	3,029	-4.5	45	259	16.9
650	31	3,606	-7.2	43	265	19.0
600	31	4,229	-11.0	44	262	22.1
550	31	4,888	-14.9	42	261	24.7
500	31	5,608	-19.2	39	261	28.0
450	31	6,376	-24.6	38	259	30.5
400	31	7,230	-30.8	36	259	33.2
350	31	8,164	-37.9	42	259	36.5
300	31	9,209	-45.5		254	37.9
250	30	10,411	-52.4		252	37.7
200	30	11,836	-56.6		251	37.5
175	30	12,684	-55.6		248	32.8
150	30	13,669	-54.4		247	27.8
125	28	14,839	-55.5		254	24.9
100	28	16,258	-55.9		256	19.4
80	28	17,676	-56.4		259	15.5
70	28	18,523	-56.1		274	12.0
60	28	19,505	-55.7		274	9.7
50	28	20,667	-55.3		289	8.0
40	28	22,092	-54.9		312	5.6
30	26	23,934	-53.9		326	4.7
25	25	25,103	-52.9		351	5.1
20	25	26,548	-51.0		2	4.7
15	19	28,472	-46.1		57	1.7
10	15	31,218	-39.2		83	4.3
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MAY 1966

TOPEKA, KANS.
985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	269	11.7	74	174	2.9
1000	31	137				
950	31	567	14.4	56	220	5.2
900	31	1,026	13.0	52	235	9.1
850	31	1,506	11.7	43	261	10.3
800	31	2,012	9.7	39	281	11.5
750	31	2,538	6.9	38	288	13.4
700	31	3,109	3.4	41	290	15.2
650	31	3,700	-.2	38	295	18.1
600	31	4,343	-4.6	43	293	21.8
550	31	5,014	-9.6	45	293	23.5
500	31	5,752	-14.8	40	291	25.3
450	31	6,533	-20.3	31	288	26.8
400	31	7,404	-26.6	31	287	27.4
350	31	8,354	-34.0	25	289	30.1
300	31	9,416	-42.1	17	286	32.6
250	31	10,627	-50.7		284	39.2
200	31	12,054	-58.5		281	42.9
175	31	12,890	-60.0		282	42.7
150	31	13,853	-59.3		283	41.4
125	31	14,997	-58.9		285	34.6
100	30	16,397	-59.9		285	28.6
80	30	17,790	-60.2		286	19.6
70	30	18,621	-60.6		291	13.6
60	29	19,583	-58.8		295	9.3
50	29	20,736	-56.0		299	6.4
40	28	22,159	-53.5		302	4.7
30	27	24,018	-50.3		297	3.5
25	26	25,214	-48.5		286	3.1
20	23	26,695	-46.6		262	3.3
15	19	28,617	-43.8		262	7.8
10	6	31,336	-40.6			
7						
5						

+ TRUK, CAROLINE IS.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	2	28.5	79	79	6.4
1000	31	99	27.4	76	80	8.2
950	31	551	23.6	76	86	12.4
900	31	1,024	20.8	73	97	13.6
850	31	1,517	18.2	68	99	13.2
800	31	2,036	15.9	60	99	13.8
750	31	2,585	13.3	54	100	13.2
700	31	3,161	10.3	52	98	11.7
650	31	3,774	6.7	50	95	11.1
600	31	4,428	3.0	45	95	10.9
550	31	5,121	-.8	46	98	9.7
500	31	5,885	-4.8	40	107	9.9
450	31	6,705	-9.1	31	109	10.1
400	31	7,612	-14.7	29	105	8.4
350	31	8,610	-21.4	29	105	4.9
300	31	9,729	-29.8	25	182	3.3
250	31	11,001	-40.2	24	215	6.4
200	31	12,484	-52.5		225	8.2
175	31	13,333	-59.5		230	9.5
150	31	14,281	-67.1		241	8.0
125	30	15,360	-74.8		272	6.0
100	30	16,637	-80.1		41	3.5
80	30	17,900	-78.6		79	15.0
70	30	18,667	-74.3		88	23.7
60	30	19,581	-67.9		95	33.8
50	30	20,690	-63.3		98	37.3
40	29	22,080	-57.5		99	26.6
30	28	23,927	-51.3		91	10.9
25	26	25,117	-48.4		118	5.1
20	20	26,591	-45.1		103	4.3
15	5	28,547	-42.5			
10						
7						
5						

* TUCSON, ARIZ.
923 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	789	17.1	41	144	6.8
1000	31	91				
950	31	533				
900	31	1,003	21.7	31	151	6.2
850	31	1,495	18.8	32	163	6.4
800	31	2,012	15.2	33	191	8.5
750	31	2,550	11.3	34	202	11.7
700	31	3,127	7.1	33	211	13.8
650	31	3,725	2.8	35	215	14.8
600	31	4,374	-2.0	33	216	15.9
550	31	5,050	-6.7	33	219	18.1
500	31	5,797	-11.6	28	228	19.8
450	31	6,591	-17.5	31	236	21.4
400	31	7,467	-23.9	30	245	23.1
350	31	8,428	-31.0	28	248	27.6
300	31	9,503	-39.3	29	250	35.5
250	31	10,729	-47.7		251	46.6
200	31	12,171	-56.4		253	55.2
175	31	13,012	-59.3		252	53.0
150	30	13,975	-60.8		253	50.5
125	30	15,106	-62.1		255	42.[illegible]
100	30	16,479	-64.1		255	30.7
80	28	17,831	-65.9		267	11.1
70	28	18,642	-65.2		304	3.5
60	27	19,579	-63.7		44	4.5
50	27	20,705	-60.5		66	6.2
40	27	22,108	-56.5		70	7.4
30	26	23,948	-52.2		69	10.5
25	25	25,136	-49.4		76	13.6
20	22	26,617	-45.9		89	14.2
15	18	28,552	-42.9		89	13.0
10	12	31,304	-38.6			
7						
5						

* VANDENBERG AFB, CALIF.
1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	100	10.6	92	335	1.7
1000	31	122			337	2.7
950	31	552	10.7	82	331	4.1
900	31	1,003	12.9	53	60	2.5
850	31	1,483	12.3	39	89	3.1
800	31	1,990	10.9	33	117	1.4
750	31	2,517	8.4	28	181	3.3
700	31	3,092	5.3	22	180	5.4
650	31	3,687	1.6	20	187	6.2
600	31	4,333	-2.7	22	196	7.8
550	31	5,008	-7.5	22	204	8.7
500	31	5,752	-13.0	25	217	9.5
450	31	6,535	-19.2	23	219	10.9
400	31	7,410	-26.1	25	228	11.5
350	31	8,361	-33.7	31	224	11.5
300	31	9,424	-42.1		231	13.8
250	31	10,634	-50.8		240	17.3
200	31	12,064	-57.3		243	23.1
175	31	12,906	-58.1		240	26.6
150	31	13,877	-57.6		242	27.6
125	31	15,025	-58.9		244	24.7
100	31	16,420	-60.1		245	21.4
80	30	17,808	-61.6		242	11.1
70	30	18,634	-61.9		233	5.6
60	30	19,588	-61.1		182	1.0
50	29	20,725	-59.5		67	4.7
40	29	22,129	-56.9		73	8.0
30	26	23,969	-52.3		73	7.8
25	26	25,155	-49.9		74	8.2
20	25	26,625	-46.8		72	8.7
15	24	28,544	-43.5		99	5.8
10	23	31,293	-39.8		82	5.8
7	18	33,746	-35.8		80	2.7
5	5	36,145	-29.0			

* WAKE IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	25.8	82	71	8.4
1000	31	139	24.6	84	75	11.3
950	31	583	20.7	88	85	12.2
900	31	1,055	17.9	85	89	11.5
850	31	1,544	15.5	80	86	9.5
800	31	2,058	13.4	71	83	8.0
750	31	2,593	10.9	60	77	6.8
700	31	3,174	8.3	53	58	4.9
650	31	3,776	5.2	42	57	3.5
600	31	4,433	1.8	37	34	3.7
550	31	5,126	-2.1	32	356	4.3
500	31	5,882	-6.7	32	339	4.3
450	31	6,690	-12.0	28	335	6.2
400	31	7,590	-18.1	25	320	8.7
350	31	8,573	-25.3	25	310	11.3
300	31	9,674	-33.6	25	309	14.0
250	31	10,927	-43.6		302	19.6
200	31	12,388	-55.2		297	24.7
175	31	13,228	-61.2		294	25.3
150	31	14,171	-67.2		293	26.8
125	31	15,256	-72.1		298	22.7
100	30	16,554	-75.9		313	13.4
80	27	17,849	-73.3		34	5.1
70	25	18,639	-69.6		75	9.3
60	24	19,568	-65.3		82	14.6
50	24	20,686	-61.9		88	20.8
40	24	22,074	-59.0		86	25.3
30	23	23,896	-54.4		87	30.7
25	23	25,073	-50.6		84	31.9
20	22	26,536	-47.1		86	31.3
15	21	28,456	-43.1		88	29.3
10	20	31,207	-38.8		86	32.1
7	12	33,659	-35.5		97	31.1
5						

* WALLOPS IS. VA. NASA
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	13.0	85	158	.6
1000	31	149	14.1	74	238	1.7
950	31	587	13.6	66	277	7.2
900	31	1,037	11.4	67	287	8.9
850	31	1,514	9.3	63	280	11.3
800	31	2,015	7.4	60	263	13.0
750	31	2,546	4.8	58	256	15.5
700	31	3,105	1.9	56	255	21.0
650	31	3,700	-1.3	54	253	24.3
600	31	4,334	-4.9	50	254	26.2
550	31	5,010	-9.2	44	254	28.0
500	31	5,745	-13.6	40	258	32.1
450	31	6,534	-18.0	37	256	34.4
400	31	7,406	-25.2	36	255	36.9
350	31	8,363	-32.2	33	255	42.2
300	31	9,433	-40.3	34	250	49.5
250	31	10,651	-49.8		249	54.4
200	30	12,075	-59.3		254	60.8
175	30	12,905	-61.7		258	60.8
150	30	13,861	-60.1		259	53.4
125	30	15,002	-59.6		260	39.6
100	30	16,394	-60.4		260	33.4
80	30	17,782	-60.5		264	22.1
70	30	18,614	-59.8		265	15.7
60	29	19,577	-58.4		259	9.5
50	29	20,731	-55.6		271	3.5
40	29	22,161	-53.0		27	1.2
30	28	24,022	-50.7		71	6.2
25	28	25,214	-48.9		70	7.6
20	26	26,684	-46.6		74	[illegible].4
15	22	28,609	-43.9		74	4.3
10	13	31,349	-41.4			
7						

WASHINGTON, D. C.
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	84	11.6	85	341	1.2
1000	31	147			315	1.2
950	31	581	11.7	67	291	4.9
900	31	1,029	10.0	61	293	7.8
850	31	1,502	8.0	57	289	12.6
800	31	2,001	6.0	54	280	15.3
750	31	2,526	3.3	53	276	18.5
700	31	3,085	.6	49	270	21.4
650	31	3,674	-2.7	45	267	24.9
600	31	4,307	-6.3	51	266	29.1
550	31	4,977	-10.0	43	264	33.2
500	31	5,711	-14.6	35	262	37.3
450	31	6,493	-19.9	32	261	41.6
400	31	7,365	-26.0	31	261	44.5
350	31	[illegible],318	-33.1	32	260	49.1
300	31	9,382	-41.5	39	260	51.9
250	31	10,594	-51.0		258	57.7
200	31	12,017	-59.1		263	61.4
175	31	12,853	-60.4		263	57.9
150	31	13,817	-59.4		263	50.7
125	31	14,960	-59.5		262	41.6
100	30	16,360	-59.6		265	33.4
80	30	17,754	-59.7		265	23.7
70	30	18,590	-58.9		267	15.3
60	29	19,560	-58.0		266	9.3
50	29	20,714	-55.0		265	3.3
40	29	22,145	-53.1		281	1.9
30	26	24,002	-50.6		98	1.0
25	26	25,193	-48.8		195	.4
20	25	26,660	-47.3		20	1.2
15	10	28,608	-45.1			
10						
7						

WINNEMUCCA, NEV.
867 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,310	8.8	41	72	1.4
1000	31	107				
950	31	545				
900	31	1,004				
850	31	1,478	13.2	35	22	1.4
800	31	1,987	11.2	36	266	1.7
750	31	2,519	7.4	40	252	3.9
700	31	3,087	3.6	43	249	5.8
650	31	3,678	-.8	48	232	9.7
600	31	4,318	-5.6	48	226	13.6
550	31	4,986	-10.1	43	237	14.2
500	31	5,723	-15.3	41	242	15.5
450	31	6,503	-20.7	34	249	17.7
400	31	7,372	-27.0	35	246	19.0
350	31	8,320	-34.3	37	252	22.3
300	31	9,380	-42.5		244	19.6
250	31	10,586	-51.7		250	22.3
200	30	12,006	-58.2		252	23.9
175	30	12,844	-59.1		252	25.6
150	30	13,811	-58.2		258	23.9
125	30	14,959	-58.1		258	21.2
100	30	16,361	-58.8		266	19.2
80	30	17,761	-59.0		273	13.0
70	30	18,598	-58.9		278	10.3
60	30	19,565	-58.6		292	8.7
50	30	20,712	-58.0		323	5.2
40	30	22,123	-56.1		349	5.1
30	27	23,977	-52.9		346	3.1
25	27	25,158	-50.7		308	4.5
20	26	26,623	-47.3		286	7.0
15	24	28,536	-44.2		282	10.7
10	[illegible]	31,245	-41.0			
7						

WINSLOW, ARIZ.
851 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,492	9.9	42	199	3.7
1000	31	117				
950	31	551				
900	31	1,015				
850	31	1,498			187	3.9
800	31	2,009	14.5	33	225	8.5
750	31	2,548	10.9	35	231	10.5
700	31	3,122	6.5	38	224	10.7
650	31	3,719	1.7	40	217	9.7
600	31	4,365	-3.3	39	213	12.2
550	31	5,040	-8.3	38	213	13.0
500	31	5,781	-13.3	33	225	14.0
450	31	6,568	-19.1	31	237	16.1
400	31	7,441	-25.7	32	243	17.7
350	31	8,395	-32.8	31	246	20.8
300	31	9,462	-41.0	31	245	25.8
250	31	10,678	-49.7		251	33.8
200	31	12,111	-57.5		252	43.1
175	31	12,949	-60.0		256	42.2
150	31	13,910	-60.3		253	40.4
125	31	15,045	-60.8		258	34.0
100	31	16,428	-62.3		260	23.9
80	31	17,798	-64.4		271	15.5
70	31	18,614	-64.1		286	9.1
60	31	19,559	-63.0		326	4.5
50	30	20,689	-59.7		[illegible]	2.5
40	30	22,094	-56.8		33	5.6
30	29	23,934	-52.3		60	5.1
25	29	25,119	-49.9		67	5.4
20	27	26,591	-46.5		82	4.1
15	19	28,514	-43.5		109	4.1
10	6	31,252	-40.2			
7						

YAKUTAT, ALASKA
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	1.5	96	111	4.7
1000	31	83			118	4.7
950	31	498	1.8	85	137	9.3
900	31	933	-1.0	86	146	11.3
850	31	1,387	-3.8	85	146	11.3
800	31	1,864	-6.5	78	154	10.1
750	31	2,366	-9.4	70	159	9.5
700	31	2,897	-12.7	70	162	11.3
650	31	3,459	-16.3	69	164	11.5
600	31	4,057	-20.1	65	179	11.7
550	31	4,694	-24.3	62	188	13.0
500	31	5,385	-28.9	59	195	12.2
450	31	6,127	-34.0	55	210	13.8
400	31	6,949	-39.0	55	217	15.2
350	31	7,855	-44.3	55	224	18.6
300	31	8,877	-48.4		234	18.5
250	31	10,075	-48.5		243	18.6
200	31	11,546	-47.8		246	17.1
175	31	12,428	-47.7		240	14.2
150	31	13,446	-47.9		236	15.0
125	31	14,646	-48.6		238	13.6
100	31	16,111	-49.5		233	11.7
80	31	17,570	-50.1		225	8.9
70	31	18,441	-50.4		230	8.2
60	31	19,446	-50.6		221	6.2
50	31	20,634	-50.8		216	2.9
40	30	22,087	-50.9		105	.6
30	29	23,962	-50.7		127	1.4
25	29	25,151	-50.3		91	3.3
20	28	26,612	-49.4		78	5.8
15	27	28,507	-47.2		83	8.7
10	18	31,231	-42.6		79	8.7
7	[illegible]	33,613	-38.2			

YAP, CAROLINE IS.
+ 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	17	28.6	79	72	6.8
1000	31	97	27.6	78	75	8.4
950	31	543	23.3	80	84	12.4
900	31	1,022	21.0	71	93	12.6
850	31	1,516	18.4	67	99	11.5
800	31	2,035	15.9	60	105	9.5
750	31	2,575	13.3	55	101	9.3
700	31	3,160	10.3	48	100	9.1
650	31	3,770	7.0	46	105	11.7
600	31	4,428	3.1	48	111	11.1
550	31	5,122	-.7	45	111	10.1
500	31	5,886	-4.8	43	115	8.5
450	31	6,702	-9.6	39	110	8.4
400	31	7,610	-15.0	33	94	7.4
350	31	8,607	-21.7	29	96	6.4
300	31	9,723	-30.1	28	86	4.1
250	31	10,994	-40.2	25	71	2.1
200	31	12,476	-52.8		273	2.3
175	30	13,323	-60.1		314	5.1
150	30	14,267	-67.6		327	6.8
125	30	15,344	-74.7		13	6.8
100	30	16,623	-79.8		55	12.2
80	30	17,882	-80.2		79	20.2
70	29	18,644	-76.0		85	25.6
60	28	19,551	-68.8		88	31.9
50	28	20,659	-63.2		90	34.[illegible]
40	28	22,045	-58.8		90	34.[illegible]
30	27	23,883	-52.5		94	20.4
25	26	25,067	-49.5		89	17.1
20	23	26,534	-45.7		90	15.2
15	14	28,451	-42.7		102	16.9
10						

YUCCA FLAT, NEV.
879 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,196	10.1	35	231	.6
1000	31	98				
950	31	534				
900	31	995				
850	31	1,477	17.1	25	215	3.3
800	31	1,991	13.9	27	200	9.3
750	31	2,525	9.9	30	200	11.5
700	31	3,100	5.4	32	195	11.3
650	31	3,691	.5	35	184	12.0
600	31	4,336	-4.6	35	180	13.4
550	31	5,003	-9.5	R32	196	13.6
500	31	5,745	-14.2	R25	216	15.0
450	31	6,523	-20.0	R23	222	15.7
400	31	7,397	-26.9	R26	230	15.0
350	31	8,346	-34.2	R27	227	12.6
300	31	9,405	-42.9		234	14.4
250	31	10,611	-51.4		246	18.3
200	31	12,035	-58.0		246	26.4
175	31	12,872	-59.7		246	28.2
150	31	13,837	-58.8		249	30.9
125	31	14,981	-59.8		255	27.0
100	29	16,375	-60.4		263	21.2
80	28	17,760	-61.5		272	14.4
70	28	18,587	-61.5		281	9.9
60	28	19,545	-60.9		324	4.5
50	28	20,683	-59.2		38	5.8
40	27	22,084	-57.0		29	7.2
30	27	23,922	-53.0		25	5.4
25	25	25,102	-50.7		28	6.6
20	21	26,582	-47.1		354	2.7
15	16	28,493	-44.5		309	2.1
10	6	31,221	-42.9			

YUMA, ARIZ.
995 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	21	131	21.0	38	106	.8
1000	21	84				
950	21	527	24.1	29	243	4.1
900	21	1,001	21.5	29	224	4.7
850	21	1,493	18.2	30	190	5.6
800	21	2,008	14.7	28	163	7.0
750	21	2,541	10.5	30	162	8.5
700	21	3,119	6.6	27	175	9.3
650	21	3,712	2.4	29	183	11.1
600	21	4,363	-2.1	25	197	11.1
550	21	5,036	-7.0	28	210	9.9
500	21	5,784	-12.2	25	228	12.4
450	21	6,570	-18.4	25	229	15.2
400	21	7,447	-25.1	27	233	19.6
350	21	8,402	-32.5	24	233	27.2
300	21	9,470	-40.1	21	237	37.1
250	21	10,690	-48.6		239	45.[illegible]
200	19	12,124	-56.3		243	51.5
175	18	12,961	-59.0		244	52.8
150	18	13,924	-59.9		250	47.0
125	18	15,061	-60.7		252	36.1
100	15	16,441	-62.5			
80						
70						
60						
50						
40						
30						
25						
20						
15						
10						

Note: All observations scheduled at 1200, G.C T Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i e , elevation angles less than 6° above the horizon, or any obstruction above the horizon

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from lithium chloride hygristors

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots

Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. They were also equipped with carbon hygristors These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes

+ Observations for these stations are scheduled at 0000 G. C T

R More than half of the observations are from statistical values

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	ALBUQUERQUE, N. MEX.								
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
May									
1-----	0.75	0.86	0.99	1.17	1.37	1.33	----	----	----
2-----	.84	.92	1.09	1.26	1.46	1.22	1.00	0.83	0.74
3-----	.77	.88	1.03	1.18	1.40	1.09	.93	----	.67
4-----	.75	.95	1.02	1.19	1.44	1.23	1.05	.92	.81
5-----	.77	.87	1.02	1.19	1.42	1.22	1.04	.98	.77
6-----	.82	.93	1.06	1.22	1.42	1.11	.93	.81	.66
7-----	.75	.87	1.00	1.17	1.41	1.19	----	----	----
8-----	----	----	----	1.12	1.40	----	----	----	----
9-----	----	----	----	----	1.38	1.08	----	----	----
11----	----	----	----	----	----	1.22	1.08	.96	.84
12----	----	----	----	----	----	----	1.06	.92	.81
13----	.79	.90	1.02	1.20	1.45	----	1.03	.85	.75
14----	.83	----	----	----	1.47	----	----	.91	----
15----	.92	1.03	1.12	1.30	1.51	1.37	1.18	1.05	.96
16----	----	----	----	1.26	1.45	----	----	----	----
17----	.96	1.06	1.18	1.33	1.51	1.26	1.05	.92	.85
18----	.83	.93	1.04	1.22	1.41	----	----	----	----
19----	.73	.85	.99	1.18	1.41	----	----	----	----
20----	.70	.81	.93	1.13	1.39	----	.98	.83	.74
21----	.71	.83	----	1.18	----	----	----	----	----
22----	.88	.97	1.08	1.25	1.45	1.18	1.00	.84	.74
23----	.89	.99	1.12	1.29	1.46	----	----	----	----
24----	.75	.83	.98	1.15	1.40	1.20	1.05	.92	.81
25----	.66	.75	.93	1.12	1.38	1.12	----	----	----
26----	.63	.70	.88	1.09	1.36	----	----	----	----
27----	.68	.75	----	1.15	1.43	1.08	.95	.80	----
28----	.75	.85	.90	1.18	1.44	1.19	.93	.84	----
29----	.79	.89	1.03	1.22	1.45	1.25	1.06	1.00	----
Averages	0.78	0.88	1.02	1.20	1.43	1.20	1.02	0.90	0.78
	OMAHA, NEBR.								
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
May									
1-----	----	----	----	----	HS1.38	HS1.12	HS0.85	HS0.69	‡
2-----	----	----	----	HM1.05	HM1.28	----	HS .84	HS .68	‡
3-----	----	----	----	----	----	HS1.04	HS .84	HS .70	‡
4-----	----	----	HM0.86	HM1.05	DS1.21	----	----	----	----
5-----	----	----	----	----	----	HS .93	HS .70	----	----
9-----	----	0.85	.99	1.16	----	----	----	----	----
13----	----	----	----	----	----	----	HS .60	----	----
14----	----	----	----	----	HM1.19	----	----	----	----
16----	HS0.67	HS .79	HS .90	HS1.04	----	----	----	----	----
18----	.69	.87	.95	1.13	----	----	----	----	----
19----	HS .72	HS .83	HS .94	HS1.16	----	----	HS1.01	HS .88	HS .72
21----	----	----	----	----	HM1.28	HS1.10	HS .80	HM .63	HM .51
24----	HS .74	HS .86	HS .98	HS1.18	----	----	----	----	----
25----	HS .77	HS .88	HS1.00	HS1.16	----	----	----	----	----
26----	----	----	HS .90	HS1.11	----	----	----	----	----
27----	HS .63	HS .77	HS .90	HS1.07	----	----	----	----	----
28----	HS .65	HS .79	HS .93	HS1.14	HS1.40	HS1.18	HS .97	HS .85	HS .72
29----	----	----	HS .92	HS1.27	----	----	----	----	----
30----	----	----	----	----	HS1.38	HM .92	HM .71	HM .55	HM .45
31----	HS .73	HS .88	HS1.02	HS1.27	----	----	----	----	----
Averages	0.70	0.84	0.94	1.14	1.30	1.05	0.81	0.71	0.60
	GUAM, M. I.								
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
			No observations due to cloudiness						

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	MADISON, WIS.								
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
May									
3-----	----	----	S 0.90	S 1.14	S 1.40	M 1.14	M 0.93	M 0.62	M 0.43
4-----	M 0.73	S 0.83	----	----	----	----	----	----	----
10----	M .71	M .85	S .97	S 1.16	----	----	----	----	----
16----	M .70	M .80	S .92	S 1.10	S 1.34	----	----	----	----
21----	I .51	I .65	S .85	S 1.01	----	----	----	----	----
22----	M .61	M .72	S .91	S 1.11	----	----	----	----	----
25----	M .69	M .83	S .95	S 1.15	S 1.36	----	----	----	----
28----	----	----	M 1.07	S 1.19	----	----	----	----	----
29----	S .78	S .87	S 1.01	----	----	----	----	----	----
31----	S .78	S .89	S 1.04	S 1.20	----	----	----	----	---
Averages	0.69	0.81	0.96	1.13	1.37	1.14	0.93	0.62	0.43
	BLUE HILL OBS., MASS.								
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
May									
3-----	0.75	0.83	0.96	1.12	1.30	0.87	0.55	0.38	----
4-----	.69	.78	.93	1.05	----	----	----	----	----
5-----	.67	.77	.91	1.10	1.32	----	----	----	----
7-----	----	----	----	1.13	1.40	1.16	.89	.81	.72
10----	----	----	.75	1.18	1.44	1.12	.90	.77	.69
11----	.75	.86	.96	1.16	----	----	----	----	----
16----	.70	.79	.91	1.07	1.28	----	----	----	----
23----	----	----	.84	1.08	1.28	.99	.82	.67	.57
24----	.58	.65	.78	.95	----	----	----	----	----
29----	----	----	----	----	----	.96	.82	.70	.62
30----	.79	.90	1.04	1.17	1.39	1.01	.79	.66	.57
31----	.58	.69	.79	1.01	1.29	----	----	----	----
Averages	0.69	0.78	0.89	1.09	1.34	1.02	0.80	0.67	0.63
	TUCSON, ARIZ.								
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
May									
1-----	0.72	0.83	0.96	----	----	----	0.94	0.79	0.66
2-----	----	----	----	----	----	----	----	.59	.47
4-----	.80	.88	.95	----	----	----	----	----	----
5-----	.80	.90	1.00	----	----	----	.82	----	----
6-----	.73	.84	.95	----	----	----	----	.76	.56
7-----	.78	.88	----	----	----	----	----	----	----
10----	----	.83	.95	----	----	----	----	----	----
11----	.66	.78	.91	----	----	----	.99	.87	.77
12----	.81	.92	----	----	----	----	.98	----	.72
13----	.80	.91	1.01	----	----	----	----	----	----
14----	----	----	----	----	----	----	.99	.89	.80
16----	.83	.91	1.01	----	----	----	----	----	----
18----	.84	.92	1.04	----	----	----	.93	.86	----
19----	.78	.82	1.00	----	----	----	----	----	----
22----			Instrument malfunction						
23----							1.09	.99	.88
24----	.84	.94	1.05	----	----	----	----	.94	.83
25----	.89	.97	----	----	----	----	1.03	.92	.88
26----	.91	.98	1.09	----	----	----	1.06	.94	.84
27----	.92	.99	1.11	----	----	----	1.09	.97	.87
28----	.90	.99	1.11	----	----	----	1.07	.96	.87
29----			Instrument malfunction						
Averages	0.81	0.89	1.01	----	----	----	0.99	0.87	0.76

HS	Slight haze	S	Slight haze - indeterminable
HM	Moderate haze	M	Moderate haze - indeterminable
DS	Slight dust	I	Intense haze - indeterminable
‡	Wind mast	*	Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	656	674	654	664	695	693	685	615	646	689	580	547	667	666	709	621	644	663	645	629	563	672	732	733	725	654	722	714	734	538	403	653
AMES IOWA	628	650	582	---	---	---	---	---	764	443	34	82	206	622*	---	598	---	644	636	224	568	605	183	---	---	---	---	---	---	723	---	---
ANNETTE ALASKA	33	50	266	241	465	314	71	477	480	609	128	604	491	170	491	391	221	---	---	336	693	160	432	308	325	586	258	---	561	---	717	366
APALACHICOLA FLORIDA	632	606	552	456	263	148	158	225	474	669	280	529	418	620	697	529	611	499	384	183	540	386	458	458	351	577	553	657	620	555	520	471
ARGONNE NAT. LAB.	616	584	658	614	593	646	389	92	514	551	44	84	74	442	266	655	114	550	562	428	605	633	510	636	666	646	548	631	680	596	677	494
ASTORIA OREGON	615	633	601	600	396	363	637	---	600	301	493	---	438	396	248	570	704	705	596	425	463	564	699	688	566	229	715	712	722	572	648	546
ATLANTA GEORGIA	562	166	661	695	691	368	656	647	651	720	539	274	80	661	725	93	233	154	154	662	242	644	423	487	329	250	348	599	694	771	765	482
BARROW ALASKA	554	498	322	421	509	443	428	437	513	452	673	619	666	577	473	608	582	717	753	524	545	549	552	573	556	576	613	537	606	784	824	564
BETHEL ALASKA	607	552	610	596	346	424	293	286	421	504	612	185	337	279	---	366	411	---	299	598	345	393	674	266	---	---	251	195	598	245	194	403
BISMARCK N.DAK.	407	601	643	627	626	628	281	603	687	199	255	287	355	479	242	653	558	467	451	592	635	610	468	690*	645	697	707	713	617	710	606	540*
BLUE HILL MASS.	405	546	684	407	655	296	724	144	38	706	617	271	259	676	671	666	549	489	152	448	392	332	718	682	346	327	589	126	481	692	654	476
BOISE IDAHO	629	663	660	640	510	626	689	560	331	708	362	556	612	555	554	628	745	749	695	669	514	624	755	706	725	709	603	409	555	555	521	607
BOSTON MASSACHUSETTS	379	540	673	413	633	313	679	138	35	713	623	269	234	659	659	656	488	431	144	444	400	332	695	622	323	324	574	108	454	699	673	462
BROWNSVILLE TEXAS	127	---	88	171	121	161	263	602	747	753	738	486	636	534	631	605	562	473	474	474	740	734	758	765	422	711	641	723	328	553	754	526
CANTON ISLAND P.I.	587	537	580	619	552	532	604	589	560	534	608	531	601	428	531	617	567*	594	575	517	594	538	572	571	588	594	602	593	575	376	597	563*
CAPE HATTERAS N.C.	647	82	597	698	704	615	363	319	417	569	712	463	443	184	157	657	663	596	441	337	487	225	634	201	131	544	101	508	509	372	280	441
CARIBOU MAINE	81	650	619	200	448	342	571	541	265	190	730	723	300	726	700	671	674	529	88	448	576	704	546	700	463	716	704	299	175	554	495	498
CHARLESTON S.C.	593	367	392	709	721	493	380	153	300	385	512	611	507	415	683	629	158	482	266	364	495	195	175	373	352	500	243	438	531	601	477	436
CLEVELAND OHIO	447	597	589	599	601	655	539	---	430	650	137	244	429	546	620	375	420	242	664	648	71	640	702	557	731	712	688	461	721	622	628	532
COLUMBIA MISSOURI	485	658	650	631	647	552	602	513	623	353	191	153	171	683	78	677	487	550	310	468	232	679	300	712	687	693	697	675	704	670	719	524
DAVIS CALIFORNIA	681	678	585	577	684	700	645	562	362	394	695	698	710	697	714	710	731	716	708	720	738	636	736	711	723	723	655	685	685	576	750	664
DODGE CITY KANSAS	513	642	651	656	648	641	628	514	418	336	638	163	640	552	660	489	670	349	568	663	656	678	689	693	685	666	632	598	544	622	408	578
E. LANSING MICHIGAN	649	622*	612	690	573	686	298	269	583	703	87	50	338	368	569	598	273	390	636	532	588	697	690	627	707	697	542	740	601	506	538	531*
EL CENTRO CALIF. NPF	573	568	572	572	567	585	524	506	561	605	587	583	582	604	605	595	600	598	392	336	568	599	585	586	586	585	583	581	587	619	621	568
EL PASO TEXAS	648	444	574	727	703	726	761	780	735	715	809	812	793	613	776	773	657	745	683	716	729	790	806	815	622	761	797	822	841	790	582	727
ELY NEVADA	717	714	696	628	641	679	688	411	394	260	444	641	764	746	723	649	756	771	708	655	315	694	782	761	647	---	562	692	656	757	777	644
EPPLEY NEWPORT R.I.	314	434	651	488	646	251	666	73	88	692	572	161	---	591	571	602	416	459	188	220	513	483	697	698	269	218	622	143	402	601	569	443
FAIRBANKS ALASKA	598	---	579	522	618	540	393	188	539	403	365	617	410	437	286	328	477	263	407	458	637	542	479	546	360	426	457	423	625	---	---	462
FORT WORTH TEXAS	154	226	588	602	534	511	718	723	684	428	285	243	779	672	555	657	644	231	449	303	654	681	527	609	731	688	643	749	583	661	619	553
FRESNO CALIFORNIA	677	661	579	632	645	685	558	484	278	190	472	680	679	714	712	706	715	683	682	673	674	717	702	697	693	695	607	648	597	647	713	629
GAINESVILLE FLORIDA	593	535	576	511	313	111	295	376	455	412	540	496	483	642	666	580	491	562	464	653	624	272	413	370	435	537	561	603	521	508	410	484
GLASGOW MONTANA	659	652	665	671	---	---	371	513	690	404	378	336	355	254	673	524	327	614	---	---	---	---	654	715	---	---	748	709	621	635	323	543
GRAND JUNCTION COLO.	724	694	709	718	719	727	716	610	440	570	361	580	760	---	730	759	642	771	786	772	531	---	817	802	793	581	500	708	758	539	454	664
GREAT FALLS MONTANA	543	569	586	604	577	523	585	607	575	81	---	454	521	282	481	641	384	538	385	498	343	311	657	652	650	647	573	485	528	560	174	500
GREENSBORO N.C.	474	78	654	702	650	582	601	539	449	725	677	222	444	187	579	470	565	249	491	656	571	573	533	124	317	312	205	449	594	606	415	474
INDIANAPOLIS INDIANA	236	665	694	713	683	687	508	494	287	698	97	283	107	380	503	620	259	463	630	680	367	612	709	363	750	730	725	560	780	646	768	539
ITHACA NEW YORK	361	618	363	228	410	288	478	242	98	449	385	55	333	587	651	127	529	78	339	492	102	610	648	523	436	653	515	403	460	287	513	396
LAKE CHARLES LA.	402	229	318	263	121	116	370	451	629	667	366	426	481	487	488	605	488	148	482	360	349	687	582	641	312	554	653	525	231	568	693	442
LAKELAND FLORIDA	631	709	633	524	421	197	427*	501	498	658	461	613	635	671	639	645	679	666	667	564	572	635	367	433	672	562	555	714	621	640	486	571*
LANDER WYOMING	701	691	622	---	573	671	693	435	414	435	89	607	625	589	744	639	606	736	731	711	601	590	736	739	720	736	735	747	485	747	480	621
LARAMIE WYOMING	582	573	496	549	442	503	475	307	357	294	164	386	337	454	624	512	454	587	665	652	563	496	675	658	560	509	474	597	526	610	326	497
LAS VEGAS NEVADA	744	736	708	505	586	633	578	602	541	512	634	781	771	---	774	771	772	761	768	---	596	782	782	784	783	754	780	783	750	823	817	711
LITTLE ROCK ARKANSAS	116	817	---	---	699	---	684	696	230	684	196	398	215	724	600	---	---	---	---	---	---	---	---	212	731	765	695	695	720	697	741	---
LOS ANGELES CALIF.	642	604	543	342*	676	682	594	179	138	332	541	586	462	446	572	653	656	558	622	457	409	516	---	461	149	250	291	469	533	672	642	489*
MADISON WISCONSIN	658	561	704	649	637	684	505	369	592	676	77	172	89	538	195	684	375	644	605	600	706	688	153	732	726	653	646	701	670	634	741	550
MANHATTAN KANSAS	654	643	643	650	646	621	632	378	676	206	254	135	676	608	588	590	605	643	533	306	553	606	579	696	683	680	682	523	666	277	553	554
MATANUSKA ALASKA	591	442	281	491	436	539	202	345	394	376	238	622	292	372	385	546	436	421	573	663	371	509	314	566	487	222	495	618	550	230	371	432
MEDFORD OREGON	669	665	466	427	311	678	644	502	336	706	719	711	533	695	267	677	744	740	717	711	680	772	746	730	714	465	601	567	639	143	724	603
MIAMI FLORIDA	618	630	661	545	502	407	389	522	385	647	471	596	586	621	590	569	394	690	712	703	584	230	628	545	426	536	490	546	398	616	500	540
MIDLAND TEXAS	177	183	287	685	406	717	741	726	360	372	730	696	516	589	679	631	605	499	570	655	711	729	718	503	580	633	720	702	732	735	---	586
NASHVILLE TENNESSEE	80	427	702	702	699	628	680	649	160	758	551	268	233	178	715	---	530	264	330	717	599	520	711	541	505	577	676	712	737	773	777	547
NEW YORK N.Y.U	364	389	580	712	641	448	695	160	48	761	598	113	612	212	662	530	645	231	79	431	562	452	686	699	261	491	387	132	516	668	354	455
NORTH OMAHA NEBRASKA	749	721	677	731	708	598	613	210	643	164	55	113	559	711	614	692	597	795	800	373	753	623	662	800	768	777	737	795	743	795	783	624
OAK RIDGE TENNESSEE	140	263	693	736	676	593	677	640	579	756	644	88	177	617	697	112	560	109	388	734	537	683	621	638	576	386	391	592	692	765	728	532
OKLAHOMA CITY OKLA.	82	630	610	602	591	589	615	600	492	209	356	219	622	567	492	571	589	581	601	413	606	569	619	576	652	612	454	595	601	544	392	524

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

MAY 1966

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PAGE ARIZONA	618	606*	618	599	611	609*	378	392	463	423	269	658	646	575	630	652	641	636	656	580	544	627	645	649	639	530	558	643	660	509	664	578*
PHOENIX ARIZONA	632	612	605	621	620	610	584	499	614	586	640	641	647	645	656	666	654	649	640	601	550	633	654	645	615	677	682	688	644	571	605	625
PORTLAND MAINE	455	637	685	450	643	337	708	128	49	575	---	366	134	697	676	705	348	311	98	436	343	419	705	686	464	539	637	111	504	739	716	477
PROSSER WASHINGTON	571	668	656	631	618	562	713	639	637	704	651	598	420	677	404	655	768	756	712	731	494	708	710	707	717	574	698	650	420	338	415	620
RAPID CITY S.DAK.	492	541	600	512	578	412	572	86	207	299	116	359	586	455	626	509	540	425	631	461	639	477	521	649	639	636	640	630	471	608	506	498
RENO NEVADA	653	639	521	392	568	663	522	470	332	616	682	644	662	645	687	693	698	697	575	663	603	676	706	643	658	609	672	512	409	540	689	605
RICHLAND 25 NW WASH.	599	635	591	615	591	460	668	565	585	622	539	526	436	615	332	611	700	709	656	595	437	682	701	668	697	611	704	688	427	311	395	580
RIVERSIDE CALIFORNIA	655	659	569	533	528	684	576	61	76	132	97	680	494	545	538	606	703	561	708	675	509	444	596	675	535	255	447	532	479	680	655	513
SAINT CLOUD MINN.	671	402	722	669	681	709	669	553	746	479	103	185	84	267	289	605	429	629	434	691	707	314	286	711	717	723	785	790	656	783	767	557
SAN ANTONIO TEXAS	121	283	447	140	167	167	557	584	658	552	398	203	483	416	395	507	581	163	338	550	578	637	619	496	638	587	344	320	651	662	650	448
SANTA MARIA CALIF.	646	628	349	564	666	663	647	157	190	333	508	562	599	671	578	624	641	615	648	584	118	601	---	594	---	210	486	317	160	626	679	506
SAULT STE MARIE MICH	559	546	326	723	661	656	691	656	757	756	588	736	689	510	674	145	593	102	284	437	743	696	541	535	747	616	505	283	574	720	733	574
SEATTLE TACOMA WASH.	646	662	658	667	591	143	708*	659	271	416	638	209	440	397	134	715	726	718	621	335	462	663	737	707	707	221	700	759	775	332	678	551*
SPOKANE WASHINGTON	661	652	635	638	622	213	665	661	584	198	640	338	578	478	331	652	692	714	662	581	---	---	708	691	---	---	---	---	---	---	---	573
STATE COLLEGE PENN.	291	539	489	590	578	634	625	89	75	729	333	89	538	479	691	331	674	92	602	575	191	669	731	639	509	574	482	454	777	489	388	482
STERLING VIRGINA	313	250	665	719	687	654	698	572	99	756	570	263	479	340	705	617	594	433	540	667	693	518	722	627	---	---	272	374	690	723	706	550
STILLWATER OKLAHOMA	151	654	646	639	624	635	643	590	362	152	366	152	659	638	435	536	641	520	672	567	665	564	670	674	692	672	660	655	633	600	402	554
SWAN ISLAND W.I.	637	572	626	211	288	426	561	413	521	446	505*	672	690	690	565	632	644	655	690	670	649	657	660	632	653	493	695	667	703	687	394	581*
TAMPA FLORIDA	599	666	490	524	365	---	458	502	600	654	522	515	643	652	638	701	698	707	680	656	687	647	687	530	708	588	646	710	630	706	605	614
TUCSON ARIZONA	692	679	573	645	582	691	674	643	705	699	712	717	716	616	518	730	738	718	240	408	679	685	731	739	736	696	773	765	708	666	667	663
WAKE ISLAND,PACIFIC	578	414	579	575	589	595	579	590	598*	565	534	573	443	178	452	468	558	533	599	300	592	503	582	502	376	606*	603	599	598	442	612	526*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

MAY 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	358	324	344	337	355	381	351	250	353	45	73	278	265	99	325	236	230	294	271	342	303	-62	370	346	356	366	438	417	401	380	444	299

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

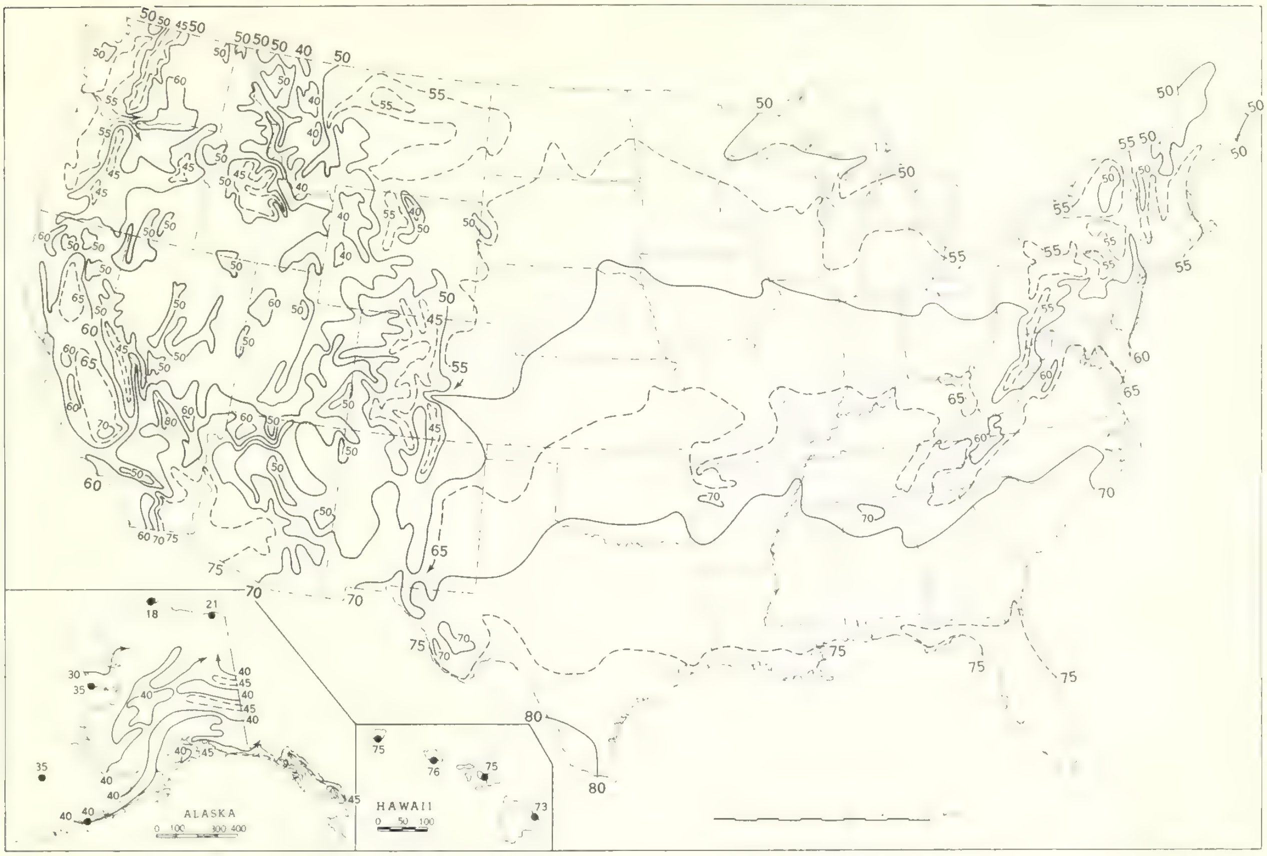
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

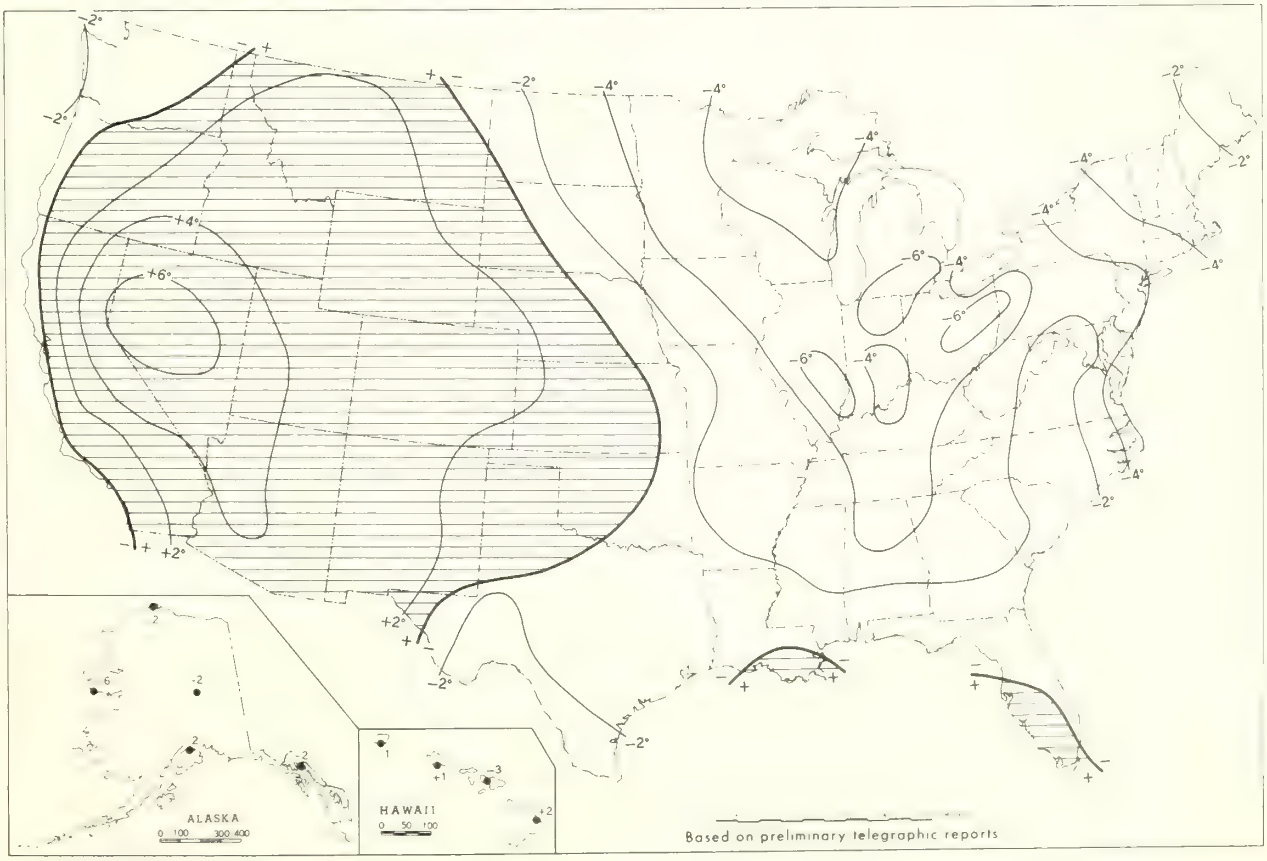
Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i e, the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g, 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), May.

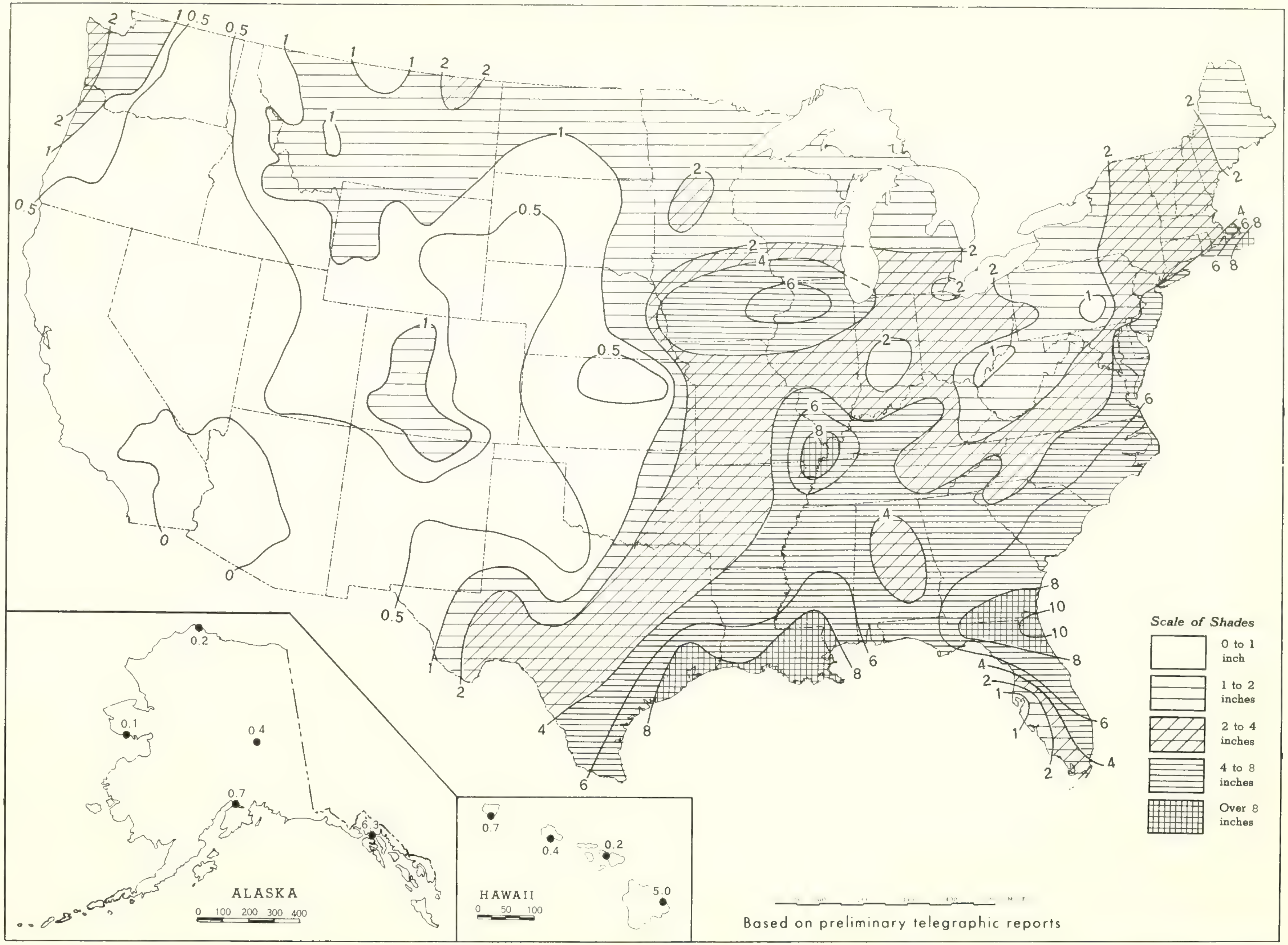


B. Temperature Departure from 30 - Year Mean (°F 1931-60), May 1966.



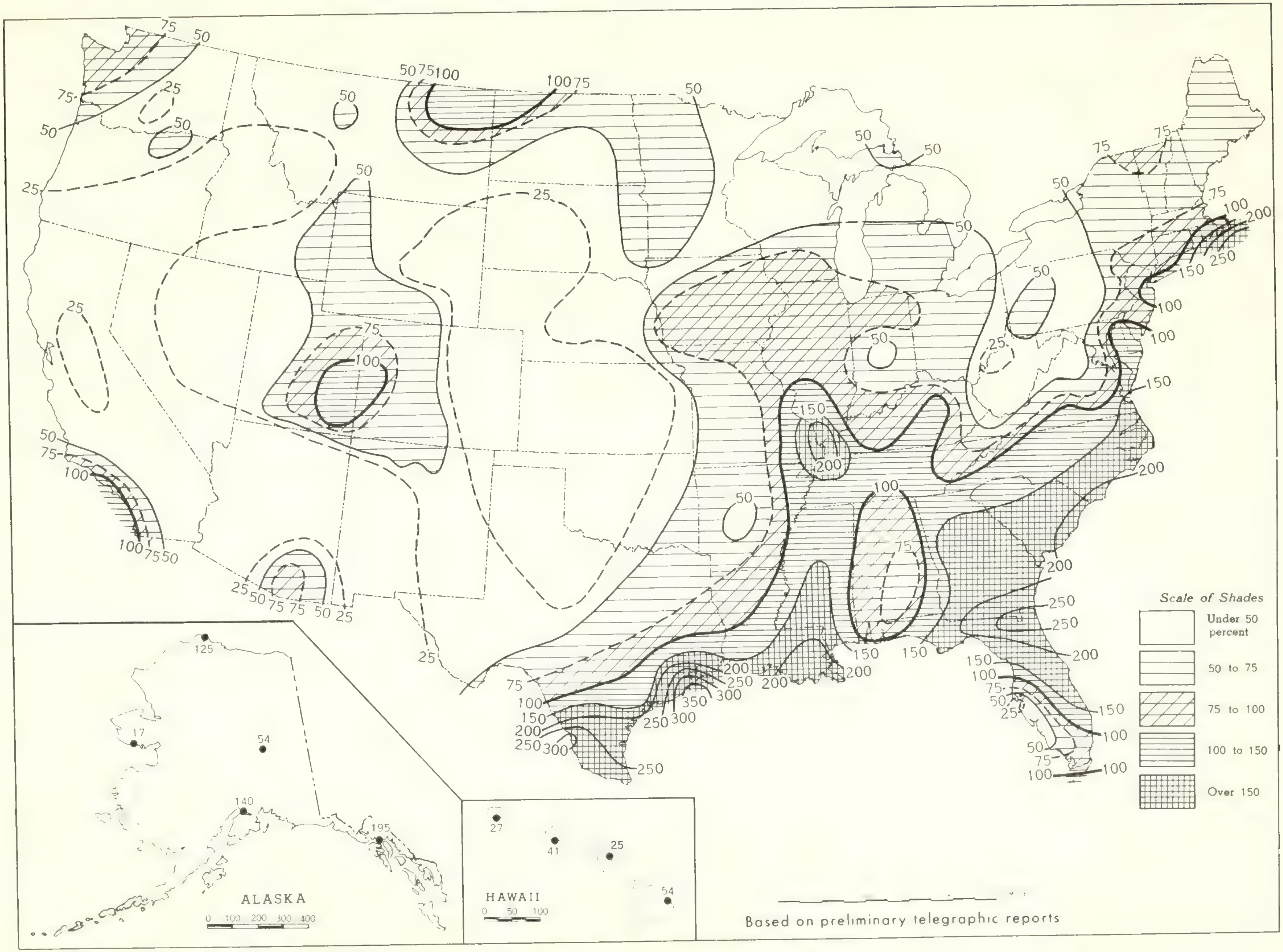
Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), May 1966.



Based on preliminary telegraphic reports

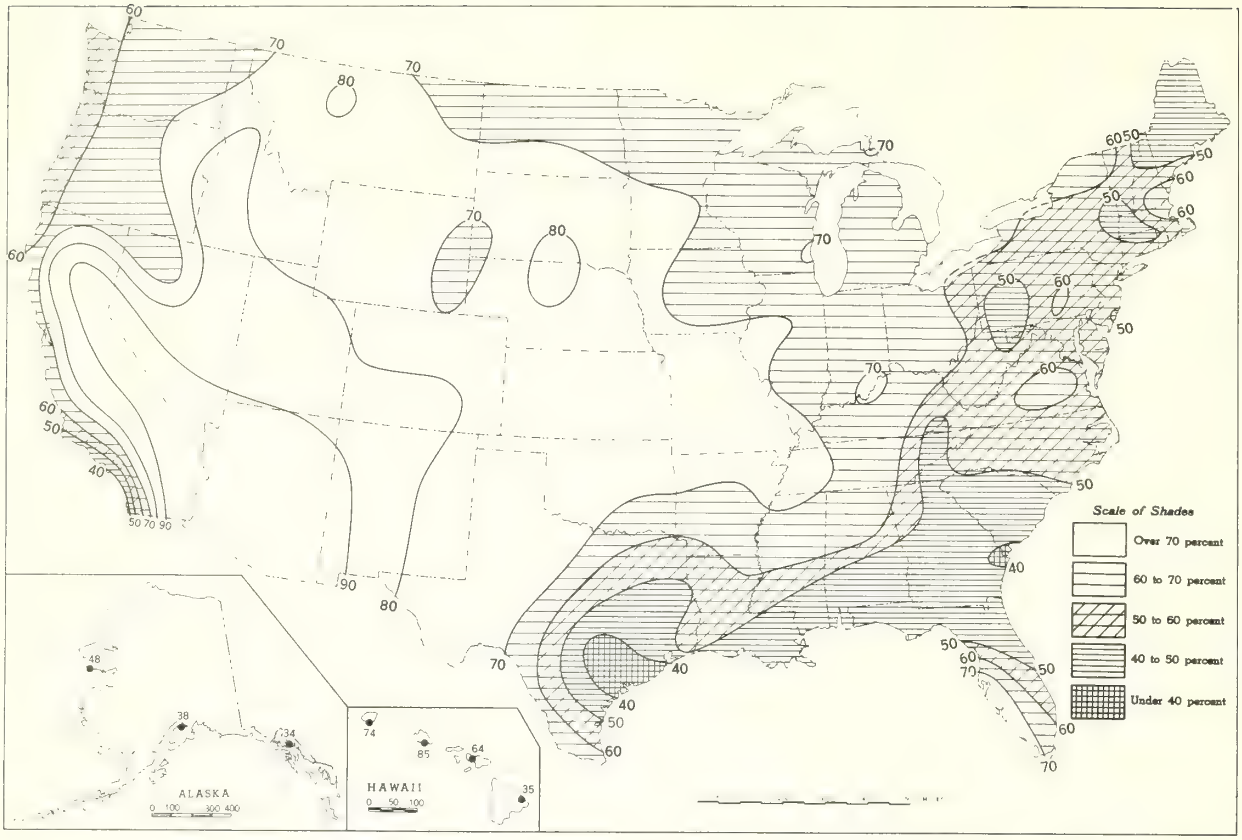
Chart III. Percentage of Normal Precipitation, May 1966.



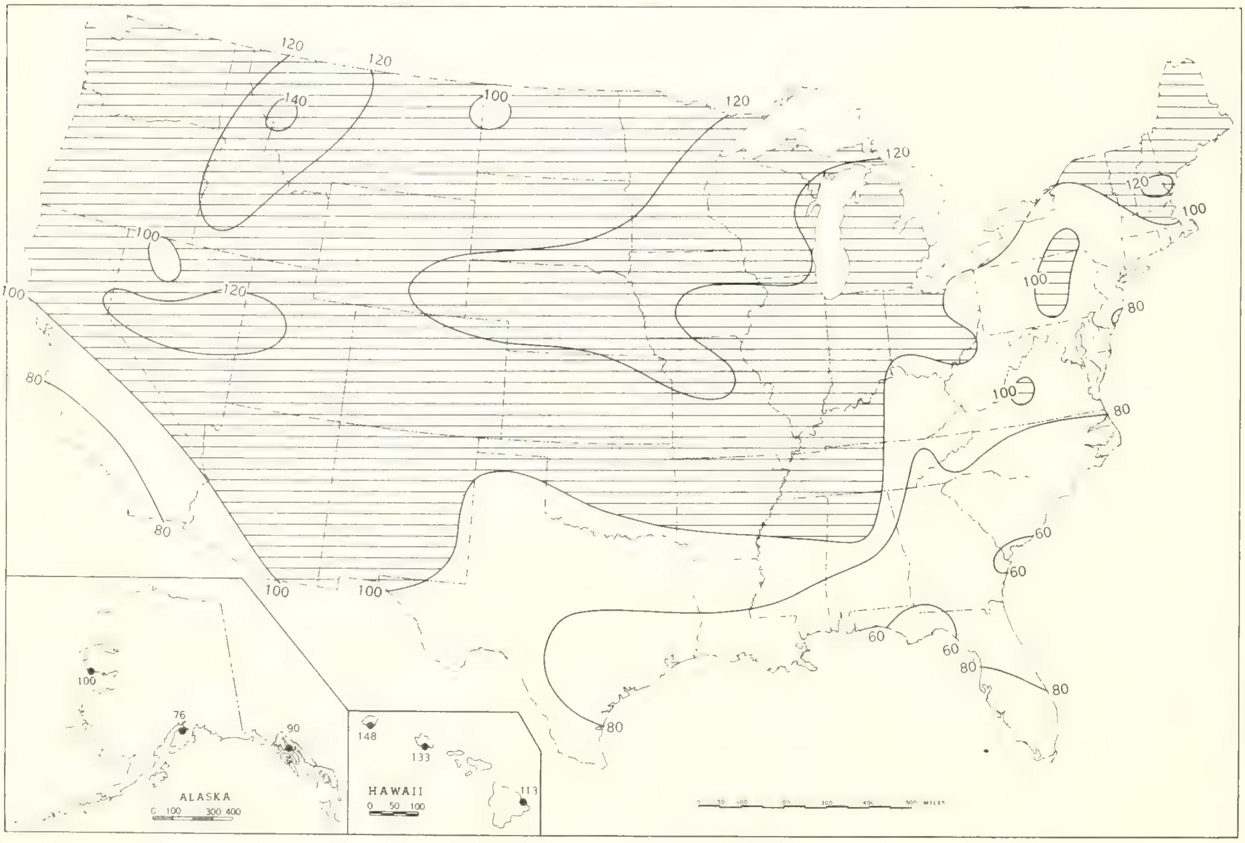
Based on preliminary telegraphic reports

Normal monthly precipitation amounts are computed from 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart VI. A. Percentage of Possible Sunshine, May 1966.

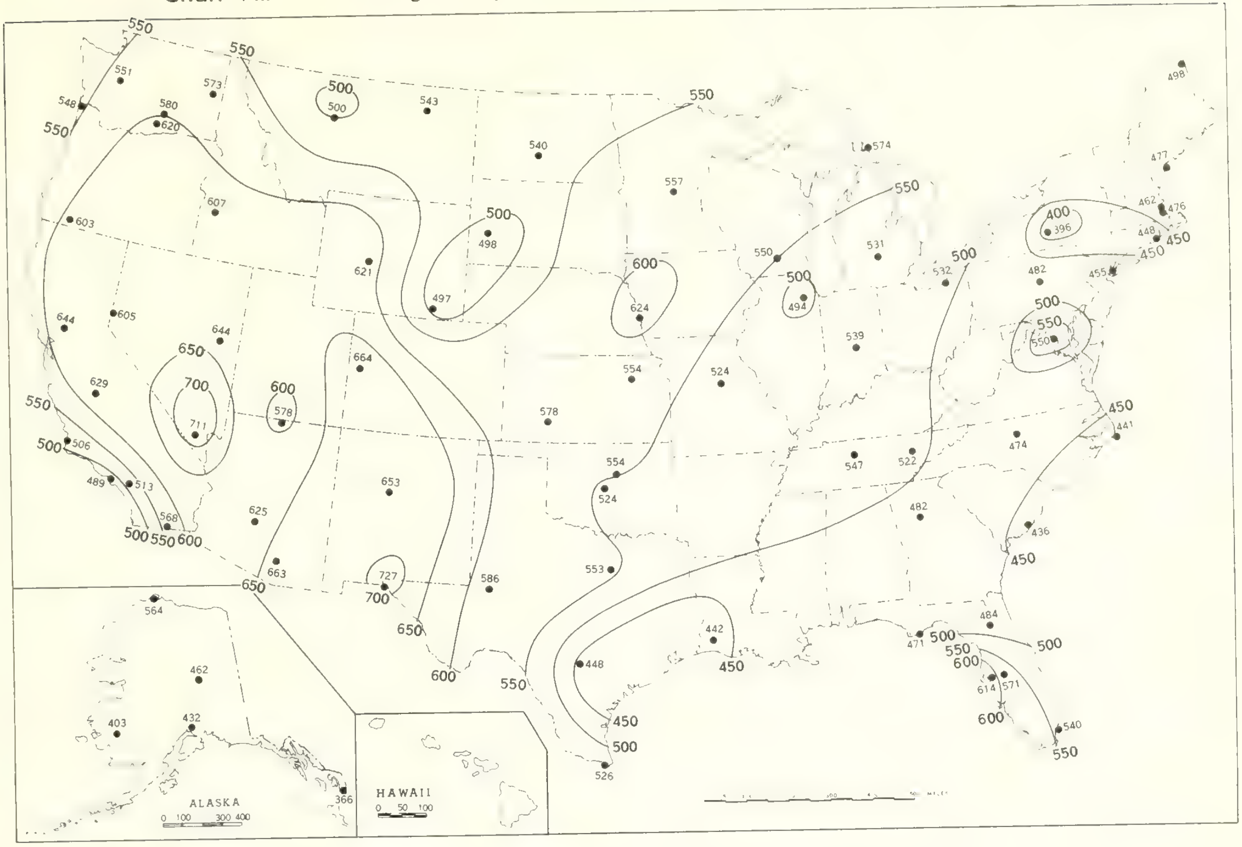


B. Percentage of Mean Monthly Sunshine, May 1966.

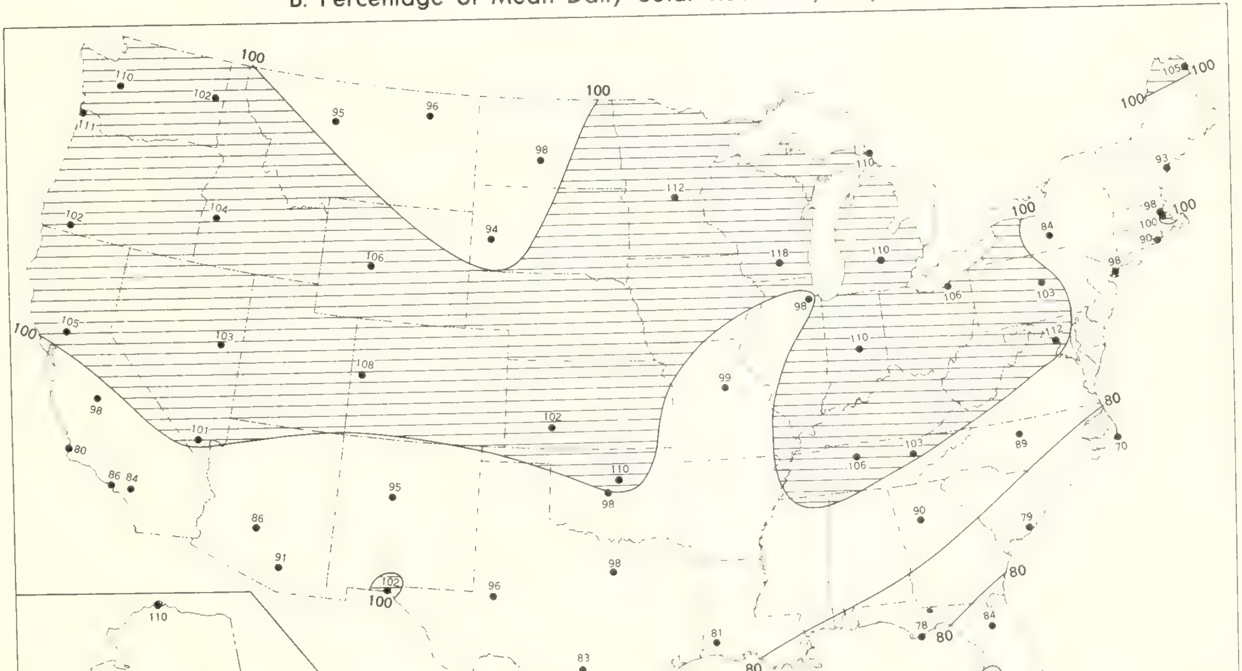


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, May 1966.

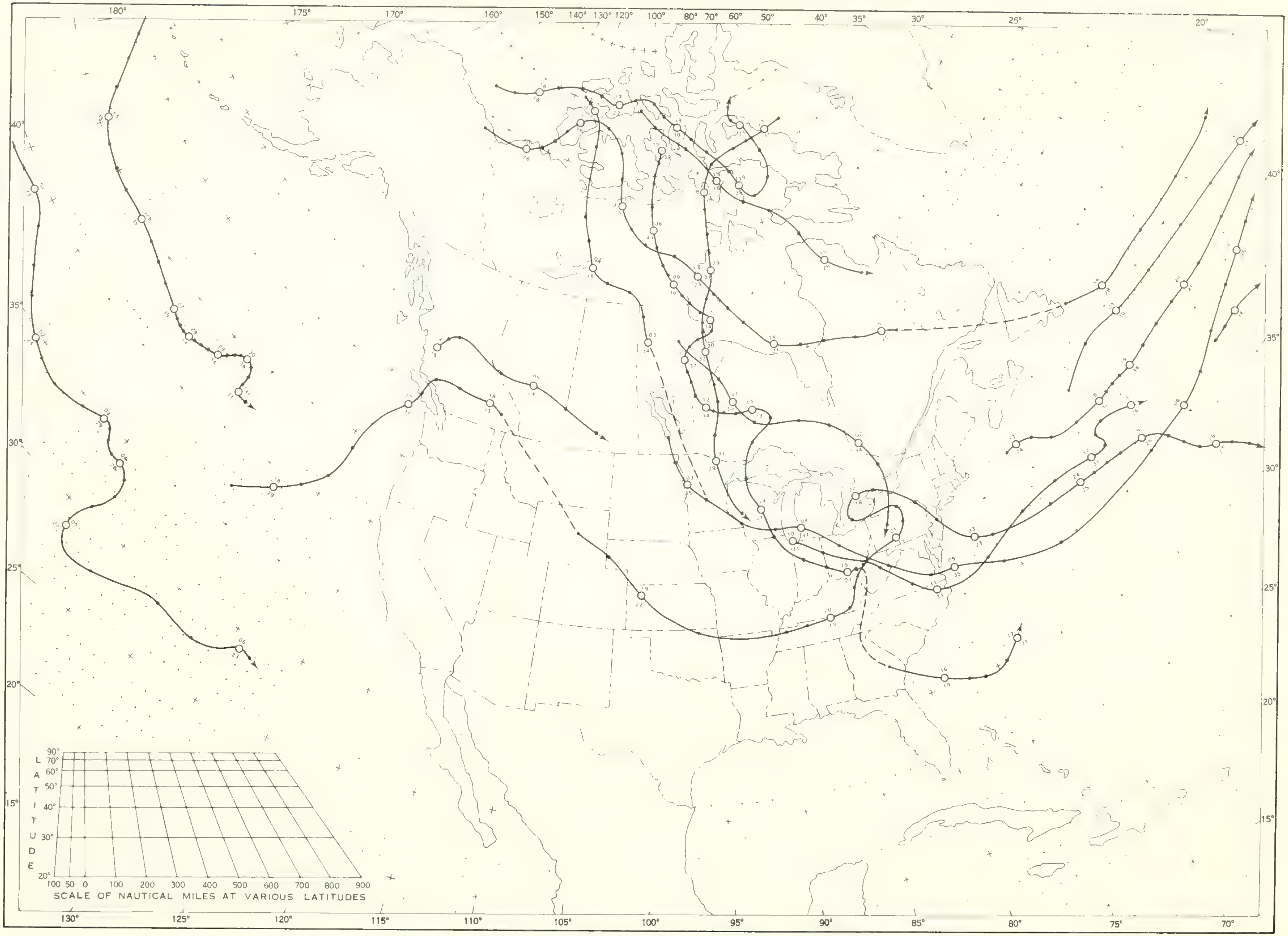


B. Percentage of Mean Daily Solar Radiation, May 1966.



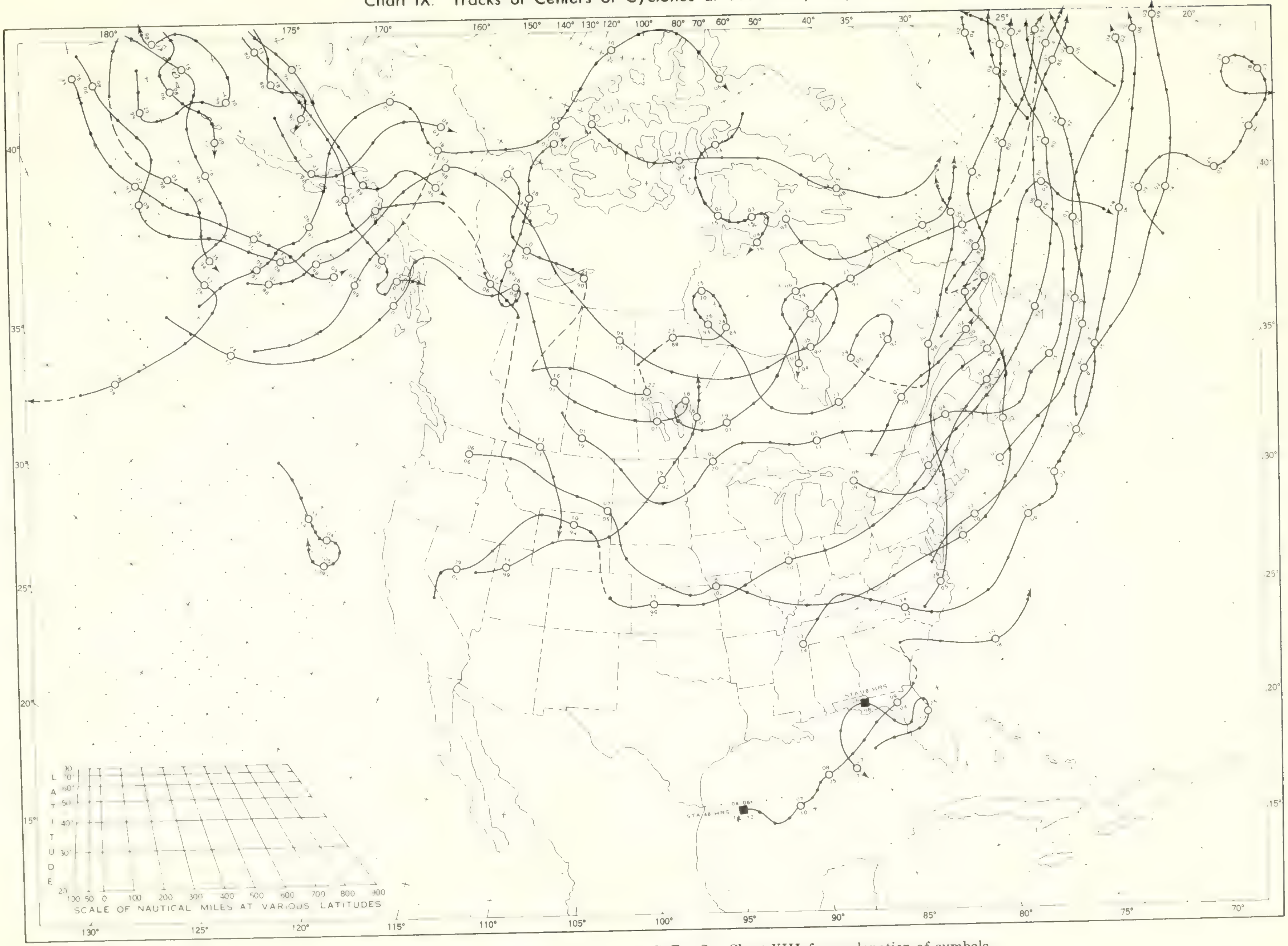
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, May 1966.



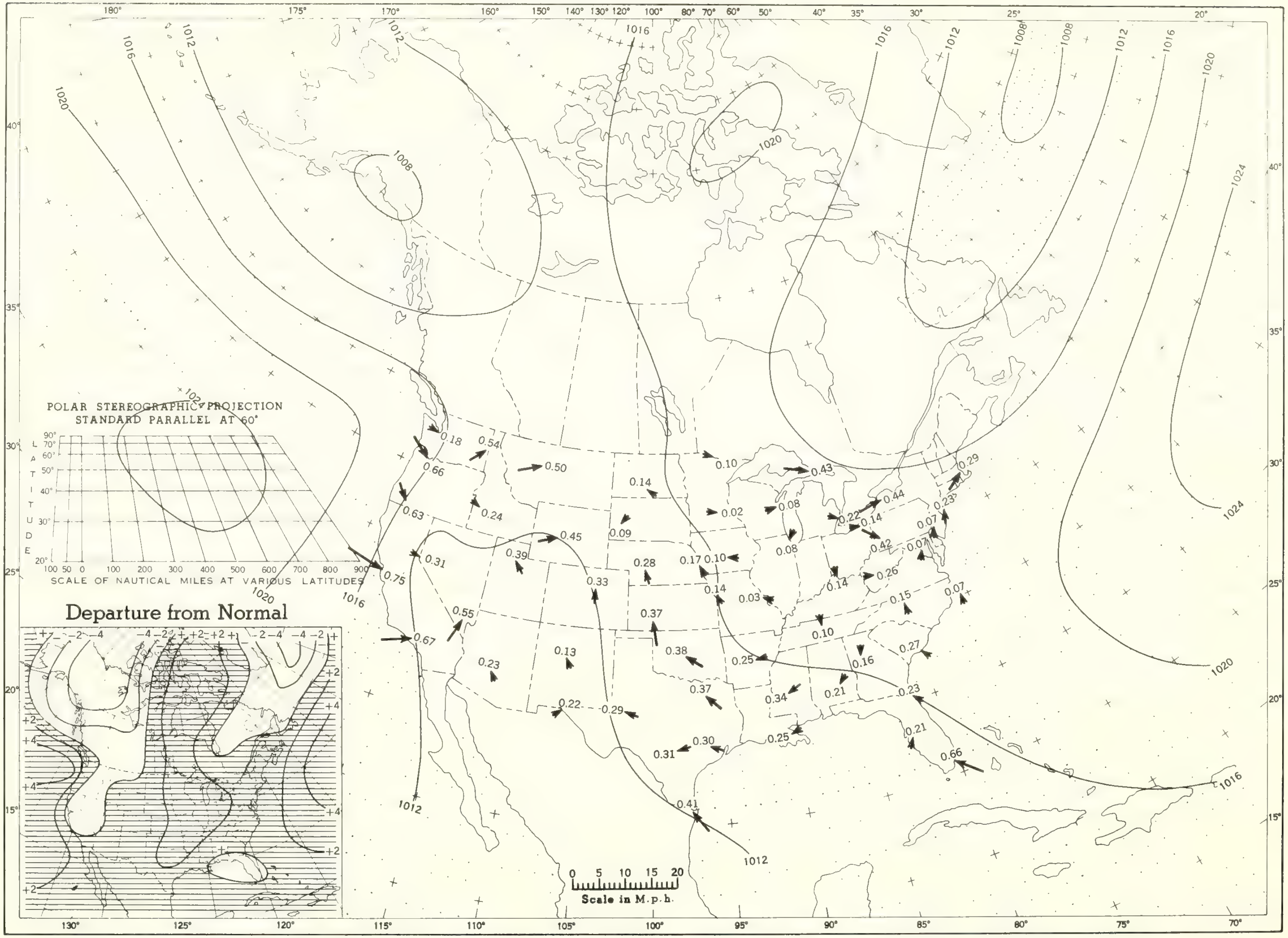
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, May 1966.



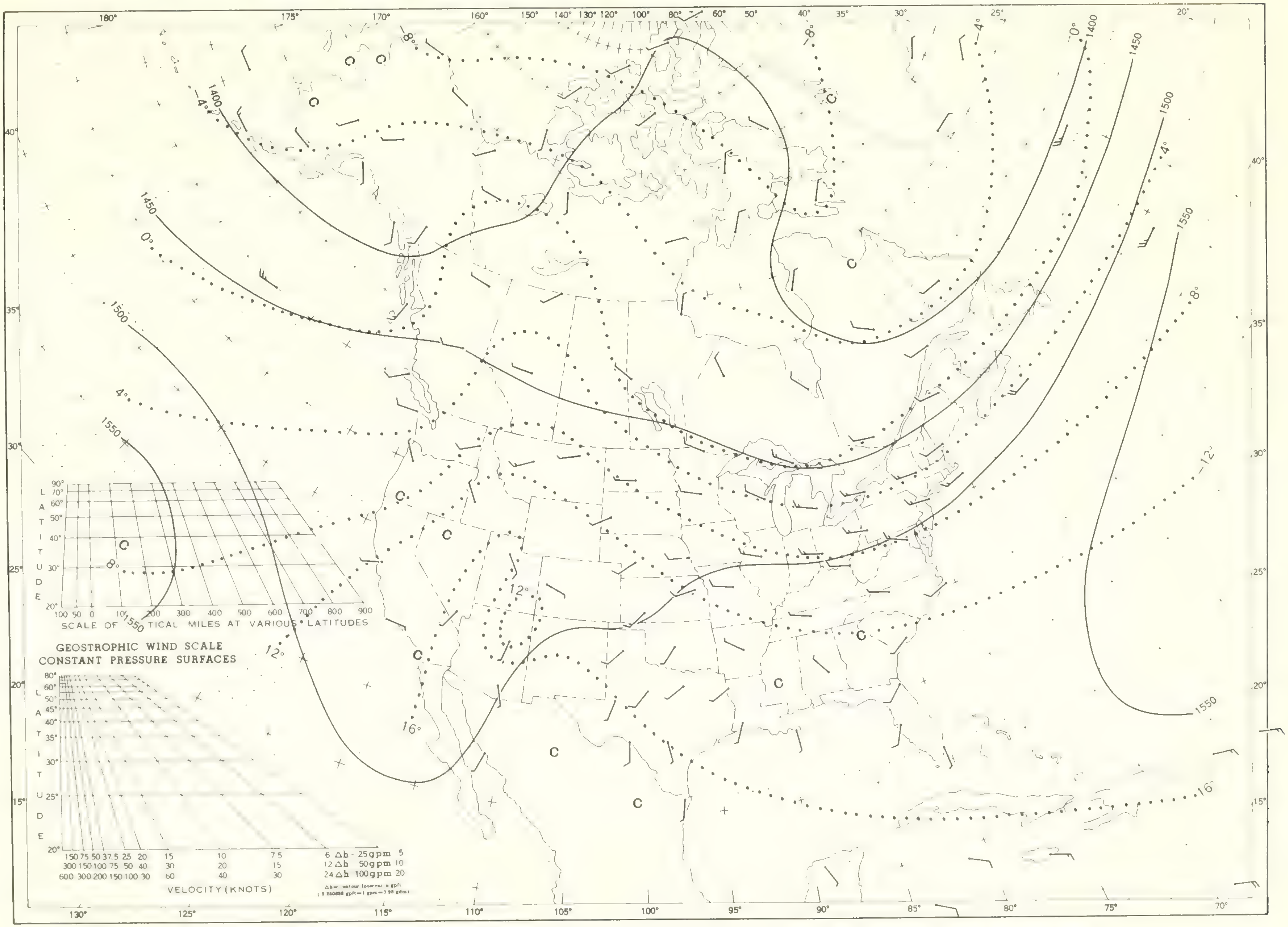
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, May 1966. Inset: Departure of Average Pressure (mb) from Normal, May 1966.



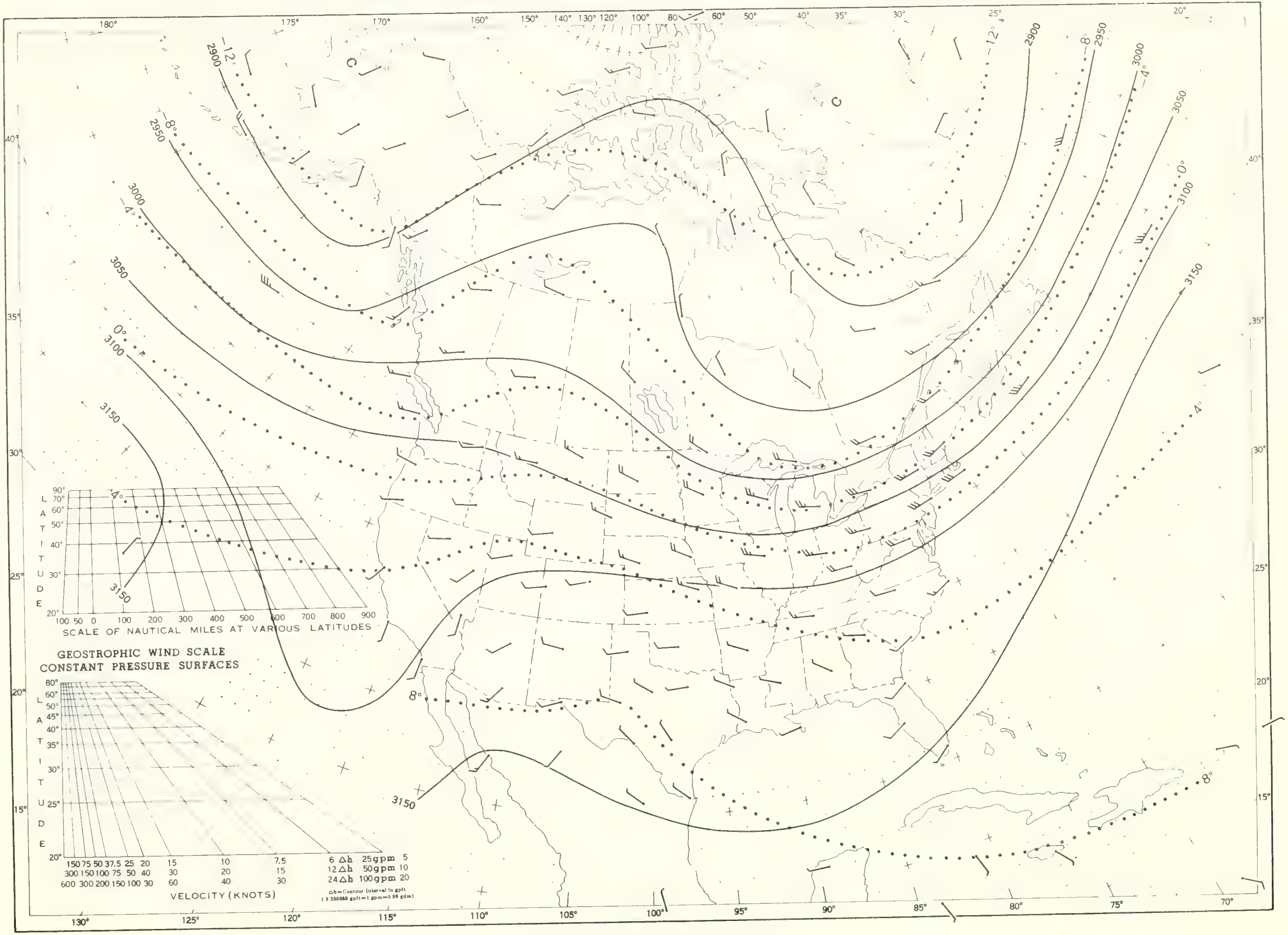
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, May 1966. Average Height and Temperature, and Resultant Winds.



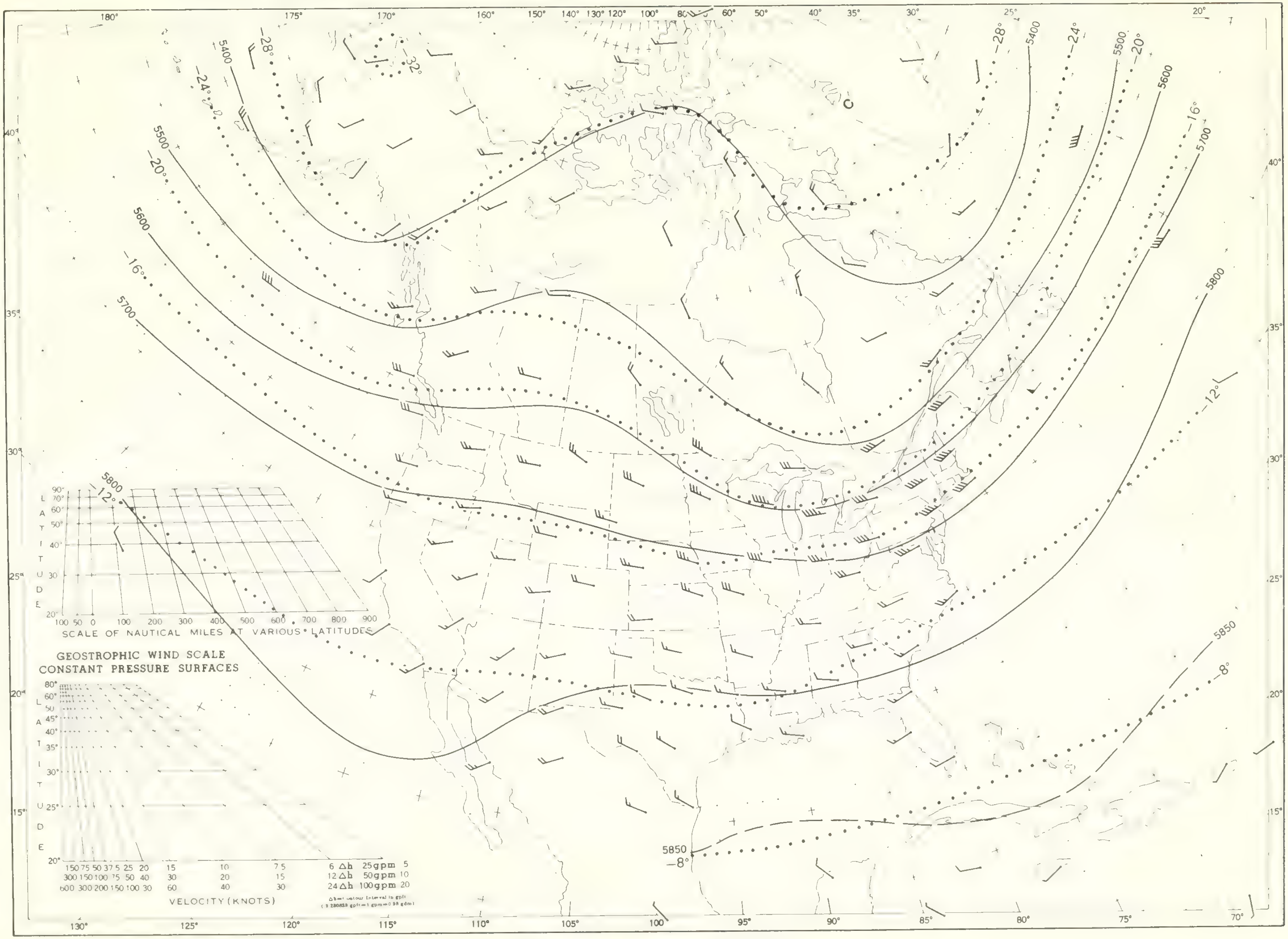
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, May 1966. Average Height and Temperature, and Resultant Winds.



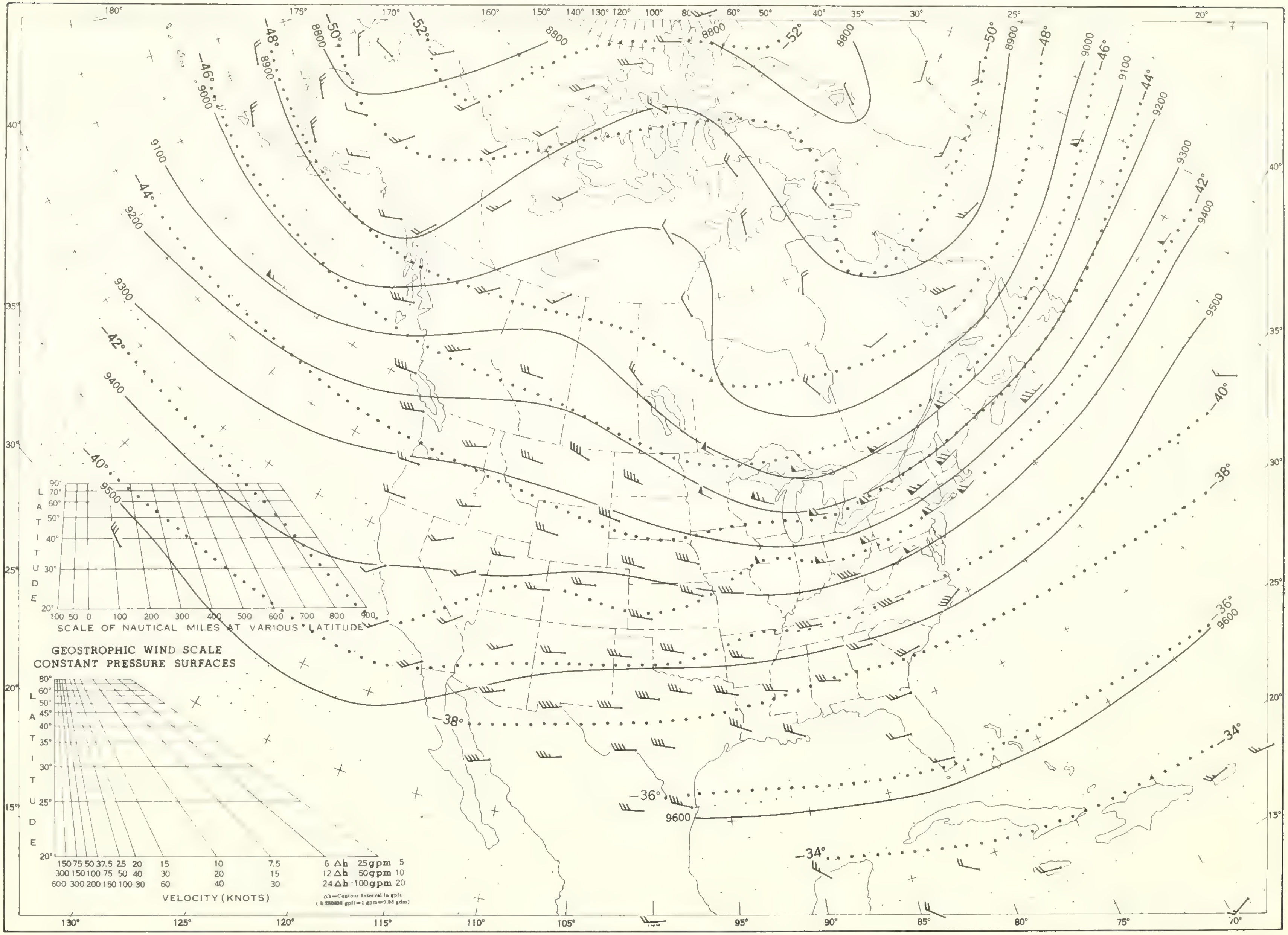
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, May 1966. Average Height and Temperature, and Resultant Winds.



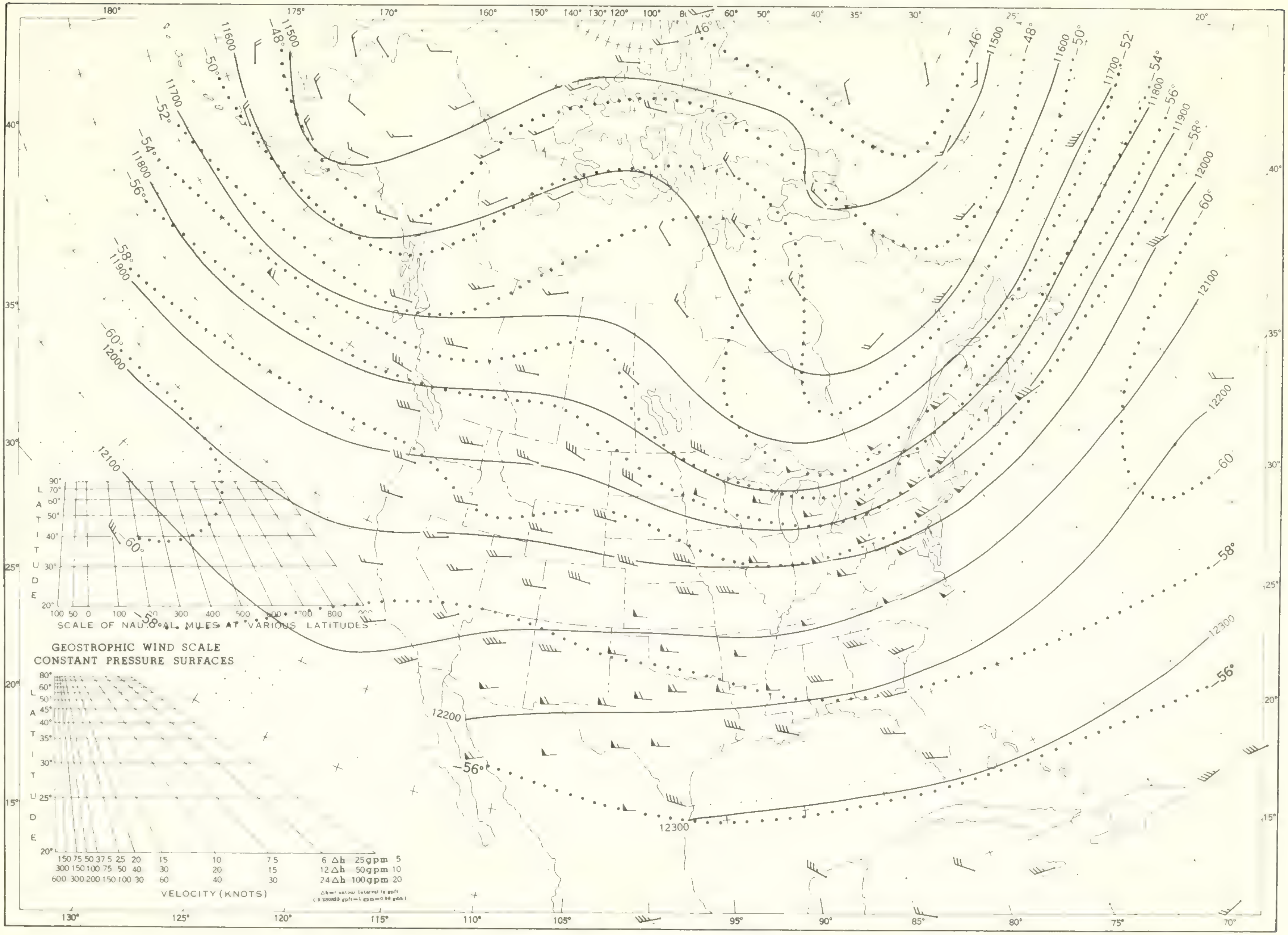
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, May 1966. Average Height and Temperature, and Resultant Winds.



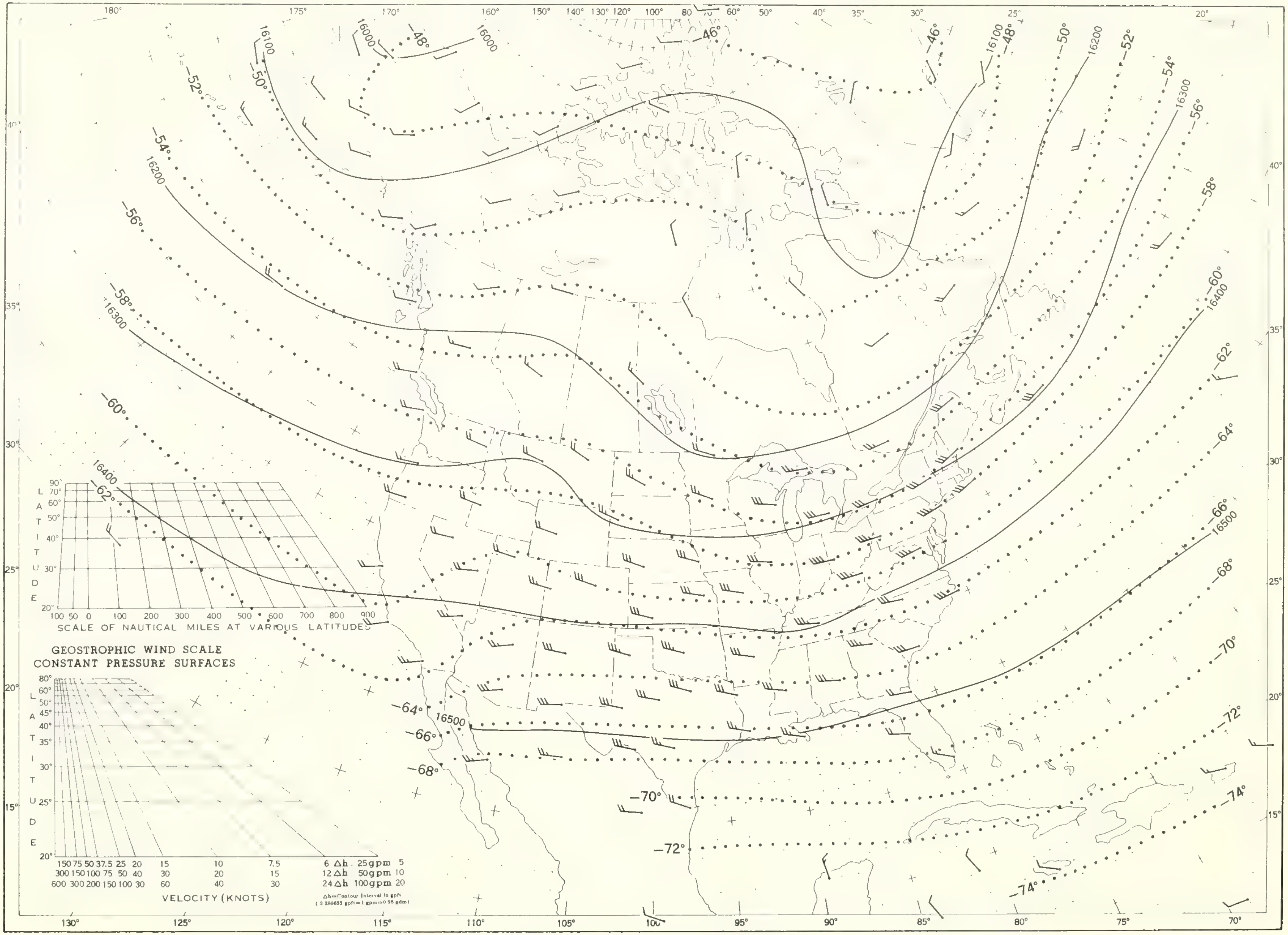
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, May 1966. Average Height and Temperature, and Resultant Winds.



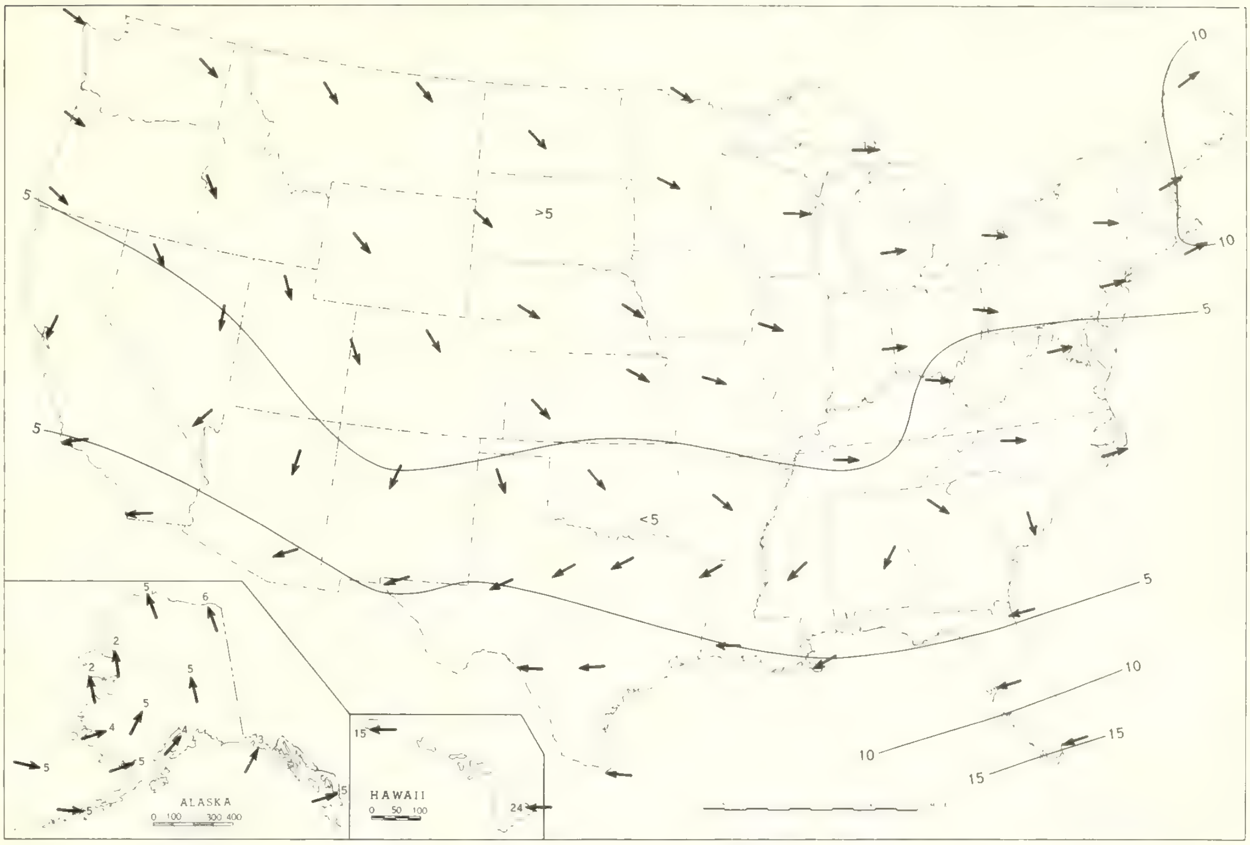
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, May 1966. Average Height and Temperature, and Resultant Winds.

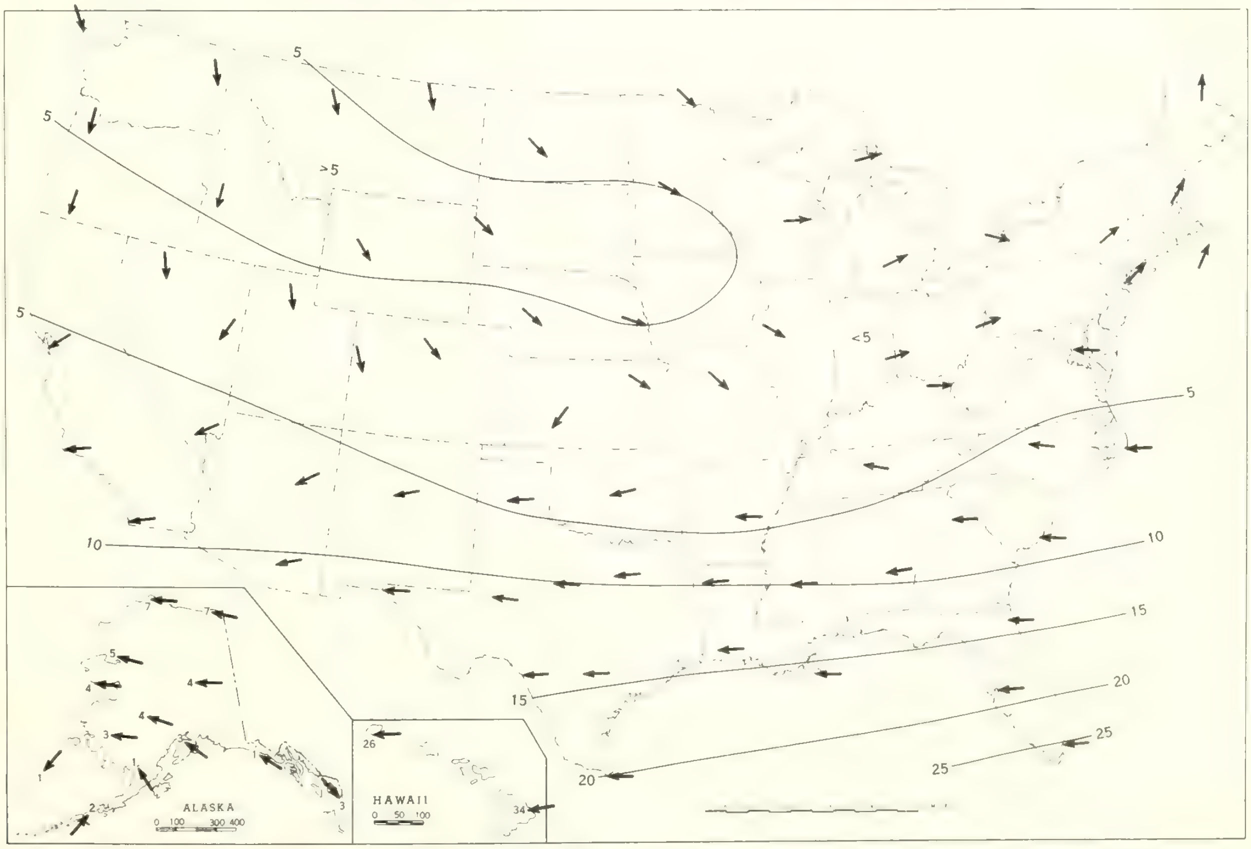


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, May 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, May 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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JUNE 1966

Volume 17 No. 6

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 6 JUNE 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Topeka tornado.
2. Hurricane Alma.
3. Cold spell East.
4. Heat wave East.
5. Drought increases Northeast, West; Southeast wet.

TEMPERATURE.--The month was warm from the northern Mississippi Valley to the north Atlantic coast and also in the far Southwest. Below normal temperatures continued in the Southeast. Cool temperatures prevailed over most of the Country during the first half of June, but a warming trend became evident during the latter half of the month as a persistent continental high pressure system developed.

June began with a polar air mass intruding into the eastern half of the Country. Low temperature records were set in at least 35 cities in an area from the Great Lakes to the Gulf of Mexico and from Missouri to the Atlantic coast. Frost formed in the Apalachians as far south as North Carolina. Gradual warming occurred in the East by the second week as temperatures plunged in the central and northern Great Plains.

A heat wave in the Southwest sent temperatures well above 100° at midmonth. At the same time cool, dry air spread over the Midwest and East producing negative anomalies similar to those during the beginning of June.

The latter half of the month was marked by a persistent anticyclone that caused a heat wave from the Rockies eastward. Only the Pacific Northwest and the Southern States recorded below normal temperatures. The mercury soared to near or over 100° in a broad band from the Dakotas and Wyoming through the middle Mississippi and Ohio Valleys to the middle Atlantic coast, but the prolonged heat did not reach its climax until July.

PRECIPITATION.--Rainfall was generally light over the eastern half of the Nation, except the extreme Southeast, and drought conditions were intensified. Less than 25% of normal precipitation was received in a belt along the west-central Appalachians from Kentucky through Pennsylvania. The dryest June of record was experienced in Huntington, Parkersburg, and Charleston, W. Va., and Avoca, Pa. Harrisburg, Pa., also set a new dryness record with a monthly total of only 0.07 inch.

Frequent showers and two tropical disturbances drenched the southeastern Atlantic coast. June was the wettest June of record in Miami's history (21.4 inches), and it also had the least amount of sunshine and the lowest monthly temperature. One beneficial aspect of the rain, however, was the relief from the drought in the Everglades.

West of the Mississippi River, convective activity produced copious precipitation in Iowa, Nebraska, northwestern Missouri, northeastern Kansas, and New Mexico. Albuquerque, N. Mex., recorded its wettest, and El Paso, Texas, its second wettest June of record. Most other areas were deficient, especially north-central Texas and the Great Basin.

SEVERE STORMS.--The usual June wind, hail, electrical storms, funnel clouds, and tornadoes swept across the Country causing mostly minor property damage. Two unusually severe storms, though, were the Topeka, Kansas tornado on the 8th and hurricane Alma.

The Topeka tornado was one of 16 in Kansas and Oklahoma on the 8th and was the most destructive. At least 17 died and 550 were injured as the twister ripped through the heart of the city. 2,540 families and over 2,000 buildings were affected. Almost total destruction occurred along an 8 mile swath in downtown Topeka. All major structures on the Washburn University campus were damaged and several were a total loss. Damage estimates were in excess of $100 million, one of the highest totals of record for a single tornado.

The second week of June was also marked by hurricane Alma. This tropical storm was the first of the 1966 season and the earliest known to cross the United States coastline. It paralleled the Florida Gulf coast before turning in a northeasterly direction to travel along the Atlantic coast of Georgia and the Carolinas. Most of the damage resulting from the storm was in the form of salt-water flooding and beach erosion, downed utility lines, and washed-out beach roads. The coastal tobacco and late season vegetable crops also sustained some damage, but the rains in the inland areas were beneficial to the citrus crops.

CONDENSED CLIMATOLOGICAL SUMMARY

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	4 Stations	99	30+	Valley Head	35	1	Union Springs	10.01	Chatom 3N	0.07
Alaska	Data Delayed									
Arizona	3 Stations	118	26+	Maverick	21	3	Granville	2.26	22 Stations	.00
Arkansas	Mountain View 2ESE	104	29	Calico Rock	38	1	Green Forest 4ESE	3.75	2 Stations	.00
California	Palm Springs	119	14	Bodie	15	2	Fort Dick	1.97	199 Stations	.00
Colorado	2 Stations	104	24	Powderhorn	14	5	Julesburg	5.95	Two Buttes 1NW	.00
Connecticut	Hartford WBAP	98	27	2 Stations	34	3	Bakersville	3.62	Norwalk Gas Plant	.34
Delaware	Newark University Farm	97	25+	Georgetown 5SW	41	1	Lewes 1SW	5.62	Middletown 1WSW	.29
Florida	Lake City 2E	101	25	De Funiak Springs	43	1	Hialeah	22.91	Marianna School for Boys	1.78
Georgia	3 Stations	97	27+	Blairsville Exp Sta	34	2+	Louisville	8.40	Fairmont	.51
Hawaii	Data Delayed									
Idaho	Glenns Ferry	103	28	Blackfoot Dam	16	25	Sandpoint Exp Sta	4.97	Boise WBAP	.01
Illinois	3 Stations	99	27+	2 Stations	38	2	Havana Power Station	6.60	Moweaqua	.59
Indiana	do	99	28+	Greensburg 3SW	30	1	Oolitic Purdue Exp Farm	4.41	Marengo	T
Iowa	Sidney	97	25	2 Stations	37	1	Blockton 2S	10.73	Emmetsburg	1.89
Kansas	Webster Dam	105	29	5 Stations	39	9+	Lecompton	12.27	Kavesta	.52
Kentucky	5 Stations	99	29+	Cumberland	29	1	Nolin River Reservoir	6.22	Salyersville 2SE	.36
Louisiana	Bastrop	99	27	Holly Ridge 10N	45	2	Vermilion Lock	8.80	Homer Exp Station	.13
Maine	Saco	94	28+	2 Stations	28	11+	Lewiston	5.57	Presque Isle	1.70
Maryland	2 Stations	99	28+	do	28	2+	Salisbury FAA AP	4.69	Emmitsburg 2SE	.07
Massachusetts	3 Stations	95	28+	do	34	3	Springfield Armory	5.07	Edgartown	1.37
Michigan	Lake City Exp Farm	99	29	do	25	10+	Cornell	5.99	Lake City Exp Farm	.33
Minnesota	2 Stations	98	30	Orr 13W	24	9	Grand Meadow	7.26	Vesta	.74
Mississippi	Batesville 2SW	101	29	2 Stations	40	1	Vancleave	7.63	Corinth 4SW	.00
Missouri	3 Stations	101	29+	do	34	1	Salisbury	9.81	2 Stations	.43
Montana	Otter 9SSW	110	28	Yellowstone Pk NE Ent	18	13+	Bigfork 10S	8.24	do	.47
Nebraska	4 Stations	101	29+	Harrison	31	9	Beaver City	9.00	Merriman	1.07
Nevada	Amargosa Ranch	113	29	Gibbs Ranch	19	5	Diamond Valley (Pollard)	1.73	4 Stations	.00
New Hampshire	Concord WBAP	97	27	Mount Washington	25	11	Mount Washington	6.88	2 Stations	1.33
New Jersey	2 Stations	101	28+	Sussex 1SE	35	3	Cape May 3W	4.21	Rahway	.21
New Mexico	Rodeo	107	14	3 Stations	25	6+	Vaughn	7.54	2 Stations	T
New York	New York Cntrl Park WB	101	27	2 Stations	28	3+	Saratoga Springs 4SW	7.30	NY John F Kennedy INAP	.21
North Carolina	4 Stations	98	27+	Transou	28	2	Morehead City	10.24	Roxboro	.61
North Dakota	Linton	107	29	Wildrose	29	7	Richardton Abbey	7.63	Ambrose 3N	.40
Ohio	3 Stations	100	28+	4 Stations	30	2	Norwalk Sewage Plant	5.81	Carpenter	.48
Oklahoma	Frederick	109	5	Boise City 2E	43	9	Hulah Dam	7.06	Hanna	.28
Oregon	4 Stations	102	16+	2 Stations	20	25+	Brightwood	3.70	2 Stations	.03
Pennsylvania	8 Stations	100	28+	Clermont 4NW	23	1	Bruceton 1S	6.10	Gettysburg	.02
Puerto Rico	Utuado	99	10	Lares	60	1	San Sebastian	21.84	Ensenada	.02
Rhode Island	Greenville	92	27	Greenville	41	12	Providence WBAP	2.31	Block Island WBAP	1.55
South Carolina	4 Stations	97	29+	Chester 2WSW	38	2	Bamberg	9.28	Anderson FAA AP	1.00
South Dakota	Philip	107	20	Custer	24	9	Andover 8NNE	10.47	Elm Springs 3ESE	.52
Tennessee	3 Stations	100	28	Mountain City No 2	28	2+	Gatlinburg 2SW	6.43	Moscow	.40
Texas	Presidio	110	6	4 Stations	46	9	Mission	11.71	2 Stations	.00
Utah	Saint George	107	15+	Blowhard Mtn Radar	18	7	Flaming Gorge	1.22	8 Stations	.00
Vermont	2 Stations	94	28+	West Burke	27	3+	Newfane	4.96	Newport	2.05
Virginia	Piedmont Field Station	100	27	2 Stations	29	2+	Boykins	6.62	2 Stations	.28
Washington	2 Stations	97	17	Rainier Paradise RS	23	1	Palmer 3ESE	6.58	do	.02
West Virginia	Williamson	100	29	2 Stations	24	2+	Webster Springs	3.07	Horner	.15
Wisconsin	West Allis	101	25	Minong 4SW	26	10	Crivitz High Falls	6.65	Hillsboro	.56
Wyoming	Spencer 10NE	107	28	Bondurant 3NW	14	5	Pine Bluffs	4.28	Evanston 1E	.10

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	995.9	1018.2	85	62	73.6	-5.8	95	26	42	1	6	0	62	70	2.87	-1.14	1.16	8	5	0.0	0	1.2	9	26	SW	16	5	15	10	5.9	73
HUNTSVILLE	600	995.3	1018.0	88	65	76.9	-1.7	96	28+	46	1	12	0	63	63	2.90	-0.47	1.25	5	5	0.0	0	1.3	14	31	1	16	11	10	9	5.2	
MOBILE	211	1009.1	1017.0	89	69	79.1	-2.4	98	10	56	1	13	0	66	69	1.19	-5.04	0.64	7	7	0.0	0	2.5	10	24	1	9	14	6	10	4.9	
MONTGOMERY	194	1010.5	1017.6	87	65	76.0	-3.4	94	28	51	2	10	0	64	71	3.20	-0.97	1.13	9	7	0.0	0	2.7	6	36	E	30	5	12	13	6.1	54
ALASKA												B																				
ANCHORAGE PRK STRIP	85			62	48	55.1	0.6	71	20	40	16	1	0			0.46	-0.52	0.17	8		0.0	0										
ANCHORAGE	114	1008.1	1012.9	63	48	55.4		75	7	40	16	2	0	44	67	0.27		0.07	7	0	0.0	0	4.1	20	23	16	8	3	4	23	7.7	45
ANNETTE	110	1010.8	1014.9	61	47	53.6	-0.7	75	1	42	1	1	0	46	78	2.23	-3.44	0.69	13	0	0.0	0	4.1	16	26	18	16	0	5	25	8.9	
BARROW	22	1010.8	1011.6	40	30	35.1	2.0	58	21	22	3+	0	21	33	93	0.37	0.01	0.31	5	0	T	7	1.8	22	32	27	23	6	8	16	6.8	
BARTER ISLAND	39	1010.2	1012.0	42	31	36.3	2.1	58	30+	20	1	0	20	32	86	0.72	0.21	0.66	4	0	T	13	2.3	8	31	29	24	10	8	12	5.6	
BETHEL	125	1007.1	1012.8	61	42	51.8	0.2	77	7	30	2	3	1	44	79	0.94	-0.24	0.36	8	1	0.0	0	2.9	29	25	33	17	1	6	23	8.3	
COLD BAY	94	1006.8	1010.8	48	40	44.2	-1.1	56	9	35	19+	0	0	39	85	0.79	-1.16	0.24	14	0	0.0	0	2.5	14	37	10	7	1	1	28	9.3	
FAIRBANKS	436	993.9	1010.6	74	53	63.3	4.9	83	7	46	28	24	0			0.19	-1.20	0.08	6	2	0.0	0	2.4	22	25	23	25	7	12	11	6.3	
JUNEAU	12	1012.9	1013.8	64	42	52.9	0.6	75	7+	34	21	5	0	47	82	1.74	-1.65	0.65	10	0	0.0	0	1.8	12	26	12	29+	7	5	18	7.2	41
KING SALMON	43	1009.5	1011.5	59	42	50.7	-0.7	66	19+	36	6	0	0	43	79	0.99	-0.41	0.30	11	0	0.0	0	2.9	13	30	9	30	0	8	22	8.6	
KOTZEBUE	10	1011.5	1012.0	45	33	39.1	-4.7	64	21	27	9	0	13	34	85	0.18	-0.31	0.08	5	0	0.0	8	5.5	27	23	30	26+	6	10	14	6.3	
MC GRATH	349	998.6	1011.3	68	47	57.5	1.0	80	7	40	28	19	0	44	61	0.86	-0.80	0.40	10	5	0.0	0	2.1	28	20	29	8	1	17	12	7.1	
NOME	13	1011.2	1012.1	50	36	43.2	-2.7	64	13	30	20+	0	3	38	83	0.71	-0.22	0.30	8	0	0.0	T	4.7	25	32	25	18	5	9	16	6.9	39
ST. PAUL ISLAND	22	1011.2	1012.3	45	37	40.7	-0.1	49	10	29	18	0	1	38	89	0.35	-0.80	0.10	11	0	0.0	0	3.4	5	28	13	3+	0	2	28	9.4	
SHEMYA	122	1007.5	1011.3	45	38	41.0	-0.8	50	11	33	2	0	0	39	93	0.97	-0.35	0.21	18	0	0.0	0	2.6	1	31	15	17	0	0	30	9.9	
YAKUTAT	28	1012.9	1014.0	56	41	48.6	-1.9	70	16	32	21	1	1	44	85	1.84	-3.22	0.68	14	0	0.0	0	1.7	23	25	14	17	0	9	21	8.1	
ARIZONA																																
FLAGSTAFF	6993	789.0	1013.3	77	41	59.1	-0.4	87	14	30	8+	0	4	29	36	0.21	-0.48	0.20	2	7	0.0	0	4.6	21	21	22	25+	14	11	5	3.8	
PHOENIX	1117	969.5	1007.3	103	70	86.8	3.2	112	14	58	2	30	0	43	24	0.22	0.13	0.21	2	2	0.0	0	0.8	19	40Y	WSW	19	24	4	2	1.7	92
TUCSON	2584	922.8	1008.0	98	68	82.8	0.1	105	25	56	4	30	0	40	24	0.02	-0.27	0.02	1	1	0.0	0	3.4	20	30	S	15+	18	10	2	2.9	86
WINSLOW	4895	850.7	1011.0	91	53	71.9	-2.4	100	25	43	4+	17	0	30	25	0.32	0.06	0.21	4	5	0.0	0	6.0	20	40	16	9	13	11	6	4.0	
YUMA	194	1000.3	1007.5	101	71	86.4	0.4	112	15	62	4	30	0	45	26	T	-0.01	T	0	0	0.0	0	4.9	22	42	SW	19	24	5	1	1.7	94
ARKANSAS																																
FORT SMITH	447	999.7	1016.0	88	64	75.7	-2.9	96	30+	55	1	11	0	63	67	1.23	-3.12	0.42	6	5	0.0	0	2.4	10	39	W	15	8	14	8	5.3	69
LITTLE ROCK	257	1007.8	1017.1	92	64	78.0	-0.9	101	29+	49	1	20	0	63	63	0.69	-2.92	0.50	3	4	0.0	0	2.2	19	31	W	29	11	10	9	5.1	73
TEXARKANA	372	1003.7	1016.6	89	65	77.1	-2.3	98	29	51	1	15	0	65	68	0.78	-3.11	0.57	5	2	0.0	0	3.5	16				16	8	6	4.5	
CALIFORNIA																																
BAKERSFIELD	494	994.6	1011.7	92	64	78.0	0.9	107	15+	51	3+	17	0	44	33	T	-0.09	T	0	0	0.0	0	5.5	33	33	15	18	25	3	2	1.2	
BISHOP	4108			91	52	71.4	1.6	100	27+	37	3	18	0			T	-0.09	T	0		0.0	0						18	8	4	3.3	
BLUE CANYON	5280			70	51	60.6	1.4	87	14	33	3	0	0			0.02	-0.91	0.02	1		0.0	0			20	5	24	19	3	8	3.4	
BURBANK	724	987.5	1012.2	84	60	71.7	3.7	98	13	52	3+	3	0	57	67	T	-0.05	T	0	0	0.0	0	6.3	15	17	18	24+	22	4	4	3.2	
EUREKA U	43			60	51	55.5	0.0	69	22	41	3	0	0			0.30	-0.44	0.15	5		0.0	0			25	NW	11	8	14	8	5.5	75
FRESNO	328	1000.0	1011.4	93	59	76.3	1.6	108	14	48	2	18	0	48	40	0.07	0.00	0.07	1	1	0.0	0	7.0	30	25	NW	23	24	3	3	1.8	92
LONG BEACH	34	1011.9	1013.1	78	60	69.3	1.8	85	29+	51	2+	0	0	54	63	T	-0.03	T	0	0	0.0	0	3.4	22	16	18	19+	13	13	4	4.2	
LOS ANGELES	97	1009.1	1012.8	73	60	66.6	1.8	77	24	53	1	0	0	56	72	T	-0.05	T	0	0	0.0	0	6.4	25	28Y	W	7	10	13	7	4.9	
LOS ANGELES U	270			79	62	70.2	2.2	90	13	55	4+	1	0			0.00	-0.06	0.00	0		0.0	0			18	W	7	18	9	3	3.6	62
MT SHASTA R	3544			75	47	61.0	0.7	95	15	30	4	2	1			0.21	-1.04	0.21	2		0.0	0										
OAKLAND	6	1014.2	1014.5	70	57	63.5	0.7	92	13	50	2	2	0	52	70	0.05	-0.07	0.05	1	0	0.0	0	8.0	28	31	27	1	20	6	4	2.9	
RED BLUFF	341	999.0	1011.6	91	63	77.0	0.8	110	14	45	3	17	0	39	29	T	-0.45	T	0	0	0.0	0	2.4	35	28	N	24	18	8	4	3.4	87
SACRAMENTO	17	1011.2	1012.0	89	56	72.6	2.1	107	14	43	2	15	0	49	50	0.02	-0.08	0.02	1	0	0.0	0	4.7	22	25	N	24+	20	7	3	2.6	93
SANDBERG R	4517			77	55	65.9	1.1	94	14	40	7+	3	0			0.00	-0.03	0.00	0		0.0	0			58	33	11	24	4	2	1.4	
SAN DIEGO	13	1011.9	1013.0	71	62	66.5	0.3	76	6	56	3	0	0	58	76	T	-0.05	T	0	0	0.0	0	4.1	25	17	NW	18+	10	12	8	5.4	61
SAN FRANCISCO	8	1014.2	1014.8	71	52	61.4	0.1	95	13	45	3	2	0	49	69	0.04	-0.07	0.04	1	0	0.0	0	12.1	29	34	W	9	19	8	3	3.0	
SAN FRANCISCO U	52			66	53	59.4	0.3	91	13	49	4+	1	0			0.17	0.03	0.17	1		0.0	0			31	W	1					84
SANTA CATALINA	1568			73	55	64.3	2.4	93	13	49	2+	1	0			0.03	-0.08	0.03	1	0	0.0	0						17	8	5	3.2	
SANTA MARIA	236			73	49	60.9	1.3	90	14	39	2	1	0			0.03	-0.11	0.03	1		0.0	0						20	6	4	3.2	
STOCKTON	22	1011.9	1012.8	90	58	73.9	1.1	108	14	45	3	16	0	48	45	0.04	-0.03	0.04	1	0	0.0	0	9.5	29	25	27	21	22	6	2	2.2	
COLORADO																																
ALAMOSA	7536			77	41	59.1	-0.9	86	25	32	4	0	1			0.72	0.23	0.20	9		0.0	0						9	15	6	4.8	
COLORADO SPRINGS	6145	811.7	1011.7	81	51	65.7	1.0	91	24	40	9	2	0	38	44	2.56	0.97	1.53	12	11	0.0	0	0.8	11	37	34	17	7	13	10	5.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days				Precipitation			No of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)				
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
DENVER	5283	836.1	1011.2	80	50	64.6	- 1.9	93	28+	41	6	4	0	42	52	1.41	- 0.03	0.77	11	7	0.0	0	1.0	11	32	W	26	8	11	11	5.9	67
GRAND JUNCTION	4855	850.3	1009.3	86	58	72.0	0.7	95	28	49	6	8	0	33	28	0.13	- 0.29	0.06	4	6	0.0	0	3.0	15	38	NW	17	15	9	6	4.0	78
PUEBLO	4684	854.7	1010.3	88	54	70.8	- 0.3	96	24	46	3+	14	0	42	42	0.70	- 0.52	0.32	7	4	0.0	0	1.2	11	42	N	7	10	12	8	4.9	82
CONNECTICUT																																
BRIDGEPORT	7	1016.6	1017.3	78	58	67.9	- 0.1	94	24	43	2	3	0	57	70	0.99	- 2.41	0.73	7	4	0.0	0	1.9	23	27	10	12	7	10	13	6.1	
HARTFORD	169	1009.8	1016.4	83	58	70.7	2.0	98	27	45	2	7	0	57	67	2.72	- 0.98	2.23	8	6	0.0	0	1.6	27	24	W	7	3	12	15	7.1	62
NEW HAVEN	6			77	58	67.8	1.6	92	24	44	3	1	0			1.28	- 2.25	0.56	11		0.0	0			18	NW	30+	5	13	12	6.3	68
DELAWARE																																
WILMINGTON	78	1014.6	1017.6	84	61	72.5	1.1	96	24	44	1	7	0	59	65	0.70	- 3.37	0.55	3	2	0.0	0	2.2	25	21	30	16+	8	10	12	5.4	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.2	1017.6	87	65	76.0	1.8	97	25+	47	1	15	0	61	62	2.02	- 1.19	1.03	6	5	0.0	0	2.0	21	31	W	28	11	12	7	5.0	69
FLORIDA																																
APALACHICOLA U	13			83	71	77.3	- 2.9	90	10	61	1	1	0			9.10	3.80	3.78	10	7	0.0	0			42	N	9	13	7	10	4.7	62
DAYTONA BEACH	31	1016.3	1017.6	84	71	77.6	- 0.8	91	11	65	26+	1	0	69	77	15.19	9.38	6.28	10	6	0.0	0	5.8	9	37	10	9	3	9	18	7.5	
FORT MYERS	15	1015.6	1015.9	88	72	80.0	- 0.8	92	15+	69	27+	11	0	73	84	12.42	3.46	2.61	19	15	0.0	0	4.7	9	46	12	8	0	17	13	7.1	
JACKSONVILLE	20	1016.6	1017.6	84	68	75.8	- 5.0	91	15	56	2	4	0	66	76	7.74	1.41	2.48	8	6	0.0	0	5.0	9	48	E	9	6	12	12	6.1	70
KEY WEST	4	1014.2	1014.8	84	75	79.8	- 2.0	88	22+	69	7	0	0	73	80	13.67	9.70	3.12	16	13	0.0	0	7.9	12	60	SE	8	3	11	16	7.3	48
LAKELAND U	214			86	70	77.9	- 2.7	93	14	65	2	5	0			7.85	0.65	2.00	15		0.0	0						5	11	14	6.7	59
MIAMI	7	1015.2	1015.7	84	72	78.2	- 2.6	90	11	70	29+	1	0	72	86	21.37	14.00	7.63	24	15	0.0	0	6.3	11	37	10	8	0	9	21	8.3	
ORLANDO	108	1012.5	1016.9	86	70	78.0	- 3.3	93	11	65	2	1	0	68	77	9.77	2.81	3.87	15	12	0.0	0	5.2	9	32	10	8	5	10	15	6.9	
PENSACOLA	112	1013.2	1017.2	87	68	77.4	- 3.7	95	10	57	1	7	0	65	67	2.00	- 3.43	0.79	8		0.0	0	1.0	10	42	SE	29					60
TALLAHASSEE	55	1014.6	1016.9	87	67	77.0	- 3.2	94	27	54	2	11	0	65	69	8.05	1.51	6.75	8	5	0.0	0	4.3	6	44	3	9	11	6	13	5.5	
TAMPA	19	1015.9	1016.1	88	70	79.2	- 1.4	94	5	66	26+	9	0	67	71	6.44	- 0.84	3.33	10	11	0.0	0	4.5	8	46	12	9	8	7	15	6.4	62
WEST PALM BEACH	15	1015.6	1016.1	86	73	79.5	- 1.5	92	11	68	21	2	0			17.91	10.38	4.81	20	11	0.0	0	6.8	12	39	10	8	1	8	21	8.4	
GEORGIA																																
ATHENS	802	990.2	1018.7	86	63	74.5	- 3.1	94	26+	51	1	6	0	63	72	3.36	- 0.52	1.25	8	8	0.0	0	0.9	7	21	2	10	12	10	8	4.9	
ATLANTA	1010	982.1	1018.2	83	63	73.4	- 3.2	91	26+	49	1	3	0	61	70	2.95	- 0.88	1.69	8	7	0.0	0	1.4	8	26	N	29	9	14	7	5.1	67
AUGUSTA	145	1012.5	1017.9	86	62	74.0	- 4.9	94	26+	50	2	10	0	63	73	3.50	0.46	1.70	8	5	0.0	0	1.6	8	18	5	9	15	5	10	5.0	
COLUMBUS	385			88	65	76.3	- 3.1	94	29+	49	2	11	0			4.54	0.86	1.61	8		0.0	0	2.3	6	35	18	30	10	11	9	5.4	
MACON	354	1005.4	1018.2	87	63	74.9	- 5.8	95	26	47	2	11	0	63	71	4.17	0.83	1.50	9	5	0.0	0	3.0	8	26	NE	9	13	8	9	5.1	71
ROME	637			88	60	73.6	- 2.8	97	26	43	2	10	0			1.73	- 2.03	0.65	8		0.0	0										
SAVANNAH	46	1016.3	1018.2	85	64	74.6	- 5.1	93	16	53	3+	5	0	65	76	6.61	1.52	2.40	6	6	0.0	0	2.9	10	29	E	9	11	8	11	5.6	61
HAWAII																																
HILO	31	1016.6	1017.9	83	67	75.1	0.8	87	12	64	7+	0	0	66	76	7.49	0.70	1.42	23	0	0.0	0	0.6	12	23	10	1	1	8	21	7.9	28
HONOLULU	7	1016.6	1017.1	87	74	80.6	2.7	90	8	72	30+	1	0	65	61	0.04	- 0.29	0.02	2	0	0.0	0	11.5	7	26	NE	28+	6	18	6	5.5	77
KAHULUI	48	1014.6	1016.9	87	72	79.0	1.8	90	8	66	23+	1	0			0.08	- 0.10	0.03	6	0	0.0	0	15.7	7	33	NE	22	7	15	8	5.3	70
LIHUE	103	1013.5	1018.6	83	72	77.7	1.1	85	20	67	6	0	0	68	75	1.08	- 0.38	0.21	19	0	0.0	0	13.0	6	23	E	18	2	18	10	6.4	73
IDAHO																																
BOISE	2838	914.3	1012.8	80	50	65.0	- 0.8	95	28	36	1	6	0	39	43	0.01	- 0.88	0.01	1	0	0.0	0	4.4	30	34	NW	10	10	11	9	5.0	89
IDAHO FALLS 42NW R	4790			78	42	59.8	0.0	95	28	29	13	4	5			0.58	- 0.66	0.32	6				3.3	24	34	WSW	24					
IDAHO FALLS 46W R	4932			76	42	58.9	- 0.9	94	28	24	25	1	5			0.12	- 0.97	0.06	4		0.0	0	4.6	23	37	WSW	24					
LEWISTON	1413			77	52	64.2	- 0.6	93	16	36	1	1	0			0.68	- 1.05	0.23	6		0.0	0						3	11	16	7.1	
POCATELLO	4454	862.2	1012.5	79	45	62.2	- 0.6	98	28	31	25	4	1	35	39	0.21	- 0.75	0.09	6	5	0.0	0	7.1	24	37	W	29+	12	11	7	4.8	70
ILLINOIS																																
CAIRO U	314			87	66	76.7	- 1.2	98	28	54	1	12	0			2.94	- 1.19	1.81	3		0.0	0			45	S	7	12	12	6	4.5	74
CHICAGO O HARE	658	992.9	1016.9	80	57	68.5	0.5	91	25	38	2	2	0	56	64	2.95	- 1.01	1.22	9	4	0.0	0	2.0	22	26	2	9	8	10	12	5.7	
CHICAGO MIDWAY	607	994.6		82	62	71.5	1.0	94	25	45	10	5	0	55	58	1.57	- 2.50	0.99	7	5	0.0	0	3.2	21	25	SW	14	10	10	10	5.4	68
MOLINE	582	994.9	1016.2	82	59	70.5	- 0.9	94	30+	41	10	7	0	59	67	4.25	- 0.12	1.42	9	8	0.0	0	2.8	20	37	NW	12	10	6	14	5.9	72
PEORIA	652	993.2	1017.0	82	59	70.4	- 1.3	93	25	44	10+	4	0	57	65	2.29	- 1.79	0.90	9	10	0.0	0	3.3	20	30	NW	15+	10	8	12	5.7	70
ROCKFORD	724	989.5	1016.3	80	58	69.2	- 0.5	92	25	42	2	3	0	57	66	4.53	0.23	1.42	11	8	0.0	0	3.0	23	23	30	14+	9	11	10	5.4	
SPRINGFIELD	588	994.9	1016.8	84	59	71.5	- 2.5	95	25	40	1	8	0	58	66	1.35	- 3.10	0.50	7	6	0.0	0	3.6	20	26	W	14	9	9	12	5.7	66

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1004.1	1017.8	88	59	73.6	- 2.2	98	28+	41	1	12	0	59	65	1.74	- 2.00	0.82	5	4	0.0	0	1.9	23	27	W	13	11	12	7	4.5	74
FORT WAYNE	791	987.8	1017.4	81	58	69.8	- 0.8	93	26	39	1	4	0	53	57	1.15	- 3.02	0.62	6	3	0.0	0	3.5	24	30	W	14+	11	7	12	5.5	71
INDIANAPOLIS	792	989.2	1017.7	85	60	72.4	1.3	95	26	43	2	9	0	57	59	1.28	- 3.34	0.54	8	3	0.0	0	2.6	21	31	SW	9	11	7	12	5.7	68
SOUTH BEND	773	989.2	1016.9	80	58	68.8	- 0.2	91	30	39	2+	2	0	53	59	1.90	- 1.68	1.09	8	7	0.0	0	3.3	25	23	24	6	12	10	8	5.2	
IOWA																																
BURLINGTON	692			81	60	70.6	- 1.5	91	30+	44	10	4	0	58	66	3.88	- 1.13		10	10	0.0		2.2	22	26	30	6	8	9	13	6.2	
DES MOINES	938	981.7	1015.9	80	61	70.4	- 0.6	92	25	47	10	2	0	59	69	5.22	0.51	1.15	12	10	0.0	0	4.4	17	36	NE	8	8	11	11	5.9	67
DUBUQUE	1056			79	57	68.0	0.1	91	25	44	10	2	0			9.52	5.31	3.60	13		0.0	0						8	9	13	6.2	
SIOUX CITY	1095	974.9	1014.3	81	60	70.6	- 0.8	95	29	49	14+	4	0	60	71	5.09	0.76	1.71	13	13	0.0	0	5.3	18	38	W	3	6	13	11	5.8	76
WATERLOO	968	984.1	1015.5	82	60	70.7	0.6	94	25	40	1	5	0	58	68	8.34	3.51	2.20	14	10	0.0	0	4.0	19	37	35	25	9	10	11	5.7	
KANSAS																																
CONCORDIA	1470	961.4	1013.1	87	62	74.2	0.0	100	29+	49	10+	14	0	58	62	2.38	- 1.82	1.69	6	13	0.0	0	8.7	16	42	SW	11	8	15	7	5.3	66
DODGE CITY	2582	923.5	1012.0	89	63	75.9	1.5	100	4	47	9	19	0	56	55	1.61	- 1.42	0.86	6	6	0.0	0	9.3	17	38	S	24	11	13	6	5.0	72
GOODLAND	3645	887.6	1011.8	85	56	70.8	1.1	98	24	42	9+	15	0	52	58	2.12	- 0.54	0.98	8	8	0.0	0	4.7	15	32	16	24	9	15	6	4.6	
TOPEKA	876	983.7	1014.9	83	62	72.7	- 2.0	92	29	49	10	3	0	61	69	8.83	4.32	3.39	12	12	0.0	0	5.1	18	72	SW	8	6	10	14	6.3	60
WICHITA	1321	967.2	1013.8	88	64	76.2	- 0.3	98	5	52	10	15	0	59	60	2.67	- 1.54	1.29	7	7	0.0	0	8.8	17	38	N	5	8	14	8	5.4	69
KENTUCKY																																
COVINGTON	869	987.1	1018.2	86	60	73.1	1.3	96	28	41	1	11	0	57	60	2.52	- 1.37	0.89	6	4	0.0	0	2.3	25	26	32	9	9	9	12	5.6	
LEXINGTON	966	983.4	1018.6	84	59	71.6	- 2.0	97	27	39	1	8	0	56	60	1.36	- 3.36	0.50	7	5	0.0	0	1.2	20	21	21	6	11	10	9	4.9	
LOUISVILLE	477	1000.3	1017.8	85	61	73.1	- 0.3	95	28+	42	1	9	0	58	62	0.75	- 3.24	0.55	5	4	0.0	0	1.7	22	24	SW	6	12	13	5	4.8	80
LOUISIANA																																
ALEXANDRIA	92	1012.5	1016.8	89	65	76.7	- 3.0	94	27+	49	1	16	0	66	74	1.61	- 2.68	0.60	4	3	0.0	0	1.8	11	23	4	29+	8	13	9	5.5	
BATON ROUGE	64	1014.2	1016.9	89	68	78.5	- 2.4	96	29	55	2	13	0	66	68	2.16	- 1.93	0.89	9	7	0.0	0	2.3	7	28	6	12	11	10	9	5.2	
LAKE CHARLES	9	1015.6	1016.6	89	70	79.7	- 1.5	95	29	58	2	16	0	69	73	5.10	0.38	4.09	6	7	0.0	0	2.6	12	31	23	13	15	10	5	4.6	
NEW ORLEANS	3	1015.6	1016.5	87	67	77.1	- 3.0	94	10	55	2	8	0	69	76	2.10	- 2.33	0.86	7	6	0.0	0	2.1	7	24	21	16	13	7	10	4.8	
SHREVEPORT	252	1007.1	1016.3	90	68	79.0	- 1.6	95	29+	58	2+	18	0	65	66	2.05	- 1.29	1.97	4	2	0.0	0	3.3	14	23	13	29	11	15	4	4.6	67
MAINE																																
CARIBOU	624			71	50	60.4	1.4	85	27	35	1	0	0			2.06	- 2.01	1.23	12		0.0	0						2	12	16	7.4	
PORTLAND	61	1013.5	1015.9	74	52	63.1	1.0	91	27	41	12+	1	0	54	75	3.04	- 0.14	0.95	13	6	0.0	0	1.5	23	25	N	29	5	11	14	6.8	52
MARYLAND																																
BALTIMORE	148	1012.2	1017.6	86	60	72.9	0.4	98	27+	42	1	9	0	57	62	1.18	- 2.11	0.45	7	6	0.0	0	2.2	26	40	SW	14	11	8	11	5.2	69
MASSACHUSETTS																																
BLUE HILL OBS R	629			77	56	66.6	1.5	92	27	44	11	1	0			1.99	- 1.76	1.00	9		0.0	0			30	E	10					60
BOSTON	15	1015.2	1016.3	78	60	69.4	1.6	94	27	51	11	1	0	55	64	3.40	- 0.08	1.17	10	7	0.0	0	2.4	24	29	NW	8+	6	8	16	6.6	64
NANTUCKET	43	1016.6	1017.0	69	53	60.6	- 0.7	85	24	43	12+	0	0	55	84	1.91	- 1.01	0.74	10	4	0.0	0	5.0	21	26	S	10	9	6	15	6.5	64
PITTSFIELD	1170			78	51	64.3	1.2	89	27	35	12	0	0			2.02	- 2.26	0.96	9		0.0	0										
WORCESTER	986	980.4	1017.1	76	55	65.4	0.8	89	27	42	11	0	0	52	66	1.91	- 1.93	1.13	12	7	0.0	0	4.3	28	24	34	11	4	12	14	6.5	
MICHIGAN																																
ALPENA	689	991.2	1016.2	78	48	63.3	2.7	94	25	28	1	5	3	49	63	2.41	- 0.26	0.93	10	6	0.0	0	1.7	26	35	SW	6	8	14	8	5.1	73
DETROIT	619	994.6	1017.1	82	61	71.2	1.5	96	26	40	1	6	0	53	54	2.97	0.14	1.27	7	7	0.0	0	2.1	27	32	19	6	15	7	8	4.6	
DETROIT M WAYNE CO	633	992.9	1017.0	81	56	68.4	0.0	92	26+	36	1	3	0	56	66	4.16	0.85	2.18	8	4	0.0	0	2.3	25	29	SW	14+	14	9	7	4.5	81
DETROIT WILLOW RUN	711	989.5	1017.5	82	55	68.4	- 1.2	94	26	33	1	5	0	53	60	2.59	- 0.69	1.05	7	3	0.0	0	3.4	25	28	23	6	15	8	7	4.5	
FLINT	770	989.5	1016.9	79	54	66.5	0.8	90	26+	33	1	2	0	54	65	2.31	- 0.81	1.61	5	4	0.0	0	3.6	24	23	22	6	10	12	8	5.0	
GRAND RAPIDS	784	988.2	1016.8	82	56	69.2	1.7	93	25	37	2+	7	0	54	63	2.36	- 0.95	1.46	6	2	0.0	0	3.9	24	35	SW	6	11	10	9	5.1	72
HOUGHTON LAKE	1149	975.3	1017.0	79	51	64.7		91	29	30	1	4	2	52	64	0.95		0.51	6	3	0.0	0	4.3	25	20	25	7	9	12	9	5.3	
LANSING	841	985.4	1016.8	83	56	69.2	1.8	94	26+	30	1	7	1	54	61	2.56	- 0.78	2.00	5	6	0.0	0	4.1	26	40	W	9	10	13	7	5.1	71
MARQUETTE U	677			73	53	63.0	2.9	94	30	37	9	4	0			2.46	- 1.00	1.37	10		0.0	0			32	SW	25	11	8	11	5.5	72
MUSKEGON	627	994.2	1016.9	78	56	67.0	0.3	92	25	36	2	2	0	53	64	1.62	- 1.08	0.86	10	3	0.0	0	4.8	23	25	8	9+	11	8	11	5.1	
SAULT STE MARIE	721	989.2	1015.7	73	49	61.0	2.0	89	24	37	2	0	0	50	71	2.04	- 1.26	0.85	11	7	0.0	0	2.7	25	35	NW	7	9	8	13	6.1	71
MINNESOTA																																
DULUTH	1428	963.8	1014.9	73	50	61.1	2.3	89	30	35	9	0	0	50	70	4.14	- 0.13	1.30	7	6	0.0	0	3.2	22	35	W	7	7	8	15	6.7	57

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	970.5	1013.1	75	51	63.0	3.1	96	30	33	8	2	0	53	72	1.63	- 2.24	0.69	8	4	0.0	0	4.2	22	29	30	7	4	14	12	6.8	
MINNEAPOLIS	834	984.8	1014.7	80	57	68.4	1.6	94	30	46	8	4	0	56	65	3.51	- 0.49	0.96	10	11	0.0	0	3.8	21	38	SW	11	6	11	13	6.3	65
ROCHESTER	1297	968.5	1015.7	78	56	67.2	0.2	92	25	44	10	1	0	54	67	3.26	- 1.20	0.98	12	7	0.0	0	5.6	21	40	27	25	5	14	11	6.1	
ST CLOUD	1034	976.6	1013.9	78	55	66.6	1.4	92	30	40	8	2	0			3.18	- 1.31	1.00	11		0.0	0						7	10	13	6.4	
MISSISSIPPI																																
JACKSON	310	1005.4	1017.3	88	64	76.1	- 3.7	93	27	49	2	12	0	64	72	1.45	- 2.34	0.64	5	5	0.0	0	2.7	10	26	NW	16	11	10	9	5.3	71
MERIDIAN	290	1006.8	1017.7	88	63	75.8	- 3.7	95	27	46	1	11	0	64	72	1.02	- 3.05	0.41	4	7	0.0	0	1.6	8	21	4	1	10	11	9	5.5	
VICKSBURG U	234			87	68	77.4	- 2.3	94	29+	57	1	10	0			2.09	- 1.37	1.60	4		0.0	0			34	NE	29	13	6	11	5.0	80
MISSOURI																																
COLUMBIA	778	988.5	1016.2	83	62	72.6	- 1.4	92	29+	46	1	4	0	59	65	3.28	- 1.06	1.31	10	9	0.0	0	4.1	17	29	NW	6	7	12	11	6.0	76
KANSAS CITY	742	988.8	1015.3	83	64	73.3	- 2.6	94	29	47	10	4	0	61	68	8.63	4.06	3.55	10	11	0.0	0	4.4	17	40	SE	4	7	9	14	6.2	62
SAINT JOSEPH	811			86	62	74.2	0.2	96	25+	46	10	10	0	60	67	7.53	1.60	2.58	13	10	0.0	0	4.8	16	26	17	22	9	8	13	5.9	
ST LOUIS	535	997.0	1017.2	85	62	73.7	- 0.4	95	25	46	1	10	0	57	58	1.59	- 2.70	0.47	5	7	0.0	0	2.9	19	28	W	12+	10	9	11	5.8	71
SPRINGFIELD	1268	972.2	1016.9	84	58	70.8	- 3.4	93	29	42	1	5	0	59	70	1.90	- 3.12	0.84	6	7	0.0	0	4.4	17	34	SE	5	11	11	8	5.1	59
MONTANA																																
BILLINGS	3567	890.3	1012.8	74	49	61.6	- 3.5	102	28	40	13	2	0	42	55	1.56	- 0.99	0.94	11	9	0.0	0	2.6	29	41	NW	24	7	12	11	6.1	74
GLASGOW	2284			75	50	62.3	0.0	96	28	39	7	2	0			0.89	- 2.09	0.23	8		0.0	0						2	16	12	6.6	
GREAT FALLS	3662	887.6	1013.2	71	48	59.9	0.0	95	28	40	3	1	0	42	55	2.17	- 0.73	0.95	13	10	0.0	0	3.7	25	35	S	28	5	9	16	6.8	77
HAVRE	2582			73	48	60.7	- 0.3	97	28	38	6	1	0			2.04	- 0.69	0.54	13		0.0	0			32	SE	21	3	12	15	6.9	66
HELENA	3828	880.5	1014.0	73	46	59.3	- 0.2	93	28	34	13	2	0	40	52	0.96	- 1.27	0.28	12	10	0.0	0	4.1	28	39	SW	3	4	9	17	7.0	64
KALISPELL	2965	910.9	1015.0	67	42	54.8	- 3.8	82	28	34	21+	0	0	45	72	4.72	2.51	2.35	16	6	0.0	0	2.7	17	23	17	2	6	10	14	6.9	
MILES CITY	2629	920.4	1011.8	80	53	66.2	0.6	102	28	42	16	6	0	45	52	3.26	0.55		12	10	0.0		3.9	31								
MISSOULA	3190	904.2	1015.4	72	45	58.1	- 0.4	90	28	35	13	1	0	43	64	1.81	- 0.10	0.45	11	5	0.0	0	3.4	32	27	SW	2	3	9	18	7.3	61
NEBRASKA																																
GRAND ISLAND	1841	948.5	1013.5	83	59	71.0	0.0	98	29	44	6	9	0	56	63	2.98	- 0.81	1.54	8	10	0.0	0	5.8	16	33	4	8	13	6	11	5.3	
LINCOLN U	1150			83	62	72.5	- 0.6	97	25	47	10	7	0			4.88	0.38	2.73	13		0.0	0			42	5	22	6	12	12	6.2	64
NORFOLK	1544			81	59	69.7	- 1.2	97	29	46	10	4	0			5.80	1.54	2.59	8		0.0	0						9	9	12	5.7	
NORTH PLATTE	2775	916.4	1012.2	82	56	68.8	- 0.3	94	20	38	9+	7	0	54	62	5.14	1.89	2.71	7	9	0.0	0	5.2	13	45	NW	4	8	15	7	5.5	71
OMAHA	977	979.7	1014.6	83	62	72.6	- 0.5	95	20	46	10	6	0	60	68	5.93	1.40	3.02	17	13	0.0	0	5.1	17	31	NW	5	6	13	11	6.0	71
SCOTTSBLUFF	3957	878.4	1011.8	83	52	67.4	0.5	99	28	36	9	10	0	47	55	2.09	- 1.01	1.23	11	10	0.0	0	2.9	7	30	32	4	7	16	7	5.4	
VALENTINE	2587			81	55	68.3	0.8	99	20	38	9	8	0			3.65	0.54	1.21	9		0.0	0			61	NW	4	12	12	6	5.0	77
NEVADA																																
ELKO	5050	844.2	1012.2	82	43	62.7	2.7	98	28	29	5	12	1	30	33	0.36	- 0.35	0.32	2	1	0.0	0	3.2	23	29	26	21	14	9	7	4.1	
ELY	6253	808.3	1010.0	80	41	60.6	2.0	90	28+	26	5	2	3	25	28	0.14	- 0.36	0.07	3	5	0.0	0	4.0	22	34	SW	21	15	9	6	4.1	84
LAS VEGAS	2162	933.0	1007.3	99	69	83.9	1.0	108	28	60	1	28	0	31	16	0.15	0.11	0.15	1	3	0.0	0	5.6	22	38	SW	21+	18	7	5	3.0	89
RENO	4404	865.2	1012.3	84	43	63.7	3.6	98	27	29	2	10	2	34	34	0.03	- 0.34	0.03	1	2	0.0	0	3.3	27	42	NW	14	19	5	6	3.2	89
WINNEMUCCA	4299	866.6	1012.2	82	45	63.2	1.7	96	28	30	3	10	2	29	30	0.38	- 0.38	0.38	2	1	0.0	0	3.6	29	32	W	21	16	7	7	3.9	73
NEW HAMPSHIRE																																
CONCORD	342	1004.1	1016.5	81	53	66.8	2.3	97	27	37	3	7	0	57	73	1.78	- 1.82	0.71	12	3	0.0	0	1.5	28	36	NW	29	6	12	12	6.6	62
MT WASHINGTON OBS	6262			52	39	45.3	0.4	63	29	25	11	0	6			6.88	0.38	1.42	17	5	0.6	T			79Y	W	21	1	8	21	8.4	30
NEW JERSEY																																
ATLANTIC CITY	64	1015.2	1017.8	83	58	70.2	0.2	96	24	39	2	9	0	58	70	1.87	- 0.96	1.28	7	5	0.0	0	2.8	22	28	21	16	9	13	8	5.5	59
ATLANTIC CITY U	11			75	62	68.4	- 0.6	92	24	49	1	1	0			2.22	- 0.82	1.73	8						31	NNE	12					
NEWARK	11	1015.9	1017.0	85	63	73.8	1.5	101	27	50	2+	10	0	56	56	0.49	- 2.95	0.19	7	4	0.0	0	3.1	25	27	28	10	8	14	8	5.7	
TRENTON U	56			84	63	73.5	2.5	97	27	47	1	9	0			0.63	- 2.97	0.26	5		0.0	0			26	S	16+	9	12	9	5.4	70
NEW MEXICO																																
ALBUQUERQUE	5311	838.1	1010.6	89	57	72.8	- 2.1	99	24	49	4	16	0	39	38	1.66	1.09	0.78	8	8	0.0	0	2.3	17	54	SW	20	15	13	2	3.6	75
CLAYTON	4969			83	55	68.8	- 1.4	92	15	42	9	4	0			3.20	1.72	2.48	7		0.0	0						12	9	9	4.7	
RATON	6379			81	50	65.5	0.1	91	25	40	9	2	0			2.49	0.79	0.69	8		0.0	0						8	13	9	5.4	
ROSWELL	3617			91	62	76.6	- 0.5	101	7	51	11	21	0			2.35	1.30	1.24	5	6	0.0	0			29	SW	1	12	9	9	5.1	59
SILVER CITY	5373			87	57	72.3	- 2.3	95	24	51	11+	10	0			2.05	1.47	1.33	6		0.0	0						15	14	1	3.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature										Average dew point	Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Sleet				Fastest mile							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below			Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1006.1	1016.8	81	54	67.4	0.1	93	25	40	3+	3	0	55	67	2.95	-0.30	1.50	11	8	0.0	0	2.9	25	44	NW	6	3	15	12	6.5	54
BINGHAMTON	1590	959.4	1017.5	77	55	65.9	2.4	87	27+	37	1	0	0	53	66	2.90	-0.95	2.24	8	6	0.0	0	3.7	28	47	SW	9	5	17	8	6.0	78
BUFFALO	705	991.9	1017.2	78	57	67.4	2.6	91	26	39	2	1	0	54	66	1.97	-0.57	0.63	8	6	0.0	0	6.2	24	33	NW	9	13	8	9	5.1	77
NEW YORK U	132	1013.5	1016.6	86	65	75.4	4.0	101	27	52	2+	10	0	56	54	1.17	-2.14	0.60	6	3	0.0	0	1.3	27	22	NE	12+	12	10	8	4.7	72
J.F. KENNEDY	13	1016.3	1017.0	80	60	70.0	-0.1	95	24	50	1	3	0	58	73	0.21	-3.14	0.16	2	1	0.0	0	3.2	19	23	19	6	8	13	9	5.5	
NEW YORK LA GUARDIA	11	1015.2	1016.9	82	66	74.0	2.5	95	27	53	1	6	0	59	62	1.44	-1.94	0.81	4	2	0.0	0	0.7	22	28	W	7	9	11	10	5.6	
ROCHESTER	547	997.6	1017.7	80	56	67.8	0.9	94	26	37	1	4	0	55	66	1.85	-0.71	1.08	6	4	0.0	0	4.6	25	31	W	14	14	10	6	4.4	74
SYRACUSE	410	1001.7	1016.6	78	53	65.7	-1.6	89	26	35	1	0	0	52	61	2.73	-0.23	1.41	8	5	0.0	0	2.9	29	35	W	9	15	8	7	4.6	78
NORTH CAROLINA																																
ASHEVILLE	2140	944.1	1019.3	79	53	66.1	-4.0	86	24	35	2	0	0	58	81	2.46	-1.06	1.60	8	7	0.0	0	1.3	1	23	35	16	8	11	11	5.7	67
CAPE HATTERAS R	7	1018.0	1018.3	79	63	70.9	-4.3	90	24	44	3	1	0	64	79	6.80	2.66	4.98	8	4	0.0	0	1.8	25	43	NNE	11	10	9	11	5.8	67
CHARLOTTE	736	991.2	1018.3	86	62	74.0	-3.1	95	25	46	2	9	0	59	63	2.58	-1.03	1.29	6	3	0.0	0	0.6	18	26	NE	11	14	9	7	4.6	87
GREENSBORO	897	987.5	1018.7	85	62	73.5	-1.3	95	29	44	2	9	0	63	73	4.04	0.57	1.19	9	6	0.0	0	0.8	20	32	NE	11	14	9	7	4.4	63
RALEIGH	434	1002.7	1018.2	85	62	73.4	-1.7	94	25	43	2	8	0	60	67	3.68	-0.02	1.64	7	5	0.0	0	0.6	18	29	34	29+	13	11	6	4.4	67
WILMINGTON	28	1017.3	1018.6	85	65	74.8	-2.9	93	25	50	2	5	0	64	73	9.78	5.52	7.73	9	5	0.0	0	1.1	15	35	N	11	11	10	9	5.3	69
NORTH DAKOTA																																
BISMARCK	1647	953.3	1012.1	76	52	64.2	-0.3	92	29	39	7	3	0	51	66	3.60	0.20	1.35	10	12	0.0	0	1.4	22	33	SW	24+	3	13	14	6.6	66
FARGO	896	980.4	1012.7	78	54	66.1	1.3	96	30	35	9	4	0	52	63	2.91	-0.13	0.72	12	11	0.0	0	3.6	21	35	W	24+	5	15	10	6.0	69
WILLISTON	1899			77	50	63.5	0.4	99	28	35	7	5	0			0.92	-2.39	0.47	9		0.0	0			45	SW	25	6	16	8	6.0	57
OHIO																																
AKRON	1208	974.3	1018.1	81	57	69.4	0.0	93	27	38	2	5	0	56	64	1.92	-2.34	0.85	7	7	0.0	0	2.6	26	25	22	9	11	12	7	4.8	
CINCINNATI OBS	761			85	61	73.1	-0.3	94	27+	43	1	9	0			1.54	-2.64	0.55	9		0.0	0			20	W	13					65
CLEVELAND	777	988.8	1017.7	81	57	68.9	1.7	93	26	39	2	4	0	57	68	1.83	-1.60	0.89	9	4	0.0	0	2.7	24	32	N	9	12	10	8	4.6	85
COLUMBUS	812	988.5	1018.2	85	58	71.4	0.6	96	27	39	2	11	0	57	62	1.28	-2.88	0.43	6	5	0.0	0	1.1	27	47	NW	28	5	19	6	5.5	72
DAYTON	1002	982.4	1018.0	86	61	73.8	2.3	97	26	42	2	12	0	57	60	2.63	-1.47	0.55	9	5	0.0	0	2.7	23	45	NW	27	8	13	9	5.3	80
MANSFIELD	1295			79	57	68.2	0.4	92	26	39	2	1	0			1.88	-2.35	0.50	10	5	0.0	0						11	13	6	5.0	
TOLEDO	676	992.9	1017.6	84	58	70.8	2.5	96	26	38	2+	8	0	55	61	3.42	-0.37	1.14	10	7	0.0	0	2.8	25	23	SW	6	11	11	8	5.0	67
YOUNGSTOWN	1178	976.0	1018.2	81	54	67.7	0.6	92	26+	33	2	4	0	53	62	1.88	-1.70	1.11	8	5	0.0	0	2.6	26	22	33	10	10	14	6	4.7	
OKLAHOMA																																
OKLAHOMA CITY	1280	968.8	1014.3	91	65	77.9	-0.1	98	30+	56	10+	21	0	61	60	2.63	-1.84	1.69	6	7	0.0	0	8.6	16	34	N	15	9	15	6	4.8	71
TULSA	650	991.5	1015.4	89	66	77.3	0.0	100	30	58	10+	15	0	61	61	2.56	-2.13	1.25	4	6	0.0	0	6.7	17	35	N	15	12	11	7	4.9	79
OREGON																																
ASTORIA	8	1017.6	1018.3	65	47	56.2	-1.1	91	15	38	1	1	0	50	82	2.13	-0.89	0.71	16	0	0.0	0	3.9	25	17	22	27+	3	7	20	7.7	
BURNS U	4151	873.0	1014.8	72	43	57.9	-1.9	88	15	30	4	0	2	38	51	1.15	0.27	0.45	11		T	T	3.6	30				9	8	13	5.9	
EUGENE	359	1004.1	1017.6	77	48	62.6	1.7	96	15	37	1	1	0	48	64	0.23	-1.19	0.20	2	1	0.0	0	2.8	27	21	26	1	6	13	11	6.0	
MEACHAM	4050	877.1	1015.6	62	43	52.6	-1.1	77	16+	29	1	0	2	39	64	1.86	-0.59	0.81	12		3.1	T	2.8	28				3	7	20	7.9	
MEDFORD	1298	969.2	1016.6	79	49	63.8	-0.4	101	15	34	4	4	0	43	52	0.37	-0.65	0.22	5	1	0.0	0	3.7	31	29	24	15	12	10	8	4.6	
PENDLETON	1482	962.1	1015.4	78	52	64.6	-1.2	93	16	36	1	3	0	40	44	0.55	-0.62	0.36	5	0	0.0	0	5.6	27	28	26	24+	3	13	14	6.9	
PORTLAND	21	1016.3	1017.4	74	51	62.4	0.4	95	15	39	1	1	0	49	65	1.02	-0.65	0.48	8	1	0.0	0	2.9	30	24	W	10	2	11	17	7.4	48
SALEM	196	1010.2	1017.5	76	48	61.8	1.2	100	15	36	1	1	0	48	65	0.58	-0.87	0.28	8	2	0.0	0	2.4	28	23	30	23+	3	16	11	6.5	
SEXTON SUMMIT R	3836	884.9	1016.2	67	42	54.8	-0.9	93	15	27	1	1	3			0.84	-0.69	0.41	6		1.2	T			28	33	28	14	9	7	4.2	
PACIFIC AREA																																
CANTON ISLAND	8			89	78	83.5	-0.3	90	22+	73	29	7	0			4.06	1.41	2.68	9		0.0	0						5	12	13	6.8	
ENIWETOK	13	1010.5	1011.2	88	78	83.2	0.4	90	5	74	16	1	0	76	79	3.02	-0.35	0.61	17		0.0	0	14.9	7								
TAGUAC GUAM R	361			87	74	80.4	0.2	90	7	70	19+	1	0			5.72	-0.15	1.28	23		0.0	0			25	SF	23					53
JOHNSTON	7	1014.2	1014.7	85	77	81.0	0.7	85	30+	75	20+	0	0	70	71	0.42	-0.42	0.08	13	0	0.0	0	15.0	9	28	E	27+	9	17	4	4.9	72
KOROR R	94	1007.1	1010.7	88	76	81.6	0.5	90	28+	73	13	4	0	76	85	10.44	-2.54	2.16	22	5	0.0	0	1.0	14	28	SW	24	0	0	30	9.9	54
KWAJALEIN	8	1009.8	1010.7	87	77	81.6	0.2	90	29	74	19+	1	0	76	83	10.42	1.74	2.47	23	0	0.0	0	11.1	7	28	9	21	0	6	24	8.6	
MAJURO	10	1010.2	1010.6	86	78	81.7	1.4	89	29	73	9	0	0	76	82	9.40	-3.44	1.70	20	2	0.0	0	6.6	7	30	F	3	0	4	26	8.8	54
MARCUS ISLAND	20	1013.2	1015.0	88	77	82.3	-0.4	90	29	74	29	1	0	73	74	1.86	-0.76	1.62	3		0.0	0	1.3	19	19	N	25	12	11	7	5.1	81
PAGO PAGO	12	1012.5	1012.9	84	75	79.8		90	26	72	27+	1	0	73	81	9.17		2.68	17	1	0.0	0	12.5	11	28	F	19	1	9	20	8.2	44
PONAPE R	123	1005.1	1010.4	88	74	81.0	0.9	90	20+	70	25	4	0	75	86	11.87	-4.83	1.89	27	3	0.0	0	4.4	9	17	E	27+	0	3	27	9.1	63
TRUK MOEN ISLAND	5	1010.2	1010.5	86	76	81.1	0.4	88	22+	73	16	0	0	75	84	6.10	-5.77	1.65	24	3	0.0	0	5.0	9	25	SF	7	0	3	27	9.3	74
WAKE	11	1014.9	1015.1	87	77	81.7	0.3	89	29	74	10+	0	0	73	77	1.59	-0.31	0.58	9	0	0.0	0	10.7	6	23	3	20	11	13	6	5.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M p.h.							%
PACIFIC AREA																																
YAP R	62	1008.5	1010.3	87	76	81.6	- 0.3	91	20+	73	29+	2	0	76	84	12.52	1.80	5.54	23	0	0.0	0	3.3	8	19	SW	23	0	1	29	9.9	49
PENNSYLVANIA																																
ALLENTOWN	387	1003.7	1017.5	85	57	71.1	1.7	100	27	42	1	8	0	55	60	0.89	- 3.18	0.47	4	3	0.0	0	2.5	28	25	32	10	10	10	10	5.3	
ERIE	731	991.2	1017.8	77	58	67.5	0.8	90	26	37	1	1	0	56	68	3.82	0.77	1.53	8	5	0.0	0	4.1	23	23	27	15+	17	8	5	3.6	
HARRISBURG	338	1004.7	1017.3	88	61	74.6	3.3	100	27	47	1	14	0	56	55	0.07	- 3.35	0.07	1	2	0.0	0	2.9	29	26	W	15	8	14	8	5.5	76
PHILADELPHIA	5	1016.3	1017.2	84	60	72.1	1.1	96	25+	46	1	8	0	58	65	0.41	- 3.64	0.24	3	2	0.0	0	3.1	26	29	N	10	8	12	10	5.6	68
PITTSBURGH	1137	974.6	1018.1	84	57	70.4	2.0	96	27	36	2+	11	0	55	62	1.72	- 2.06	0.63	6	3	0.0	0	2.6	28	30	25	6	8	14	8	5.4	64
READING U	266			86	62	74.0	1.8	98	27	45	1	10	0			0.90	- 2.82	0.80	4		0.0	0			63	W	14	10	12	8	5.2	71
SCRANTON	930	983.7	1017.7	83	57	70.1	1.9	94	27	41	2+	6	0	56	64	0.27	- 3.64	0.18	5	3	0.0	0	1.3	27	25	S	14	7	15	8	5.3	73
WILLIAMSPORT	527	998.6	1017.5	80	53	66.3	- 2.9	92	25+	39	3+	2	0	56	72	0.66	- 2.57	0.22	8	6	0.0	0	2.5	28	25	24	5	9	15	6	5.0	
RHODE ISLAND																																
BLOCK ISLAND	110			69	56	62.3	- 0.6	84	24	47	2	0	0			1.55	- 1.01	0.72	10		0.0	0						6	12	12	6.3	
PROVIDENCE	51	1014.2	1016.6	78	57	67.4	1.2	91	27	45	12+	2	0	55	68	2.31	- 0.45	1.61	9	4	0.0	0	2.4	22	24	5	24+	4	13	13	6.4	58
SOUTH CAROLINA																																
CHARLESTON	40	1016.6	1018.2	84	63	73.7	- 5.5	91	26+	51	2+	5	0	63	73	6.03	1.05	2.28	7	3	0.0	0	1.9	11	46Y	S	10	12	8	10	5.2	64
CHARLESTON U	9			82	70	75.9	- 3.7	89	25+	57	1	0	0			3.26	- 0.99	1.56	7		0.0	0			35	S	10+					
COLUMBIA	217	1009.8	1017.9	87	63	75.0	- 4.7	96	25	51	2	13	0	63	69	3.66	- 0.19	2.29	7	5	0.0	0	1.1	8	32	35	29	13	8	9	5.0	63
GNVLE-SPARTANBURG	957	984.1	1018.3	86	62	74.2	- 2.8	94	29	46	2	9	0	60	66	3.84	0.95	2.15	6	4	0.0	0	0.8	2	26	N	29	13	10	7	4.6	72
SOUTH DAKOTA																																
ABERDEEN	1296	966.5	1012.6	80	54	67.1	0.5	93	30+	37	9	5	0	55	68	4.53	0.77	1.69	11	12	0.0	0	2.3	16	32	18	10	7	12	11	6.0	
HURON	1282	966.8	1012.5	83	55	68.7	1.1	99	30+	40	16	6	0	55	65	2.42	- 0.72	1.05	10	11	0.0	0	4.3	18	34	SW	22+	6	15	9	5.8	79
RAPID CITY	3162	903.2	1012.2	80	51	65.3	0.4	103	28	40	6+	6	0	45	53	1.31	- 1.77	0.28	11	10	0.0	0	1.5	33	55	SW	22	7	13	10	5.5	63
SIOUX FALLS	1418	963.4	1013.9	81	56	68.5	0.4	97	30+	43	10	5	0	55	64	2.68	- 1.67	0.68	12	10	0.0	0	4.8	19	44	30	13	9	10	11	5.9	
TENNESSEE																																
BRISTOL	1507	965.8	1019.2	86	58	71.9	- 1.3	95	27	38	2+	9	0	59	69	1.77	- 1.61	0.57	6	6	0.0	0	0.5	30	29	31	16	8	17	5	5.1	
CHATTANOOGA	665	993.6	1018.0	86	61	73.8	- 4.3	95	28+	42	1	8	0	61	69	1.03	- 2.67	0.49	5	5	0.0	0	1.0	8	26	N	16	8	15	7	5.2	69
KNOXVILLE	980	984.1	1018.8	86	63	74.3	- 1.4	94	28	44	1	10	0	60	65	2.27	- 1.06	1.35	7	4	0.0	0	0.8	34	34	N	16	9	14	7	5.2	70
MEMPHIS	255	1007.5	1017.6	88	65	76.6	- 1.9	97	28	48	1	12	0	61	62	0.52	- 3.16	0.33	3	4	0.0	0	3.4	15	26	S	13	12	12	6	4.9	76
NASHVILLE	590	996.6	1017.9	88	62	75.1	- 2.3	98	28	42	1	13	0	61	65	1.09	- 2.16	0.33	6	7	0.0	0	1.3	20	26	NW	16	10	12	8	5.1	79
OAK RIDGE	905			85	60	72.5	- 2.0	93	28	40	1	6	0			2.65	- 0.59	0.98	4		0.0	0			29Y		16	15	6	9	4.5	
TEXAS																																
ABILENE	1762	953.3	1013.3	91	69	79.9	- 0.4	98	15	66	10+	22	0	63	59	1.16	- 1.51	1.08	4	3	0.0	0	10.1	16	34	SE	3	6	19	5	5.5	77
AMARILLO	3604	891.3	1011.5	87	62	74.2	- 2.8	98	15	48	9	6	0	56	58	4.62	1.73	2.70	8	7	0.0	0	10.4	18	42	NE	15+	10	13	7	5.0	72
AUSTIN	597	993.2	1014.9	90	70	79.9	- 2.0	95	13	62	3+	19	0	66	68	1.53	- 1.69	0.83	5	3	0.0	0	6.2	17	43	NW	13	10	15	5	5.2	64
BROWNSVILLE	16	1013.5	1014.0	88	72	80.0	- 2.7	92	16+	62	2	9	0	71	79	2.18	- 0.78	0.61	10	3	0.0	0	8.8	13	29	SE	24	8	13	9	5.6	71
CORPUS CHRISTI	41	1013.2	1014.7	88	71	79.5	- 2.8	93	12	63	2	7	0	73	83	4.35	1.96	2.20	10	8	0.0	0	8.0	13	40	W	18	4	14	12	6.2	46
DALLAS	481	998.0	1015.1	89	71	80.0	- 1.3	94	30+	64	17	15	0	66	64	4.50	1.26	2.23	5	3	0.0	0	7.8	16	30	S	4+	14	13	3	4.2	71
DEL RIO	1026	977.7	1013.2	91	70	80.2	- 4.2	96	13	63	12	21	0	66	66	3.37	1.08	2.57	4	2	0.0	0	9.7	13	21	7	12+	5	16	9	6.2	
EL PASO	3918	880.8	1009.0	92	67	79.5	- 1.5	101	13	57	11+	22	0	47	40	2.67	1.98	1.45	6	11	0.0	0	2.2	17	33	W	16+	16	9	5	3.8	76
FORT WORTH	537	994.9	1015.0	89	70	79.6	- 1.9	94	30+	63	2	17	0	65	64	5.47	2.49	3.11	5	5	0.0	0	6.9	16	29	18	5	13	14	3	4.4	
GALVESTON U	7			84	75	79.6	- 2.1	92	30	70	19+	2	0			4.86	2.21	2.31	7		0.0	0			31	N	17					67
HOUSTON U	41			89	73	80.7	- 1.5	94	16+	66	2	14	0			3.56	- 0.27	2.25	6		0.0	0										
HOUSTON	50	1013.5	1015.8	89	71	80.0	- 1.6	94	10+	61	2	12	0	69	73	4.42	0.73	1.62	10	5	0.0	0	4.7	14	23	9	30+	10	14	6	4.9	74
LUBBOCK	3254	903.5	1011.7	90	67	78.5	1.0	101	4	57	9	16	0	56	51	2.27	- 0.26	1.15	7	11	0.0	0	8.5	17	46	10	10	5	16	9	5.6	
MIDLAND	2851	915.3	1011.3	90	66	78.0	- 3.2	98	4	61	11	13	0	59	58	2.91	1.28	1.62	5	5	0.0	0	9.1	15	58	24	11	9	15	6	5.2	
PORT ARTHUR	16	1015.6	1016.3	90	71	80.2	- 0.4	96	10	60	2+	20	0	69	74	3.50	- 0.79	1.90	8	6	0.0	0	3.5	14	30	NW	17	12	13	5	4.5	65
SAN ANGELO	1903	947.5	1012.4	93	69	81.0	- 1.5	98	16+	65	18	26	0	61	54	0.77	- 1.05	0.73	2	2	0.0	0	8.7	17	24	15	24+	6	22	2	5.3	
SAN ANTONIO	788	987.1	1014.8	89	69	78.8	- 3.1	95	17	61	3	14	0	67	72	1.78	- 1.17	1.48	5	2	0.0	0	6.6	14	24	E	13	7	15	8	5.5	64
VICTORIA	104	1011.2	1015.3	89	71	80.0	- 1.3	93	10	61	2	14	0	70	76	3.60	0.56	1.12	8	6	0.0	0	6.3	13	40Y	ESE	18	4	18	8	5.8	
WACO	500	997.3	1015.2	91	72	81.4	- 0.6	96	30+	67	3+	23	0	64	59	2.34	- 0.33	1.86	4	3	0.0	0	8.0	16	25	18	8	15	12	3	4.4	
WICHITA FALLS	994	978.0	1013.7	94	68	81.3	- 0.5	101	5	61	10	25	0	62	55	0.28	- 2.92	0.24	3	5	0.0	0	10.1	15	31	14	12+	5	16	9	5.6	
UTAH																																
MILFORD	5028			86	47	66.1	0.7	96	29	30	1	11	1			0.11	- 0.32	0.06	4		0.0	0						15	10	5	3.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	869.6	1010.5	85	53	69.2	1.8	100	28	36	5	13	0	35	31	0.07	-0.91	0.03	4	3	0.0	0	2.2	13	35	N	4	15	10	5	4.2	85
WENDOVER	4237			82	59	70.5	0.7	97	28	47	25+	8	0			0.23	-0.23	0.15	2		0.0	0						15	11	4	3.7	
VERMONT																																
BURLINGTON	332	1003.1	1015.6	77	53	65.3	1.1	91	27	36	2	1	0	55	73	2.63	-0.86	0.83	14	9	0.0	0	2.3	19	38	N	29	7	13	10	6.2	71
VIRGINIA																																
LYNCHBURG	916			85	59	71.8	-1.2	94	28	42	1	9	0			1.36	-2.70	0.95	6	4	0.0	0			27	NE	10	16	10	4	4.1	76
NORFOLK	22	1017.3	1018.2	81	62	71.6	-4.0	90	25+	48	2	2	0	62	75	1.82	-1.79	0.75	9	3	0.0	0	1.9	20	35	F	11	11	10	9	5.7	67
RICHMOND	162	1012.2	1018.2	83	60	71.4	-3.7	92	30+	43	1	7	0	61	72	2.54	-1.21	0.68	9	5	0.0	0	1.3	22	27	NW	16	11	10	9	5.2	75
ROANOKE	1149	977.0	1018.3	85	57	71.1	-2.3	95	29	40	2	8	0	56	61	1.54	-2.26	0.69	6	5	0.0	0	0.4	1	46	28	16	11	12	7	4.9	
WASHINGTON																																
OLYMPIA	195	1010.5	1017.8	68	44	56.3	-2.8	86	15	31	1	0	1	46	69	1.28	-0.51	0.35	10	0	0.0	0	3.5	24	24	25	10	2	10	18	7.6	
SEATTLE TACOMA	400	1001.0	1017.4	67	50	58.7	-1.1	86	15	46	25+	0	0	48	71	1.15	-0.43	0.70	9	0	0.0	0	3.5	23	24	23	10	4	6	20	7.7	60
SPOKANE	2356	931.3	1014.4	71	47	58.8	-3.1	85	16	37	3	0	0	41	55	0.70	-0.79	0.51	7	1	0.0	0	4.0	20	32	SW	10	2	13	15	7.0	51
STAMPEDE PASS R	3958			54	39	46.7	-2.2	73	16	31	1	0	2			4.63	0.54	1.49	17		0.1	8						2	2	26	8.7	
TATOOSH ISLAND R	101	1014.2	1017.5	57	49	53.0	-0.9	65	16+	45	5+	0	0	49	88	2.65	-0.19	0.86	19	0	0.0	0	5.0	19	42	NE	15	1	11	18	8.1	32
WALLA WALLA U	949			77	54	65.4	-1.8	90	16	41	1	1	0			1.09	-0.13	0.64	7		0.0	0			26	W	10	3	12	15	7.0	69
YAKIMA	1052	976.6	1014.7	76	47	61.4	-3.0	90	16	34	1	1	0	42	51	0.17	-0.64	0.16	3	1	0.0	0	4.2	30	25	31	10	4	18	8	6.2	
WEST INDIES																																
SAN JUAN P.R.	13	1014.6	1016.8	87	75	81.0	1.0	91	30	72	3+	2	0	73	78	3.26	-2.40	0.92	18	4	0.0	0	9.6	8	26	E	4	3	18	9	6.2	78
SWAN ISLAND	28			84	77	80.4	-1.9	87	30	73	21	0	0			31.53	25.07	6.80	19	8	0.0	0						2	5	23	8.3	
WEST VIRGINIA																																
BECKLEY	2504	931.9	1018.8	80	54	66.5		89	28	34	2	0	0	52	63	1.58		0.52	9	6	0.0	0	1.7	26	26	26	16	13	10	7	5.2	
CHARLESTON	939	984.4	1018.1	87	57	72.0	0.0	96	28+	35	2	13	0	56	63	0.70	-2.99	0.31	4	3	0.0	0	0.6	22	27	28	6	8	15	7	5.4	
ELKINS	1970	948.9	1019.7	80	48	64.3	-2.8	90	27	29	2	1	1	53	73	1.98	-3.21	0.86	8	5	0.0	0	1.7	31	20	30	16	6	14	10	5.9	
HUNTINGTON	827	988.5	1018.1	87	58	72.4	0.4	95	27+	40	1	12	0	57	62	0.41	-3.69	0.28	5	2	0.0	0	1.3	23	23	26	6	8	13	9	5.4	
PARKERSBURG U	615			86	59	72.4	-0.2	96	27	39	2	11	0			0.92	-3.35	0.35	4		0.0	0			37	W	6					64
WISCONSIN																																
GREEN BAY	682	990.5	1015.9	80	54	67.0	1.5	94	29	35	1	5	0	55	66	1.09	-2.27	0.50	11	7	0.0	0	4.4	23	28	SE	11	9	12	9	5.5	65
LA CROSSE	651	991.9	1016.1	82	58	69.8	1.0	97	30+	42	10	7	0	58	69	3.47	-0.73	1.67	10	10	0.0	0	4.3	18	24	27	6	7	13	10	5.9	
MADISON	858	985.4	1016.4	79	54	66.6	0.5	93	30	34	1	4	0	56	69	2.91	-1.04	1.15	12	5	0.0	0	3.6	24	26	SW	12	9	7	14	5.8	77
MILWAUKEE	672	992.6	1017.5	78	56	67.0	3.7	93	25	36	1	3	0	56	69	1.68	-1.96	1.19	6	0	0.0	0	2.6	21	28	N	9	11	10	9	5.1	76
WYOMING																																
CASPER	5338	837.1	1011.9	79	45	61.8	-1.3	94	29	32	5	5	1	35	45	1.12	-0.13	0.66	9	9	3.0	1	3.0	26	40	25	10	7	12	11	6.0	
CHEYENNE	6126	813.1	1012.9	75	48	61.5	-1.5	90	28	38	8	1	0	38	49	1.95	-0.16	1.09	9	9	0.0	0	2.9	27	40	SW	22	7	14	9	5.8	62
LANDER	5563	828.7	1011.7	77	48	62.2	0.2	94	28	35	13	3	0	37	45	1.31	-0.05	0.99	7	8	0.0	0	4.2	26	49	SW	24	6	12	12	6.3	60
SHERIDAN	3964	877.8	1013.2	76	45	60.2	-1.7	98	28	34	16+	3	0	41	53	1.29	-1.28	0.55	9	8	0.0	0	1.8	30	40	SW	18	5	14	11	6.3	63

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	995.9	1018.2	29.4	16.7	23.1	-3.2	35.0	26	5.6	1	6	0	16.7	70	73	- 29	29	8	5	0	0	0.5	9	11.6	SW	16	5	15	10	5.9	73
HUNTSVILLE	183	995.3	1018.0	31.1	18.3	24.9	-0.9	35.6	28+	7.8	1	12	0	17.2	63	74	- 12	32	5	5	0	0	0.6	14	13.9	1	16	11	10	9	5.2	
MOBILE	64	1009.1	1017.0	31.7	20.6	26.2	-1.3	36.7	10	13.3	1	13	0	18.9	69	30	-128	16	7	7	0	0	1.1	10	10.7	1	9	14	6	10	4.9	
MONTGOMERY	59	1010.5	1017.6	30.6	18.3	24.4	-1.9	34.4	28	10.6	2	10	0	17.8	71	81	- 25	29	9	7	0	0	1.2	6	16.1	E	30	5	12	13	6.1	54
ALASKA												B																				
ANCHORAGE PRK STRIP	26			16.7	8.9	12.8	0.3	21.7	20	4.4	16	1	0			12	- 13	4	8		0	0										
ANCHORAGE	35	1008.1	1012.9	17.2	8.9	13.0		23.9	7	4.4	16	2	0	6.7	67	7		2	7	0	0	0	1.8	20	10.3	16	8	3	4	23	7.7	45
ANNETTE	34	1010.8	1014.9	16.1	8.3	12.0	-0.4	23.9	1	5.6	1	1	0	7.8	78	57	- 87	18	13	0	0	0	1.8	16	11.6	18	16	0	5	25	8.8	
BARROW	7	1010.8	1011.6	4.4	- 1.1	1.7	1.1	14.4	21	- 5.6	3+	0	21	0.6	93	9	0	8	5	0	T	178	0.8	22	14.3	27	23	6	8	16	6.8	
BARTER ISLAND	12	1010.2	1012.0	5.6	- 0.6	2.4	1.2	14.4	30+	- 6.7	1	0	20	0.0	86	18	5	17	4	0	T	330	1.0	8	13.9	29	24	10	8	12	5.6	
BETHEL	38	1007.1	1012.8	16.1	5.6	11.0	0.1	25.0	7	- 1.1	2	3	1	6.7	79	24	- 6	9	8	1	0	0	1.3	29	11.2	33	17	1	6	23	8.3	
COLD BAY	29	1006.8	1010.8	8.9	4.4	6.8	-0.6	13.3	9	1.7	19+	0	0	3.9	85	20	- 29	6	14	0	0	0	1.1	14	16.5	10	7	1	1	28	9.3	
FAIRBANKS	133	993.9	1010.6	23.3	11.7	17.4	2.7	28.3	7	7.8	28	24	0			5	- 30	2	6	2	0	0	1.1	22	11.2	23	25	7	12	11	6.3	
JUNEAU	4	1012.9	1013.8	17.8	5.6	11.6	0.3	23.9	7+	1.1	21	5	0	8.3	82	44	- 42	17	10	0	0	0	0.8	12	11.6	12	29+	7	5	18	7.2	41
KING SALMON	13	1009.5	1011.5	15.0	5.6	10.4	-0.4	18.9	19+	2.2	6	0	0	6.1	79	25	- 10	8	11	0	0	0	1.3	13	13.4	9	30	0	8	22	8.6	
KOTZEBUE	3	1011.5	1012.0	7.2	0.6	3.9	-2.6	17.8	21	- 2.8	9	0	13	1.1	85	5	- 8	2	5	0	0	203	2.5	27	10.3	30	26+	6	10	14	6.3	
MC GRATH	9	1012.9	1014.0	13.3	5.0	9.2	-1.1	21.1	16	0.0	21	1	1	6.7	85	22	- 20	10	10	5	0	0	0.9	28	8.9	29	8	1	17	12	7.1	
NOME	4	1011.2	1012.1	10.0	2.2	6.2	-1.5	17.8	13	- 1.1	20+	0	3	3.3	83	18	- 6	8	8	0	0	T	2.1	25	14.3	25	18	5	9	16	6.9	39
ST. PAUL ISLAND	7	1011.2	1012.3	7.2	2.8	4.8	-0.1	9.4	10	- 1.7	18	0	1	3.3	89	9	- 20	3	11	0	0	0	1.5	5	12.5	13	3+	0	2	28	9.4	
SHEMYA	37	1007.5	1011.3	7.2	3.3	5.0	-0.4	10.0	11	0.6	2	0	0	3.9	93	25	- 9	5	18	0	0	0	1.2	1	13.9	15	17	0	0	30	9.8	
YAKUTAT	106	998.6	1011.3	20.0	8.3	14.2	0.6	26.7	7	4.4	28	19	0	6.7	61	47	- 82	17	14	0	0	0	0.8	23	11.2	14	17	0	9	21	8.1	
ARIZONA																																
FLAGSTAFF	2131	789.0	1013.3	25.0	5.0	15.1	-0.2	30.6	14	- 1.1	8+	0	4	- 1.7	36	5	- 12	5	2	7	0	0	2.1	21	9.4	22	25+	14	11	5	3.8	
PHOENIX	340	969.5	1007.3	39.4	21.1	30.4	1.8	44.4	14	14.4	2	30	0	6.1	24	6	3	5	2	2	0	0	0.4	19	17.9Y	WSW	19	24	4	2	1.7	92
TUCSON	788	922.8	1008.0	36.7	20.0	28.2	0.1	40.6	25	13.3	4	30	0	4.4	24	1	- 7	1	1	1	0	0	1.5	20	13.4	S	15+	18	10	2	2.9	86
WINSLOW	1492	850.7	1011.0	32.8	11.7	22.2	-1.3	37.8	25	6.1	4+	17	0	- 1.1	25	8	2	5	4	5	0	0	2.7	20	17.9	16	9	13	11	6	4.0	
YUMA	59	1000.3	1007.5	38.3	21.7	30.2	0.2	44.4	15	16.7	4	30	0	7.2	26	T	0	T	0	0	0	0	2.2	22	18.8	SW	19	24	5	1	1.7	94
ARKANSAS																																
FORT SMITH	136	999.7	1016.0	31.1	17.8	24.3	-1.6	35.6	30+	12.8	1	11	0	17.2	67	31	- 79	11	6	5	0	0	1.1	10	17.4	W	15	8	14	8	5.3	69
LITTLE ROCK	78	1007.8	1017.1	33.3	17.8	25.6	-0.5	38.3	29+	9.4	1	20	0	17.2	63	18	- 74	13	3	4	0	0	1.0	19	13.9	W	29	11	10	9	5.1	73
TEXARKANA	113	1003.7	1016.6	31.7	18.3	25.1	-1.3	36.7	29	10.6	1	15	0	18.3	68	20	- 79	14	5	2	0	0	1.6	16				16	8	6	4.5	
CALIFORNIA																																
BAKERSFIELD	151	994.6	1011.7	33.3	17.8	25.6	0.5	41.7	15+	10.6	3+	17	0	6.7	33	T	- 2	T	0	0	0	0	2.5	33	14.8	15	18	25	3	2	1.2	
BISHOP	1252			32.8	11.1	21.9	0.9	37.8	27+	2.8	3	18	0			T	- 2	T	0		0	0						18	8	4	3.3	
BLUE CANYON	1609			21.1	10.6	15.9	0.8	30.6	14	0.6	3	0	0			1	- 23	1	1		0	0			8.9	5	24	19	3	8	3.4	
BURBANK	221	987.5	1012.2	28.9	15.6	22.1	2.1	36.7	13	11.1	3+	3	0	13.9	67	T	- 1	T	0	0	0	0	2.8	15	7.6	18	24+	22	4	4	3.2	
EUREKA U	13			15.6	10.6	13.1	0.0	20.6	22	5.0	3	0	0			8	- 11	4	5		0	0			11.2	NW	11	8	14	8	5.5	75
FRESNO	100	1000.0	1011.4	33.9	15.0	24.6	0.9	42.2	14	8.9	2	18	0	8.9	40	2	0	2	1	1	0	0	3.1	30	11.2	NW	23	24	3	3	1.8	92
LONG BEACH	10	1011.9	1013.1	25.6	15.6	20.7	1.0	29.4	29+	10.6	2+	0	0	12.2	63	T	- 1	T	0	0	0	0	1.5	22	7.2	18	19+	13	13	4	4.2	
LOS ANGELES	30	1009.1	1012.8	22.8	15.6	19.2	1.0	25.0	24	11.7	1	0	0	13.3	72	T	- 1	T	0	0	0	0	2.9	25	12.5Y	W	7	10	13	7	4.9	
LOS ANGELES U	82			26.1	16.7	21.2	1.2	32.2	13	12.8	4+	1	0			0	- 2	0	0		0	0			8.0	W	7	18	9	3	3.6	62
MT SHASTA R	1080			23.9	8.3	16.1	0.4	35.0	15	- 1.1	4	2	1			5	- 26	5	2		0	0										
OAKLAND	2	1014.2	1014.5	21.1	13.9	17.5	0.4	33.3	13	10.0	2	2	0	11.1	70	1	- 2	1	1	0	0	0	3.6	28	13.9	27	1	20	6	4	2.9	
RED BLUFF	104	999.0	1011.6	32.8	17.2	25.0	0.4	43.3	14	7.2	3	17	0	3.9	29	T	- 11	T	0	0	0	0	1.1	35	12.5	N	24	18	8	4	3.4	87
SACRAMENTO	5	1011.2	1012.0	31.7	13.3	22.6	1.2	41.7	14	6.1	2	15	0	9.4	50	1	- 2	1	1	0	0	0	2.1	22	11.2	N	24+	20	7	3	2.6	93
SANDBERG R	1377			25.0	12.8	18.8	0.6	34.4	14	4.4	7+	3	0			0	- 1	0	0		0	0			25.9	33	11	24	4	2	1.4	
SAN DIEGO	4	1011.9	1013.0	21.7	16.7	19.2	0.2	24.4	6	13.3	3	0	0	14.4	76	T	- 1	T	0	0	0	0	1.8	25	7.6	NW	18+	10	12	8	5.4	61
SAN FRANCISCO	2	1014.2	1014.8	21.7	11.1	16.3	0.1	35.0	13	7.2	3	2	0	9.4	69	1	- 2	1	1	0	0	0	5.4	29	15.2	W	9	19	8	3	3.0	
SAN FRANCISCO U	16			18.9	11.7	15.2	0.2	32.8	13	9.4	4+	1	0			4	1	4	1		0	0			13.9	W	1					84
SANTA CATALINA	478			22.8	12.8	17.9	1.3	33.9	13	9.4	2+	1	0			1	- 2	1	1	0	0	0						17	8	5	3.2	
SANTA MARIA	72			22.8	9.4	16.1	0.7	32.2	14	3.9	2	1	0			1	- 3	1	1		0	0						20	6	4	3.2	
STOCKTON	7	1011.9	1012.8	32.2	14.4	23.3	0.6	42.2	14	7.2	3	16	0	8.9	45	1	- 1	1	1	0	0	0	4.2	29	11.2	27	21	22	6	2	2.2	
COLORADO																																
ALAMOSA	2297			25.0	5.0	15.1	-0.5	30.0	25	0.0	4	0	1			18	6	5	9		0	0						9	15	6	4.8	
COLORADO SPRINGS	1873	811.7	1011.7	27.2	10.6	18.7	0.6	32.8	24	4.4	9	2	0	3.3	44	65	25	39	12	11	0	0	0.4	11	16.5	34	17	7	13	10	5.2	
DENVER	1610	836.1	1011.2	26.7	10.0	18.1	-1.1	33.9	28+	5.0	6	4	0	5.6	52	36	- 1	20	11	7	0	0	0.4	11	14.3	W	26	8	11	11	5.9	67
GRAND JUNCTION	1480	850.3	1009.3	30.0	14.4	22.2	0.4	35.0	28	9.4	6	8	0	0.6	28	3	- 7	2	4	6	0	0	1.3	15	17.0	NW	17	15	9	6	4.0	78
PUEBLO	1428	854.7	1010.3	31.1	12.2	21.6	-0.2	35.6	24	7.8	3+	14	0	5.6	42	18	- 13	8	7	4	0	0	0.5	11	18.8	N	7	10	12	8	4.9	82

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s							%
CONNECTICUT																																
BRIDGEPORT	2	1016.6	1017.3	25.6	14.4	19.9	-0.1	34.4	24	6.1	2	3	0	13.9	70	25	- 61	19	7	4	0	0	0.8	23	12.1	10	12	7	10	13	6.1	
HARTFORD	52	1009.8	1016.4	28.3	14.4	21.5	1.1	36.7	27	7.2	2	7	0	13.9	67	69	- 25	57	8	6	0	0	0.7	27	10.7	W	7	3	12	15	7.1	62
NEW HAVEN	2			25.0	14.4	19.9	0.9	33.3	24	6.7	3	1	0			33	- 57	14	11		0	0			8.0	NW	30+	5	13	12	6.3	68
DELAWARE																																
WILMINGTON	24	1014.6	1017.6	28.9	16.1	22.5	0.6	35.6	24	6.7	1	7	0	15.0	65	18	- 86	14	3	2	0	0	1.0	25	9.4	30	16+	8	10	12	5.4	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.2	1017.6	30.6	18.3	24.4	1.0	36.1	25+	8.3	1	15	0	16.1	62	51	- 30	26	6	5	0	0	0.9	21	13.9	W	28	11	12	7	5.0	69
FLORIDA																																
APALACHICOLA U	4			28.3	21.7	25.2	-1.6	32.2	10	16.1	1	1	0			231	97	96	10	7	0	0			18.8	N	9	13	7	10	4.7	62
DAYTONA BEACH	9	1016.3	1017.6	28.9	21.7	25.3	-0.4	32.8	11	18.3	26+	1	0	20.6	77	386	238	160	10	6	0	0	2.6	9	16.5	10	9	3	9	18	7.5	
FORT MYERS	5	1015.6	1015.9	31.1	22.2	26.7	-0.4	33.3	15+	20.6	27+	11	0	22.8	84	315	88	66	19	15	0	0	2.1	9	20.6	12	8	0	17	13	7.1	
JACKSONVILLE	6	1016.6	1017.6	28.9	20.0	24.3	-2.8	32.8	15	13.3	2	4	0	18.9	76	197	36	63	8	6	0	0	2.2	9	21.5	E	9	6	12	12	6.1	70
KEY WEST	1	1014.2	1014.8	28.9	23.9	26.6	-1.1	31.1	22+	20.6	7	0	0	22.8	80	347	246	79	16	13	0	0	3.5	12	26.8	SE	8	3	11	16	7.3	48
LAKELAND U	65			30.0	21.1	25.5	-1.5	33.9	14	18.3	2	5	0			199	17	51	15		0	0						5	11	14	6.7	59
MIAMI	2	1015.2	1015.7	28.9	22.2	25.7	-1.4	32.2	11	21.1	29+	1	0	22.2	86	543	356	194	24	15	0	0	2.8	11	16.5	10	8	0	9	21	8.3	
ORLANDO	33	1012.5	1016.9	30.0	21.1	25.6	-1.8	33.9	11	18.3	2	1	0	20.0	77	248	71	98	15	12	0	0	2.3	9	14.3	10	8	5	10	15	6.9	
PENSACOLA	34	1013.2	1017.2	30.6	20.0	25.2	-2.1	35.0	10	13.9	1	7	0	18.3	67	51	- 87	20	8		0	0	0.4	10	18.8	SE	29					60
TALLAHASSEE	17	1014.6	1016.9	30.6	19.4	25.0	-1.8	34.4	27	12.2	2	11	0	18.3	69	204	38	171	8	5	0	0	1.9	6	19.7	3	9	11	6	13	5.5	
TAMPA	6	1015.9	1016.1	31.1	21.1	26.2	-0.8	34.4	5	18.9	26+	9	0	19.4	71	164	- 21	85	10	11	0	0	2.0	8	20.6	12	9	8	7	15	6.4	62
WEST PALM BEACH	5	1015.6	1016.1	30.0	22.8	26.4	-0.8	33.3	11	20.0	21	2	0			455	264	122	20	11	0	0	3.0	12	17.4	10	8	1	8	21	8.4	
GEORGIA																																
ATHENS	244	990.2	1018.7	30.0	17.2	23.6	-1.7	34.4	26+	10.6	1	6	0	17.2	72	85	- 13	32	8	8	0	0	0.4	7	9.4	2	10	12	10	8	4.9	
ATLANTA	308	982.1	1018.2	28.3	17.2	23.0	-1.8	32.8	26+	9.4	1	3	0	16.1	70	75	- 22	43	8	7	0	0	0.6	8	11.6	N	29	9	14	7	5.1	67
AUGUSTA	44	1012.5	1017.9	30.0	16.7	23.3	-2.7	34.4	26+	10.0	2	10	0	17.2	73	89	12	43	8	5	0	0	0.7	8	8.0	S	9	15	5	10	5.0	
COLUMBUS	117			31.1	18.3	24.6	-1.7	34.4	29+	9.4	2	11	0			115	22	41	8		0	0	1.0	6	15.6	18	30	10	11	9	5.4	
MACON	108	1005.4	1018.2	30.6	17.2	23.8	-3.2	35.0	26	8.3	2	11	0	17.2	71	106	21	38	9	5	0	0	1.3	8	11.6	NE	9	13	8	9	5.1	71
ROME	194			31.1	15.6	23.1	-1.6	36.1	26	6.1	2	10	0			44	- 52	17	8		0	0										
SAVANNAH	14	1016.3	1018.2	29.4	17.8	23.7	-2.8	33.9	16	11.7	3+	5	0	18.3	76	168	39	61	6	6	0	0	1.3	10	13.0	E	9	11	8	11	5.6	61
HAWAII																																
HILO	9	1016.6	1017.9	28.3	19.4	23.9	0.4	30.6	12	17.8	7+	0	0	18.9	76	190	18	36	23	0	0	0	0.3	12	10.3	10	1	1	8	21	7.9	28
HONOLULU	2	1016.6	1017.1	30.6	23.3	27.0	1.5	32.2	8	22.2	30+	1	0	18.3	61	1	- 7	1	2	0	0	0	5.1	7	11.6	NE	28+	6	18	6	5.5	77
KAHULUI	15	1014.6	1016.9	30.6	22.2	26.1	1.0	32.2	8	18.9	23+	1	0			2	- 3	1	6	0	0	0	7.0	7	14.8	NE	22	7	15	8	5.3	70
LIHUE	31	1013.5	1018.6	28.3	22.2	25.4	0.6	29.4	20	19.4	6	0	0	20.0	75	27	- 10	5	19	0	0	0	5.8	6	10.3	E	18	2	18	10	6.4	73
IDAHO																																
BOISE	865	914.3	1012.8	26.7	10.0	18.3	-0.4	35.0	28	2.2	1	6	0	3.9	43	T	- 22	T	1	0	0	0	2.0	30	15.2	NW	10	10	11	9	5.0	89
IDAHO FALLS 42NW R	1460			25.6	5.6	15.4	0.0	35.0	28	- 1.7	13	4	5			15	- 17	8	6				1.5	24	15.2	WSW	24					
IDAHO FALLS 46W R	1503			24.4	5.6	14.9	-0.5	34.4	28	- 4.4	25	1	5			3	- 25	2	4		0	0	2.1	23	16.5	WSW	24					
LEWISTON	431			25.0	11.1	17.9	-0.3	33.9	16	2.2	1	1	0			17	- 27	6	6		0	0						3	11	16	7.1	
POCATELLO	1358	862.2	1012.5	26.1	7.2	16.8	-0.3	36.7	28	- 0.6	25	4	1	1.7	39	5	- 19	2	6	5	0	0	3.2	24	16.5	W	29+	12	11	7	4.8	70
ILLINOIS																																
CAIRO U	96			30.6	18.9	24.8	-0.7	36.7	28	12.2	1	12	0			75	- 30	46	3		0	0			20.1	S	7	12	12	6	4.5	74
CHICAGO O HARE	201	992.9	1016.9	26.7	13.9	20.3	0.3	32.8	25	3.3	2	2	0	13.3	64	75	- 26	31	9	4	0	0	0.9	22	11.6	2	9	8	10	12	5.7	
CHICAGO MIDWAY	185	994.6		27.8	16.7	21.9	0.6	34.4	25	7.2	10	5	0	12.8	58	40	- 64	25	7	5	0	0	1.4	21	11.2	SW	14	10	10	10	5.4	68
MOLINE	177	994.9	1016.2	27.8	15.0	21.4	-0.5	34.4	30+	5.0	10	7	0	15.0	67	108	- 3	36	9	8	0	0	1.3	20	16.5	NW	12	10	6	14	5.9	72
PEORIA	199	993.2	1017.0	27.8	15.0	21.3	-0.7	33.9	25	6.7	10+	4	0	13.9	65	58	- 45	23	9	10	0	0	1.5	20	13.4	NW	15+	10	8	12	5.7	70
ROCKFORD	221	989.5	1016.3	26.7	14.4	20.7	-0.3	33.3	25	5.6	2	3	0	13.9	66	115	6	36	11	8	0	0	1.3	23	10.3	30	14+	9	11	10	5.4	
SPRINGFIELD	179	994.9	1016.8	28.9	15.0	21.9	-1.4	35.0	25	4.4	1	8	0	14.4	66	34	- 79	13	7	6	0	0	1.6	20	11.6	W	14	9	9	12	5.7	66
INDIANA																																
EVANSVILLE	116	1004.1	1017.8	31.1	15.0	23.1	-1.2	36.7	28+	5.0	1	12	0	15.0	65	44	- 51	21	5	4	0	0	0.8	23	12.1	W	13	11	12	7	4.5	74
FORT WAYNE	241	987.8	1017.4	27.2	14.4	21.0	-0.4	33.9	26	3.9	1	4	0	11.7	57	29	- 77	16	6	3	0	0	1.6	24	13.4	W	14+	11	7	12	5.5	71
INDIANAPOLIS	241	989.2	1017.7	29.4	15.6	22.4	0.7	35.0	26	6.1	2	9	0	13.9	59	33	- 85	14	8	3	0	0	1.2	21	13.9	SW	9	11	7	12	5.7	68
SOUTH BEND	236	989.2	1016.9	26.7	14.4	20.4	-0.1	32.8	30	3.9	2+	2	0	11.7	59	48	- 43	28	8	7	0	0	1.5	25	10.3	24	6	12	10	8	5.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
BURLINGTON	211			27.2	15.6	21.4	-0.8	32.8	30+	6.7	10	4	0	14.4	66	99	- 29		10	10	0		1.0	22	11.6	30	6	8	9	13	6.2	
DES MOINES	286	981.7	1015.9	26.7	16.1	21.3	-0.3	33.3	25	8.3	10	2	0	15.0	69	133	13	29	12	10	0	0	2.0	17	16.1	NE	8	8	11	11	5.9	67
DUBUQUE	322			26.1	13.9	20.0	0.1	32.8	25	6.7	10	2	0			242	135	91	13		0	0						8	9	13	6.2	
SIOUX CITY	334	974.9	1014.3	27.2	15.6	21.4	-0.4	35.0	29	9.4	14+	4	0	15.6	71	129	19	43	13	13	0	0	2.4	18	17.0	W	3	6	13	11	5.8	76
WATERLOO	265	984.1	1015.5	27.8	15.6	21.5	0.3	34.4	25	4.4	1	5	0	14.4	68	212	89	56	14	10	0	0	1.8	19	16.5	35	25	9	10	11	5.7	
KANSAS																																
CONCORDIA	448	961.4	1013.1	30.6	16.7	23.4	0.0	37.8	29+	9.4	10+	14	0	14.4	62	60	- 46	43	6	13	0	0	3.9	16	18.8	SW	11	8	15	7	5.3	66
DODGE CITY	787	923.5	1012.0	31.7	17.2	24.4	0.8	37.8	4	8.3	9	19	0	13.3	55	41	- 36	22	6	6	0	0	4.2	17	17.0	S	24	11	13	6	5.0	72
GOODLAND	1111	887.6	1011.8	29.4	13.3	21.6	0.6	36.7	24	5.6	9+	15	0	11.1	58	54	- 14	25	8	8	0	0	2.1	15	14.3	16	24	9	15	6	4.6	
TOPEKA	267	983.7	1014.9	28.3	16.7	22.6	-1.1	33.3	29	9.4	10	3	0	16.1	69	224	110	86	12	12	0	0	2.3	18	32.2	SW	8	6	10	14	6.3	60
WICHITA	403	967.2	1013.8	31.1	17.8	24.6	-0.2	36.7	5	11.1	10	15	0	15.0	60	68	- 39	33	7	7	0	0	3.9	17	17.0	N	5	8	14	8	5.4	69
KENTUCKY																																
COVINGTON	265	987.1	1018.2	30.0	15.6	22.8	0.7	35.6	28	5.0	1	11	0	13.9	60	64	- 35	23	6	4	0	0	1.0	25	11.6	32	9	9	9	12	5.6	
LEXINGTON	294	983.4	1018.6	28.9	15.0	22.0	-1.1	36.1	27	3.9	1	8	0	13.3	60	35	- 85	13	7	5	0	0	0.5	20	9.4	21	6	11	10	9	4.9	
LOUISVILLE	145	1000.3	1017.8	29.4	16.1	22.8	-0.2	35.0	28+	5.6	1	9	0	14.4	62	19	- 82	14	5	4	0	0	0.8	22	10.7	SW	6	12	13	5	4.8	80
LOUISIANA																																
ALEXANDRIA	28	1012.5	1016.8	31.7	18.3	24.8	-1.7	34.4	27+	9.4	1	16	0	18.9	74	41	- 68	15	4	3	0	0	0.8	11	10.3	4	29+	8	13	9	5.5	
BATON ROUGE	20	1014.2	1016.9	31.7	20.0	25.8	-1.3	35.6	29	12.8	2	13	0	18.9	68	55	- 49	23	9	7	0	0	1.0	7	12.5	6	12	11	10	9	5.2	
LAKE CHARLES	3	1015.6	1016.6	31.7	21.1	26.5	-0.8	35.0	29	14.4	2	16	0	20.6	73	130	10	104	6	7	0	0	1.2	12	13.9	23	13	15	10	5	4.6	
NEW ORLEANS	1	1015.6	1016.5	30.6	19.4	25.1	-1.7	34.4	10	12.8	2	8	0	20.6	76	53	- 59	22	7	6	0	0	0.9	7	10.7	21	16	13	7	10	4.8	
SHREVEPORT	77	1007.1	1016.3	32.2	20.0	26.1	-0.9	35.0	29+	14.4	2+	18	0	18.3	66	52	- 33	50	4	2	0	0	1.5	14	10.3	13	29	11	15	4	4.6	67
MAINE																																
CARIBOU	190			21.7	10.0	15.8	0.8	29.4	27	1.7	1	0	0			52	- 51	31	12		0	0						2	12	16	7.4	
PORTLAND	19	1013.5	1015.9	23.3	11.1	17.3	0.6	32.8	27	5.0	12+	1	0	12.2	75	77	- 4	24	13	6	0	0	0.7	23	11.2	N	29	5	11	14	6.8	52
MARYLAND																																
BALTIMORE	45	1012.2	1017.6	30.0	15.6	22.7	0.2	36.7	27+	5.6	1	9	0	13.9	62	30	- 54	11	7	6	0	0	1.0	26	17.9	SW	14	11	8	11	5.2	69
MASSACHUSETTS																																
BLUE HILL OBS R	192			25.0	13.3	19.2	0.8	33.3	27	6.7	11	1	0			51	- 45	25	9		0	0			13.4	E	10					60
BOSTON	5	1015.2	1016.3	25.6	15.6	20.8	0.9	34.4	27	10.6	11	1	0	12.8	64	86	- 2	30	10	7	0	0	1.1	24	13.0	NW	8+	6	8	16	6.6	64
NANTUCKET	13	1016.6	1017.0	20.6	11.7	15.9	-0.4	29.4	24	6.1	12+	0	0	12.8	84	49	- 26	19	10	4	0	0	2.2	21	11.6	S	10	9	6	15	6.5	64
PITTSFIELD	357			25.6	10.6	17.9	0.7	31.7	27	1.7	12	0	0			51	- 57	24	9		0	0										
WORCESTER	301	980.4	1017.1	24.4	12.8	18.6	0.4	31.7	27	5.6	11	0	0	11.1	66	49	- 49	29	12	7	0	0	1.9	28	10.7	34	11	4	12	14	6.5	
MICHIGAN																																
ALPENA	210	991.2	1016.2	25.6	8.9	17.4	1.5	34.4	25	- 2.2	1	5	3	9.4	63	61	- 7	24	10	6	0	0	0.8	26	15.6	SW	6	8	14	8	5.1	73
DETROIT	189	994.6	1017.1	27.8	16.1	21.8	0.8	35.6	26	4.4	1	6	0	11.7	54	75	4	32	7	7	0	0	0.9	27	14.3	19	6	15	7	8	4.6	
DETROIT M WAYNE CO	193	992.9	1017.0	27.2	13.3	20.2	0.0	33.3	26+	2.2	1	3	0	13.3	66	106	22	55	8	4	0	0	1.0	25	13.0	SW	14+	14	9	7	4.5	81
DETROIT WILLOW RUN	217	989.5	1017.5	27.8	12.8	20.2	-0.7	34.4	26	0.6	1	5	0	11.7	60	66	- 18	27	7	3	0	0	1.5	25	12.5	23	6	15	8	7	4.5	
FLINT	235	989.5	1016.9	26.1	12.2	19.2	0.4	32.2	26+	0.6	1	2	0	12.2	65	59	- 21	41	5	4	0	0	1.6	24	10.3	22	6	10	12	8	5.0	
GRAND RAPIDS	239	988.2	1016.8	27.8	13.3	20.7	0.9	33.9	25	2.8	2+	7	0	12.2	63	60	- 24	37	6	2	0	0	1.7	24	15.6	SW	6	11	10	9	5.1	72
HOUGHTON LAKE	350	975.3	1017.0	26.1	10.6	18.2		32.8	29	- 1.1	1	4	2	11.1	64	24		13	6	3	0	0	1.9	25	8.9	25	7	9	12	9	5.3	
LANSING	256	985.4	1016.8	28.3	13.3	20.7	1.0	34.4	26+	- 1.1	1	7	1	12.2	61	65	- 20	51	5	6	0	0	1.8	26	17.9	W	9	10	13	7	5.1	71
MARQUETTE U	206			22.8	11.7	17.2	1.6	34.4	30	2.8	9	4	0			62	- 25	35	10		0	0			14.3	SW	25	11	8	11	5.5	72
MUSKEGON	191	994.2	1016.9	25.6	13.3	19.4	0.2	33.3	25	2.2	2	2	0	11.7	64	41	- 27	22	10	3	0	0	2.1	23	11.2	8	9+	11	8	11	5.1	
SAULT STE MARIE	220	989.2	1015.7	22.8	9.4	16.1	1.1	31.7	24	2.8	2	0	0	10.0	71	52	- 32	22	11	7	0	0	1.2	25	15.6	NW	7	9	8	13	6.1	71
MINNESOTA																																
DULUTH	435	963.8	1014.9	22.8	10.0	16.2	1.3	31.7	30	1.7	9	0	0	10.0	70	105	- 3	33	7	6	0	0	1.4	22	15.6	W	7	7	8	15	6.7	57
INTERNATIONAL FALLS	359	970.5	1013.1	23.9	10.6	17.2	1.7	35.6	30	0.6	8	2	0	11.7	72	41	- 57	18	8	4	0	0	1.9	22	13.0	30	7	4	14	12	6.8	
MINNEAPOLIS	254	984.8	1014.7	26.7	13.9	20.2	0.9	34.4	30	7.8	8	4	0	13.3	65	89	- 12	24	10	11	0	0	1.7	21	17.0	SW	11	6	11	13	6.3	65
ROCHESTER	395	968.5	1015.7	25.6	13.3	19.6	0.1	33.3	25	6.7	10	1	0	12.2	67	83	- 30	25	12	7	0	0	2.5	21	17.9	27	25	5	14	11	6.1	
ST CLOUD	315	976.6	1013.9	25.6	12.8	19.2	0.8	33.3	30	4.4	8	2	0			81	- 33	25	11		0	0						7	10	13	6.4	
MISSISSIPPI																																
JACKSON	94	1005.4	1017.3	31.1	17.8	24.5	-2.1	33.9	27	9.4	2	12	0	17.8	72	37	- 59	16	5	5	0	0	1.2	10	11.6	NW	16	11	10	9	5.3	71
MERIDIAN	88	1006.8	1017.7	31.1	17.2	24.3	-2.1	35.0	27	7.8	1	11	0	17.8	72	26	- 77	10	4	7	0	0	0.7	8	9.4	4	1	10	11	9	5.5	
VICKSBURG U	71			30.6	20.0	25.2	-1.3	34.4	29+	13.9	1	10	0			53	- 35	41	4		0	0			15.2	NE	29	13	6	11	5.0	80

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JUNE 1966

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile (1 6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s							%
MISSOURI																																
COLUMBIA	237	988.5	1016.2	28.3	16.7	22.6	-0.8	33.3	29+	7.8	1	4	0	15.0	65	83	- 27	33	10	9	0	0	1.8	17	13.0	NW	6	7	12	11	6.0	76
KANSAS CITY	226	988.8	1015.3	28.3	17.8	22.9	-1.4	34.4	29	8.3	10	4	0	16.1	68	219	103	90	10	11	0	0	2.0	17	17.9	SE	4	7	9	14	6.2	62
SAINT JOSEPH	247			30.0	16.7	23.4	0.1	35.6	25+	7.8	10	10	0	15.6	67	191	41	66	13	10	0	0	2.1	16	11.6	17	22	9	8	13	5.9	
ST LOUIS	163	997.0	1017.2	29.4	16.7	23.2	-0.2	35.0	25	7.8	1	10	0	13.9	58	40	- 69	12	5	7	0	0	1.3	19	12.5	W	12+	10	9	11	5.8	71
SPRINGFIELD	386	972.2	1016.9	28.9	14.4	21.6	-1.9	33.9	29	5.6	1	5	0	15.0	70	48	- 79	21	6	7	0	0	2.0	17	15.2	SE	5	11	11	8	5.1	59
MONTANA																																
BILLINGS	1087	890.3	1012.8	23.3	9.4	16.4	-1.9	38.9	28	4.4	13	2	0	5.6	55	40	- 25	24	11	9	0	0	1.2	29	18.3	NW	24	7	12	11	6.1	74
GLASGOW	696			23.9	10.0	16.8	0.0	35.6	28	3.9	7	2	0			23	- 53	6	8		0	0						2	16	12	6.6	
GREAT FALLS	1116	887.6	1013.2	21.7	8.9	15.5	0.0	35.0	28	4.4	3	1	0	5.6	55	55	- 19	24	13	10	0	0	1.7	25	15.6	S	28	5	9	16	6.8	77
HAVRE	787			22.8	8.9	15.9	-0.2	36.1	28	3.3	6	1	0			52	- 18	14	13		0	0			14.3	SE	21	3	12	15	6.9	66
HELENA	1167	880.5	1014.0	22.8	7.8	15.2	-0.1	33.9	28	1.1	13	2	0	4.4	52	24	- 32	7	12	10	0	0	1.8	28	17.4	SW	3	4	9	17	7.0	64
KALISPELL	904	910.9	1015.0	19.4	5.6	12.7	-2.1	27.8	28	1.1	21+	0	0	7.2	72	120	64	60	16	6	0	0	1.2	17	10.3	17	2	6	10	14	6.9	
MILES CITY	801	920.4	1011.8	26.7	11.7	19.0	0.3	38.9	28	5.6	16	6	0	7.2	52	83	14		12	10	0		1.7	31								
MISSOULA	972	904.2	1015.4	22.2	7.2	14.5	-0.2	32.2	28	1.7	13	1	0	6.1	64	46	- 3	11	11	5	0	0	1.5	32	12.1	SW	2	3	9	18	7.3	61
NEBRASKA																																
GRAND ISLAND	561	948.5	1013.5	28.3	15.0	21.7	0.0	36.7	29	6.7	6	9	0	13.3	63	76	- 21	39	8	10	0	0	2.6	16	14.8	4	8	13	6	11	5.3	
LINCOLN U	351			28.3	16.7	22.5	-0.3	36.1	25	8.3	10	7	0			124	10	69	13		0	0			18.8	S	22	6	12	12	6.2	64
NORFOLK	471			27.2	15.0	20.9	-0.7	36.1	29	7.8	10	4	0			147	39	66	8		0	0						9	9	12	5.7	
NORTH PLATTE	846	916.4	1012.2	27.8	13.3	20.4	-0.2	34.4	20	3.3	9+	7	0	12.2	62	131	48	69	7	9	0	0	2.3	13	20.1	NW	4	8	15	7	5.5	71
OMAHA	298	979.7	1014.6	28.3	16.7	22.6	-0.3	35.0	20	7.8	10	6	0	15.6	68	151	36	77	17	13	0	0	2.3	17	13.9	NW	5	6	13	11	6.0	71
SCOTTSBLUFF	1206	878.4	1011.8	28.3	11.1	19.7	0.3	37.2	28	2.2	9	10	0	8.3	55	53	- 26	31	11	10	0	0	1.3	7	13.4	32	4	7	16	7	5.4	
VALENTINE	789			27.2	12.8	20.2	0.4	37.2	20	3.3	9	8	0			93	14	31	9		0	0			27.3	NW	4	12	12	6	5.0	77
NEVADA																																
ELKO	1539	844.2	1012.2	27.8	6.1	17.1	1.5	36.7	28	- 1.7	5	12	1	- 1.1	33	9	- 9	8	2	1	0	0	1.4	23	13.0	26	21	14	9	7	4.1	
ELY	1906	808.3	1010.0	26.7	5.0	15.9	1.1	32.2	28+	- 3.3	5	2	3	- 3.9	28	4	- 9	2	3	5	0	0	1.8	22	15.2	SW	21	15	9	6	4.1	84
LAS VEGAS	659	933.0	1007.3	37.2	20.6	28.8	0.6	42.2	28	15.6	1	28	0	- 0.6	16	4	3	4	1	3	0	0	2.5	22	17.0	SW	21+	18	7	5	3.0	89
RENO	1342	865.2	1012.3	28.9	6.1	17.6	2.0	36.7	27	- 1.7	2	10	2	1.1	34	1	- 9	1	1	2	0	0	1.5	27	18.8	NW	14	19	5	6	3.2	89
WINNEMUCCA	1310	866.6	1012.2	27.8	7.2	17.3	0.9	35.6	28	- 1.1	3	10	2	- 1.7	30	10	- 10	10	2	1	0	0	1.6	29	14.3	W	21	16	7	7	3.9	73
NEW HAMPSHIRE																																
CONCORD	104	1004.1	1016.5	27.2	11.7	19.3	1.3	36.1	27	2.8	3	7	0	13.9	73	45	- 46	18	12	3	0	0	0.7	28	16.1	NW	29	6	12	12	6.6	62
MT WASHINGTON OBS	1909			11.1	3.9	7.4	0.2	17.2	29	- 3.9	11	0	6			175	10	36	17	5	15	T			35.3Y	W	21	1	8	21	8.4	30
NEW JERSEY																																
ATLANTIC CITY	20	1015.2	1017.8	28.3	14.4	21.2	0.1	35.6	24	3.9	2	9	0	14.4	70	47	- 24	33	7	5	0	0	1.3	22	12.5	21	16	9	13	8	5.5	59
ATLANTIC CITY U	3			23.9	16.7	20.2	-0.3	33.3	24	9.4	1	1	0			56	- 21	44	8						13.9	NNE	12					
NEWARK	3	1015.9	1017.0	29.4	17.2	23.2	0.8	38.3	27	10.0	2+	10	0	13.3	56	12	- 75	5	7	4	0	0	1.4	25	12.1	28	10	8	14	8	5.7	
TRENTON U	17			28.9	17.2	23.1	1.4	36.1	27	8.3	1	9	0			16	- 75	7	5		0	0			11.6	S	16+	9	12	9	5.4	70
NEW MEXICO																																
ALBUQUERQUE	1619	838.1	1010.6	31.7	13.9	22.7	-1.2	37.2	24	9.4	4	16	0	3.9	38	42	28	20	8	8	0	0	1.0	17	24.1	SW	20	15	13	2	3.6	75
CLAYTON	1515			28.3	12.8	20.4	-0.8	33.3	15	5.6	9	4	0			81	44	63	7		0	0						12	9	9	4.7	
RATON	1944			27.2	10.0	18.6	0.1	32.8	25	4.4	9	2	0			63	20	18	8		0	0						8	13	9	5.4	
ROSWELL	1102			32.8	16.7	24.8	-0.3	38.3	7	10.6	11	21	0			60	33	31	5	6	0	0			13.0	SW	1	12	9	9	5.1	59
SILVER CITY	1638			30.6	13.9	22.4	-1.3	35.0	24	10.6	11+	10	0			52	37	34	6		0	0						15	14	1	3.8	
NEW YORK																																
ALBANY	84	1006.1	1016.8	27.2	12.2	19.7	0.1	33.9	25	4.4	3+	3	0	12.8	67	75	- 8	38	11	8	0	0	1.3	25	19.7	NW	6	3	15	12	6.5	54
BINGHAMTON	485	959.4	1017.5	25.0	12.8	18.8	1.3	30.6	27+	2.8	1	0	0	11.7	66	74	- 24	57	8	6	0	0	1.7	28	21.0	SW	9	5	17	8	6.0	78
BUFFALO	215	991.9	1017.2	25.6	13.9	19.7	1.4	32.8	26	3.9	2	1	0	12.2	66	50	- 14	16	8	6	0	0	2.8	24	14.8	NW	9	13	8	9	5.1	77
NEW YORK U	40	1013.5	1016.6	30.0	18.3	24.1	2.2	38.3	27	11.1	2+	10	0	13.3	54	30	- 54	15	6	3	0	0	0.6	27	9.8	NE	12+	12	10	8	4.7	72
J.F. KENNEDY	4	1016.3	1017.0	26.7	15.6	21.1	-0.1	35.0	24	10.0	1	3	0	14.4	71	5	- 80	4	2	1	0	0	1.4	19	10.3	19	6	8	13	9	5.5	
NEW YORK LA GUARDIA	3	1015.2	1016.9	27.8	18.9	23.3	1.4	35.0	27	11.7	1	6	0	15.0	62	37	- 49	21	4	2	0	0	0.3	22	12.5	W	7	9	11	10	5.6	
ROCHESTER	167	997.6	1017.7	26.7	13.3	19.9	0.5	34.4	26	2.8	1	4	0	12.8	66	47	- 18	27	6	4	0	0	2.1	25	13.9	W	14	14	10	6	4.4	74
SYRACUSE	125	1001.7	1016.6	25.6	11.7	18.7	-0.9	31.7	26	1.7	1	0	0	11.1	61	69	- 6	36	8	5	0	0	1.3	29	15.6	W	9	15	8	7	4.6	78
NORTH CAROLINA																																
ASHEVILLE	652	944.1	1019.3	26.1	11.7	18.9	-2.2	30.0	24	1.7	2	0	0	14.4	81	62	- 27	41	8	7	0	0	0.6	1	10.3	35	16	8	11	11	5.7	67
CAPE HATTERAS R	2	1018.0	1018.3	26.1	17.2	21.6	-2.4	32.2	24	6.7	3	1	0	17.8	79	173	68	126	8	4	0	0	0.8	25	19.2	NNE	11	10	9	11	5.8	67
CHARLOTTE	224	991.2	1018.3	30.0	16.7	23.3	-1.7	35.0	25	7.8	2	9	0	15.0	63	66	- 26	33	6	3	0	0	0.3	18	11.6	NE	11	14	9	7	4.6	87

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ○	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
NORTH CAROLINA																																
GREENSBORO	273	987.5	1018.7	29.4	16.7	23.1	-0.7	35.0	29	6.7	2	9	0	17.2	73	103	14	30	9	6	0	0	0.4	20	14.3	NE	11	14	9	7	4.4	63
RALEIGH	132	1002.7	1018.2	29.4	16.7	23.0	-0.9	34.4	25	6.1	2	8	0	15.6	67	93	- 1	42	7	5	0	0	0.3	18	13.0	34	29+	13	11	6	4.4	67
WILMINGTON	9	1017.3	1018.6	29.4	18.3	23.8	-1.6	33.9	25	10.0	2	5	0	17.8	73	248	140	196	9	5	0	0	0.5	15	15.6	N	11	11	10	9	5.3	69
NORTH DAKOTA																																
BISMARCK	502	953.3	1012.1	24.4	11.1	17.9	-0.2	33.3	29	3.9	7	3	0	10.6	66	91	5	34	10	12	0	0	0.6	22	14.8	SW	24+	3	13	14	6.6	66
FARGO	273	980.4	1012.7	25.6	12.2	18.9	0.7	35.6	30	1.7	9	4	0	11.1	63	74	- 3	18	12	11	0	0	1.6	21	15.6	W	24+	5	15	10	6.0	69
WILLISTON	579			25.0	10.0	17.5	0.2	37.2	28	1.7	7	5	0			23	- 61	12	9		0	0			20.1	SW	25	6	16	8	6.0	57
OHIO																																
AKRON	368	974.3	1018.1	27.2	13.9	20.8	0.0	33.9	27	3.3	2	5	0	13.3	64	49	- 59	22	7	7	0	0	1.2	26	11.2	22	9	11	12	7	4.8	
CINCINNATI OBS	232			29.4	16.1	22.8	-0.2	34.4	27+	6.1	1	9	0			39	- 67	14	9		0	0			8.9	W	13					65
CLEVELAND	237	988.8	1017.7	27.2	13.9	20.5	0.9	33.9	26	3.9	2	4	0	13.9	68	46	- 41	23	9	4	0	0	1.2	24	14.3	N	9	12	10	8	4.6	85
COLUMBUS	247	988.5	1018.2	29.4	14.4	21.9	0.3	35.6	27	3.9	2	11	0	13.9	62	33	- 73	11	6	5	0	0	0.5	27	21.0	NW	28	5	19	6	5.5	72
DAYTON	305	982.4	1018.0	30.0	16.1	23.2	1.3	36.1	26	5.6	2	12	0	13.9	60	67	- 37	14	9	5	0	0	1.2	23	20.1	NW	27	8	13	9	5.3	80
MANSFIELD	395			26.1	13.9	20.1	0.2	33.3	26	3.9	2	1	0			48	- 60	13	10	5	0	0						11	13	6	5.0	
TOLEDO	206	992.9	1017.6	28.9	14.4	21.6	1.4	35.6	26	3.3	2+	8	0	12.8	61	87	- 9	29	10	7	0	0	1.3	25	10.3	SW	6	11	11	8	5.0	67
YOUNGSTOWN	359	976.0	1018.2	27.2	12.2	19.8	0.3	33.3	26+	0.6	2	4	0	11.7	62	48	- 43	28	8	5	0	0	1.2	26	9.8	33	10	10	14	6	4.7	
OKLAHOMA																																
OKLAHOMA CITY	390	968.8	1014.3	32.8	18.3	25.5	-0.1	36.7	30+	13.3	10+	21	0	16.1	60	67	- 47	43	6	7	0	0	3.8	16	15.2	N	15	9	15	6	4.8	71
TULSA	198	991.5	1015.4	31.7	18.9	25.2	0.0	37.8	30	14.4	10+	15	0	16.1	61	65	- 54	32	4	6	0	0	3.0	17	15.6	N	15	12	11	7	4.9	79
OREGON																																
ASTORIA	2	1017.6	1018.3	18.3	8.3	13.4	-0.6	32.8	15	3.3	1	1	0	10.0	82	54	- 23	18	16	0	0	0	1.7	25	7.6	22	27+	3	7	20	7.7	
BURNS U	1265	873.0	1014.8	22.2	6.1	14.4	-1.1	31.1	15	- 1.1	4	0	2	3.3	51	29	7	11	11		T	T	1.6	30				9	8	13	5.9	
EUGENE	109	1004.1	1017.6	25.0	8.9	17.0	0.9	35.6	15	2.8	1	1	0	8.9	64	6	- 30	5	2	1	0	0	1.3	27	9.4	26	1	6	13	11	6.0	
MEACHAM	1234	877.1	1015.6	16.7	6.1	11.4	-0.6	25.0	16+	- 1.7	1	0	2	3.9	64	47	- 15	21	12		79	T	1.3	28				3	7	20	7.9	
MEDFORD	396	969.2	1016.6	26.1	9.4	17.7	-0.2	38.3	15	1.1	4	4	0	6.1	52	9	- 17	6	5	1	0	0	1.7	31	13.0	24	15	12	10	8	4.6	
PENDLETON	452	962.1	1015.4	25.6	11.1	18.1	-0.7	33.9	16	2.2	1	3	0	4.4	44	14	- 16	9	5	0	0	0	2.5	27	12.5	26	24+	3	13	14	6.9	
PORTLAND	6	1016.3	1017.4	23.3	10.6	16.9	0.2	35.0	15	3.9	1	1	0	9.4	65	26	- 17	12	8	1	0	0	1.3	30	10.7	W	10	2	11	17	7.4	48
SALEM	60	1010.2	1017.5	24.4	8.9	16.6	0.7	37.8	15	2.2	1	1	0	8.9	65	15	- 22	7	8	2	0		1.1	28	10.3	30	23+	3	16	11	6.5	
SEXTON SUMMIT R	1169	884.9	1016.2	19.4	5.6	12.7	-0.5	33.9	15	- 2.8	1	1	3			21	- 18	10	6		30	T			12.5	33	28	14	9	7	4.2	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	25.6	28.6	-0.2	32.2	22+	22.8	29	7	0			103	36	68	9		0	0						5	12	13	6.8	
ENIWETOK	4	1010.5	1011.2	31.1	25.6	28.4	0.2	32.2	5	23.3	16	1	0	24.4	79	77	- 9	15	17		0	0	6.7	7								
TAGUAC GUAM R	110			30.6	23.3	26.9	0.1	32.2	7	21.1	19+	1	0			145	- 4	33	23		0	0			11.2	SE	23					53
JOHNSTON	2	1014.2	1014.7	29.4	25.0	27.2	0.4	29.4	30+	23.9	20+	0	0	21.1	71	11	- 11	2	13	0	0	0	6.7	9	12.5	E	27+	9	17	4	4.9	72
KOROR R	29	1007.1	1010.7	31.1	24.4	27.6	0.3	32.2	28+	22.8	13	4	0	24.4	85	265	- 65	55	22	5	0	0	0.4	14	12.5	SW	24	0	0	30	9.9	54
KWAJALEIN	2	1009.8	1010.7	30.6	25.0	27.6	0.1	32.2	29	23.3	19+	1	0	24.4	83	265	44	63	23	0	0	0	5.0	7	12.5	9	21	0	6	24	8.6	
MAJURO	3	1010.2	1010.6	30.0	25.6	27.6	0.8	31.7	29	22.8	9	0	0	24.4	82	239	87	43	20	2	0	0	0.7	27	13.4	E	3	0	4	26	8.8	54
MARCUS ISLAND	6	1013.2	1015.0	31.1	25.0	27.9	-0.2	32.2	29	23.3	29	1	0	22.8	74	47	- 19	41	3		0	0	0.6	19	8.5	N	25	12	11	7	5.1	81
PAGO PAGO	4	1012.5	1012.9	28.9	23.9	26.6		32.2	26	22.2	27+	1	0	22.8	81	233		68	17	1	0	0	5.6	11	12.5	E	19	1	9	20	8.2	44
PONAPE R	37	1005.1	1010.4	31.1	23.3	27.2	0.5	32.2	20+	21.1	25	4	0	23.9	86	302	-123	48	27	3	0	0	2.0	9	7.6	E	27+	0	3	27	9.1	63
TRUK MOEN ISLAND	2	1010.2	1010.5	30.0	24.4	27.3	0.2	31.1	22+	22.8	16	0	0	23.9	84	155	-147	42	24	3	0	0	2.2	9	11.2	SE	7	0	3	27	9.3	74
WAKE	3	1014.9	1015.1	30.6	25.0	27.6	0.2	31.7	29	23.3	10+	0	0	22.8	77	40	- 8	15	9	0	0	0	4.8	6	10.3	3	20	11	13	6	5.2	
YAP R	19	1008.5	1010.3	30.6	24.4	27.6	-0.2	32.8	20+	22.8	29+	2	0	24.4	84	318	46	141	23	0	0	0	1.5	8	8.5	SW	23	0	1	29	9.9	49
PENNSYLVANIA																																
ALLENTOWN	118	1003.7	1017.5	29.4	13.9	21.7	0.9	37.8	27	5.6	1	8	0	12.8	60	23	- 81	12	4	3	0	0	1.1	28	11.2	32	10	10	10	10	5.3	
ERIE	223	991.2	1017.8	25.0	14.4	19.7	0.4	32.2	26	2.8	1	1	0	13.3	68	97	20	39	8	5	0	0	1.8	23	10.3	27	15+	17	8	5	3.6	
HARRISBURG	103	1004.7	1017.3	31.1	16.1	23.7	1.8	37.8	27	8.3	1	14	0	13.3	55	2	- 85	2	1	2	0	0	1.3	29	11.6	W	15	8	14	8	5.5	76
PHILADELPHIA	2	1016.3	1017.2	28.9	15.6	22.3	0.6	35.6	25+	7.8	1	8	0	14.4	65	10	- 92	6	3	2	0	0	1.4	26	13.0	N	10	8	12	10	5.6	68
PITTSBURGH	347	974.6	1018.1	28.9	13.9	21.3	1.1	35.6	27	2.2	2+	11	0	12.8	62	44	- 52	16	6	3	0	0	1.2	28	13.4	25	6	8	14	8	5.4	64
READING U	81			30.0	16.7	23.3	1.0	36.7	27	7.2	1	10	0			23	- 72	20	4		0	0			28.2	W	14	10	12	8	5.2	71
SCRANTON	283	983.7	1017.7	28.3	13.9	21.2	1.1	34.4	27	5.0	2+	6	0	13.3	64	7	- 92	5	5	3	0	0	0.6	27	11.2	S	14	7	15	8	5.3	73
WILLIAMSPORT	161	998.6	1017.5	26.7	11.7	19.1	-1.6	33.3	25+	3.9	3+	2	0	13.3	72	17	- 65	6	8	6	0	0	1.1	28	11.2	24	5	9	15	6	5.0	
RHODE ISLAND																																
BLOCK ISLAND	34			20.6	13.3	16.8	-0.3	28.9	24	8.3	2	0	0			39	- 26	18	10		0	0						6	12	12	6.3	
PROVIDENCE	16	1014.2	1016.6	25.6	13.9	19.7	0.7	32.8	27	7.2	12+	2	0	12.8	68	59	- 11	41	9	4	0	0	1.1	22	10.7	5	24+	4	13	13	6.4	58

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days		Average dew point	Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower			Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
SOUTH CAROLINA																																
CHARLESTON	12	1016.6	1018.2	28.9	17.2	23.2	-3.1	32.8	26+	10.6	2+	5	0	17.2	73	153	27	58	7	3	0	0	0.8	11	20.6Y	S	10	12	8	10	5.2	64
CHARLESTON U	3			27.8	21.1	24.4	-2.1	31.7	25+	13.9	1	0	0			83	- 25	40	7		0	0			15.6	S	10+					
COLUMBIA	66	1009.8	1017.9	30.6	17.2	23.9	-2.6	35.6	25	10.6	2	13	0	17.2	69	93	- 5	58	7	5	0	0	0.5	8	14.3	35	29	13	8	9	5.0	63
GNVLE SPARTANBURG	292	984.1	1018.3	30.0	16.7	23.4	-1.6	34.4	29	7.8	2	9	0	15.6	66	98	24	55	6	4	0	0	0.4	2	11.6	N	29	13	10	7	4.6	72
SOUTH DAKOTA																																
ABERDEEN	395	966.5	1012.6	26.7	12.2	19.5	0.3	33.9	30+	2.8	9	5	0	12.8	68	115	20	43	11	12	0	0	1.0	16	14.3	18	10	7	12	11	6.0	
HURON	391	966.8	1012.5	28.3	12.8	20.4	0.6	37.2	30+	4.4	16	6	0	12.8	65	61	- 18	27	10	11	0	0	1.9	18	15.2	SW	22+	6	15	9	5.8	79
RAPID CITY	964	903.2	1012.2	26.7	10.6	18.5	0.2	39.4	28	4.4	6+	6	0	7.2	53	33	- 45	7	11	10	0	0	0.7	33	24.6	SW	22	7	13	10	5.5	63
SIOUX FALLS	432	963.4	1013.9	27.2	13.3	20.3	0.2	36.1	30+	6.1	10	5	0	12.8	64	68	- 42	17	12	10	0	0	2.1	19	19.7	30	13	9	10	11	5.9	
TENNESSEE																																
BRISTOL	459	965.8	1019.2	30.0	14.4	22.2	-0.7	35.0	27	3.3	2+	9	0	15.0	69	45	- 41	14	6	6	0	0	0.2	30	13.0	31	16	8	17	5	5.1	
CHATTANOOGA	203	993.6	1018.0	30.0	16.1	23.2	-2.4	35.0	28+	5.6	1	8	0	16.1	69	26	- 68	12	5	5	0	0	0.4	8	11.6	N	16	8	15	7	5.2	69
KNOXVILLE	299	984.1	1018.8	30.0	17.2	23.5	-0.8	34.4	28	6.7	1	10	0	15.6	65	58	- 27	34	7	4	0	0	0.4	34	15.2	N	16	9	14	7	5.2	70
MEMPHIS	78	1007.5	1017.6	31.1	18.3	24.8	-1.1	36.1	28	8.9	1	12	0	16.1	62	13	- 80	8	3	4	0	0	1.5	15	11.6	S	13	12	12	6	4.9	76
NASHVILLE	180	996.6	1017.9	31.1	16.7	23.9	-1.3	36.7	28	5.6	1	13	0	16.1	65	28	- 55	8	6	7	0	0	0.6	20	11.6	NW	16	10	12	8	5.1	79
OAK RIDGE	276			29.4	15.6	22.5	-1.1	33.9	28	4.4	1	6	0			67	- 15	25	4		0	0			13.0Y		16	15	6	9	4.5	
TEXAS																																
ABILENE	537	953.3	1013.3	32.8	20.6	26.6	-0.2	36.7	15	18.9	10+	22	0	17.2	59	29	- 38	27	4	3	0	0	4.5	16	15.2	SE	3	6	19	5	5.5	77
AMARILLO	1098	891.3	1011.5	30.6	16.7	23.4	-1.6	36.7	15	8.9	9	6	0	13.3	58	117	44	69	8	7	0	0	4.6	18	18.8	NE	15+	10	13	7	5.0	72
AUSTIN	182	993.2	1014.9	32.2	21.1	26.6	-1.1	35.0	13	16.7	3+	19	0	18.9	68	39	- 43	21	5	3	0	0	2.8	17	19.2	NW	13	10	15	5	5.2	64
BROWNSVILLE	5	1013.5	1014.0	31.1	22.2	26.7	-1.5	33.3	16+	16.7	2	9	0	21.7	79	55	- 20	15	10	3	0	0	3.9	13	13.0	SE	24	8	13	9	5.6	71
CORPUS CHRISTI	12	1013.2	1014.7	31.1	21.7	26.4	-1.6	33.9	12	17.2	2	7	0	22.8	83	110	50	56	10	8	0	0	3.6	13	17.9	W	18	4	14	12	6.2	46
DALLAS	147	998.0	1015.1	31.7	21.7	26.7	-0.7	34.4	30+	17.8	17	15	0	18.9	64	114	32	57	5	3	0	0	3.5	16	13.4	S	4+	14	13	3	4.2	71
DEL RIO	313	977.7	1013.2	32.8	21.1	26.8	-2.3	35.6	13	17.2	12	21	0	18.9	66	86	27	65	4	2	0	0	4.3	13	9.4	7	12+	5	16	9	6.2	
EL PASO	1194	880.8	1009.0	33.3	19.4	26.4	-0.8	38.3	13	13.9	11+	22	0	8.3	40	68	50	37	6	11	0	0	1.0	17	14.8	W	16+	16	9	5	3.8	76
FORT WORTH	164	994.9	1015.0	31.7	21.1	26.4	-1.1	34.4	30+	17.2	2	17	0	18.3	64	139	63	79	5	5	0	0	3.1	16	13.0	18	5	13	14	3	4.4	
GALVESTON U	2			28.9	23.9	26.4	-1.2	33.3	30	21.1	19+	2	0			123	56	59	7		0	0			13.9	N	17					67
HOUSTON U	12			31.7	22.8	27.1	-0.8	34.4	16+	18.9	2	14	0			90	- 7	57	6		0	0										
HOUSTON	15	1013.5	1015.8	31.7	21.7	26.7	-0.9	34.4	10+	16.1	2	12	0	20.6	73	112	19	41	10	5	0	0	2.1	14	10.3	9	30+	10	14	6	4.9	74
LUBBOCK	992	903.5	1011.7	32.2	19.4	25.8	0.6	38.3	4	13.9	9	16	0	13.3	51	58	- 7	29	7	11	0	0	3.8	17	20.6	10	10	5	16	9	5.6	
MIDLAND	869	915.3	1011.3	32.2	18.9	25.6	-1.8	36.7	4	16.1	11	13	0	15.0	58	74	33	41	5	5	0	0	4.1	15	25.9	24	11	9	15	6	5.2	
PORT ARTHUR	5	1015.6	1016.3	32.2	21.7	26.8	-0.2	35.6	10	15.6	2+	20	0	20.6	74	89	- 20	48	8	6	0	0	1.6	14	13.4	NW	17	12	13	5	4.5	65
SAN ANGELO	580	947.5	1012.4	33.9	20.6	27.2	-0.8	36.7	16+	18.3	18	26	0	16.1	54	20	- 27	19	2	2	0	0	3.9	17	10.7	15	24+	6	22	2	5.3	
SAN ANTONIO	240	987.1	1014.8	31.7	20.6	26.0	-1.7	35.0	17	16.1	3	14	0	19.4	72	45	- 30	38	5	2	0	0	3.0	14	10.7	E	13	7	15	8	5.5	64
VICTORIA	32	1011.2	1015.3	31.7	21.7	26.7	-0.7	33.9	10	16.1	2	14	0	21.1	76	91	14	28	8	6	0	0	2.8	13	17.9Y	ESE	18	4	18	8	5.8	
WACO	152	997.3	1015.2	32.8	22.2	27.4	-0.3	35.6	30+	19.4	3+	23	0	17.8	59	59	- 8	47	4	3	0	0	3.6	16	11.2	18	8	15	12	3	4.4	
WICHITA FALLS	303	978.0	1013.7	34.4	20.0	27.4	-0.3	38.3	5	16.1	10	25	0	16.7	55	7	- 74	6	3	5	0	0	4.5	15	13.9	14	12+	5	16	9	5.6	
UTAH																																
MILFORD	1533			30.0	8.3	18.9	0.4	35.6	29	- 1.1	1	11	1			3	- 8	2	4		0	0						15	10	5	3.7	
SALT LAKE CITY	1286	869.6	1010.5	29.4	11.7	20.7	1.0	37.8	28	2.2	5	13	0	1.7	31	2	- 23	1	4	3	0	0	1.0	13	15.6	N	4	15	10	5	4.2	85
WENDOVER	1291			27.8	15.0	21.4	0.4	36.1	28	8.3	25+	8	0			6	- 6	4	2		0	0						15	11	4	3.7	
VERMONT																																
BURLINGTON	101	1003.1	1015.6	25.0	11.7	18.5	0.6	32.8	27	2.2	2	1	0	12.8	73	67	- 22	21	14	9	0	0	1.0	19	17.0	N	29	7	13	10	6.2	71
VIRGINIA																																
LYNCHBURG	279			29.4	15.0	22.1	-0.7	34.4	28	5.6	1	9	0			35	- 69	24	6	4	0	0			12.1	NE	10	16	10	4	4.1	76
NORFOLK	7	1017.3	1018.2	27.2	16.7	22.0	-2.2	32.2	25+	8.9	2	2	0	16.7	75	46	- 45	19	9	3	0	0	0.8	20	15.6	E	11	11	10	9	5.7	67
RICHMOND	49	1012.2	1018.2	28.3	15.6	21.9	-2.1	33.3	30+	6.1	1	7	0	16.1	72	65	- 31	17	9	5	0	0	0.6	22	12.1	NW	16	11	10	9	5.2	75
ROANOKE	350	977.0	1018.3	29.4	13.9	21.7	-1.3	35.0	29	4.4	2	8	0	13.3	61	39	- 57	18	6	5	0	0	0.2	1	20.6	28	16	11	12	7	4.9	
WASHINGTON																																
OLYMPIA	59	1010.5	1017.8	20.0	6.7	13.5	-1.6	30.0	15	- 0.6	1	0	1	7.8	69	33	- 13	9	10	0	0	0	1.6	24	10.7	25	10	2	10	18	7.6	
SEATTLE TACOMA	122	1001.0	1017.4	19.4	10.0	14.8	-0.6	30.0	15	7.8	25+	0	0	8.9	71	29	- 11	18	9	0	0	0	1.6	23	10.7	23	10	4	6	20	7.7	60
SPOKANE	718	931.3	1014.4	21.7	8.3	14.9	-1.7	29.4	16	2.8	3	0	0	5.0	55	18	- 20	13	7	1	0	0	1.8	20	14.3	SW	10	2	13	15	7.0	51
STAMPEDE PASS R	1206			12.2	3.9	8.2	-1.2	22.8	16	- 0.6	1	0	2			118	14	38	17		T	203						2	2	26	8.7	
TATOOSH ISLAND R	31	1014.2	1017.5	13.9	9.4	11.7	-0.5	18.3	16+	7.2	5+	0	0	9.4	88	67	- 5	22	19	0	0	0	2.2	19	18.8	NE	15	1	11	18	8.1	32
WALLA WALLA U	289			25.0	12.2	18.6	-1.0	32.2	16	5.0	1	1	0			28	- 3	16	7		0	0			11.6	W	10	3	12	15	7.0	69
YAKIMA	321	976.6	1014.7	24.4	8.3	16.3	-1.7	32.2	16	1.1	1	1	0	5.6	51	4	- 16	4	3	1	0	0	1.9	30	11.2	31	10	4	18	8	6.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C				°C.	%	Mm	Mm.	Mm.			Mm	Mm.	M.p.s		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	4	1014.6	1016.8	30.6	23.9	27.2	0.6	32.8	30	22.2	3+	2	0	22.8	78	83	- 61	23	18	4	0	0	4.3	8	11.6	E	4	3	18	9	6.2	78
SWAN ISLAND	9			28.9	25.0	26.9	-1.1	30.6	30	22.8	21	0	0			801	637	173	19	8	0	0						2	5	23	8.3	
WEST VIRGINIA																																
BECKLEY	763	931.9	1018.8	26.7	12.2	19.2		31.7	28	1.1	2	0	0	11.1	63	40		13	9	6	0	0	0.8	26	11.6	26	16	13	10	7	5.2	
CHARLESTON	286	984.4	1018.1	30.6	13.9	22.2	0.0	35.6	28+	1.7	2	13	0	13.3	63	18	- 76	8	4	3	0	0	0.3	22	12.1	28	6	8	15	7	5.4	
ELKINS	600	948.9	1019.7	26.7	8.9	17.9	-1.6	32.2	27	- 1.7	2	1	1	11.7	73	50	- 82	22	8	5	0	0	0.8	31	8.9	30	16	6	14	10	5.9	
HUNTINGTON	252	988.5	1018.1	30.6	14.4	22.4	0.2	35.0	27+	4.4	1	12	0	13.9	62	10	- 94	7	5	2	0	0	0.6	23	10.3	26	6	8	13	9	5.4	
PARKERSBURG U	187			30.0	15.0	22.4	-0.1	35.6	27	3.9	2	11	0			23	- 85	9	4		0	0			16.5	W	6					64
WISCONSIN																																
GREEN BAY	208	990.5	1015.9	26.7	12.2	19.4	0.8	34.4	29	1.7	1	5	0	12.8	66	28	- 58	13	11	7	0	0	2.0	23	12.5	SE	11	9	12	9	5.5	65
LA CROSSE	198	991.9	1016.1	27.8	14.4	21.0	0.6	36.1	30+	5.6	10	7	0	14.4	69	88	- 19	42	10	10	0	0	1.9	18	10.7	27	6	7	13	10	5.9	
MADISON	262	985.4	1016.4	26.1	12.2	19.2	0.3	33.9	30	1.1	1	4	0	13.3	69	74	- 26	29	12	5	0	0	1.6	24	11.6	SW	12	9	7	14	5.8	77
MILWAUKEE	205	992.6	1017.5	25.6	13.3	19.4	2.1	33.9	25	2.2	1	3	0	13.3	69	43	- 50	30	6	0	0	0	1.2	21	12.5	N	9	11	10	9	5.1	76
WYOMING																																
CASPER	1627	837.1	1011.9	26.1	7.2	16.6	-0.7	34.4	29	0.0	5	5	1	1.7	45	28	- 3	17	9	9	76	25	1.3	26	17.9	25	10	7	12	11	6.0	
CHEYENNE	1867	813.1	1012.9	23.9	8.9	16.4	-0.8	32.2	28	3.3	8	1	0	3.3	49	50	- 4	28	9	9	0	0	1.3	27	17.9	SW	22	7	14	9	5.8	62
LANDER	1696	828.7	1011.7	25.0	8.9	16.8	0.1	34.4	28	1.7	13	3	0	2.8	45	33	- 1	25	7	8	0	0	1.9	26	21.9	SW	24	6	12	12	6.3	60
SHERIDAN	1208	877.8	1013.2	24.4	7.2	15.7	-0.9	36.7	28	1.1	16+	3	0	5.0	53	33	- 33	14	9	8	0	0	0.8	30	17.9	SW	18	5	14	11	6.3	63

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1965 - 1966

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
ALABAMA														
BIRMINGHAM	0	0	13	171	305	583	840	520	393	149	34	9	3017	2551
HUNTSVILLE	0	0	15	135	268	585	916	548	394	152	35	3	3051	3070
MOBILE	0	0	0	43	100	345	554	333	208	27	1	0	1611	1560
MONTGOMERY	0	0	0	107	209	501	709	438	301	69	7	0	2341	2291
ALASKA														
ANCHORAGE PRK STRIP	253	347	399	1112	1376	1633	1714	1415	1464	885	637	289	11524	10864
ANCHORAGE	178	261	333	1055	1328	1603	1713	1402	1493	882	641	285	11174	
ANNETTE	240	175	272	552	778	985	1114	795	796	659	575	333	7274	7069
BARROW	821	825	1067	1720	1566	2408	2508	2453	2734	2108	1509	891	20610	20174
BARTER ISLAND	886	853	1018	1729	1725	2425	2584	2512	2713	2160	1408	855	20868	19862
BETHEL	406	453	500	1254	1264	1944	1842	1465	2109	1253	979	389	13858	13196
COLD BAY	497	450	477	871	864	1126	991	924	1346	914	850	616	9926	9880
FAIRBANKS	152	374	496	1580	1833	2455	2872	2039	2092	1132	600	63	15688	14279
JUNEAU	292	297	435	654	1045	1182	1746	1090	1071	805	667	355	9639	9075
KING SALMON	373	410	437	1215	1265	1852	1387	1328	1863	1040	851	425	12446	11343
KOTZEBUE	424	540	639	1495	1449	2191	2129	1941	2391	1675	1270	770	16914	16105
MC GRATH	290	400	500	1569	1686	2445	2654	1813	2132	1250	768	217	15724	14283
NOME	568	595	649	1294	1275	1958	1806	1586	2111	1488	1107	649	15086	14171
ST. PAUL ISLAND	622	569	628	907	917	1153	1002	963	1334	1111	965	724	10895	11199
SHEMYA	574	495	560	720	870	980	1039	978	1033	931	842	711	9733	9687
YAKUTAT	448	477	520	775	1135	1348	1608	1121	1264	947	822	487	10952	9092
ARIZONA														
FLAGSTAFF	22	69	326	467	753	1071	1281	1109	854	603	343	171	7069	7152
PHOENIX	0	0	4	7	116	370	516	423	145	12	0	0	1593	1765
TUCSON	0	0	8	33	110	396	532	473	166	26	0	0	1744	1800
WINSLOW	0	0	77	236	532	890	1264	866	571	287	43	0	4766	4782
YUMA	0	0	0	0	65	321	390	273	71	3	0	0	1123	974
ARKANSAS														
FORT SMITH	0	0	16	144	286	576	938	659	384	152	30	0	3185	3292
LITTLE ROCK	0	0	19	137	257	561	916	611	327	115	42	0	2985	3219
TEXARKANA	0	0	8	100	136	437	749	534	281	82	22	0	2349	2533
CALIFORNIA														
BAKERSFIELD	0	0	0	18	232	681	557	443	236	46	6	1	2220	2122
BISHOP	0	0	85	146	553	872	926	718	468	223	36	12	4039	4227
BLUE CANYON	30	49	221	157	671	897	926	877	741	405	245	191	5410	5507
BURBANK	0	0	10	7	159	334	361	305	135	68	44	2	1425	1646
EUREKA U	309	183	324	285	305	551	531	510	519	433	443	280	4673	4643
FRESNO	0	0	12	41	302	707	664	492	271	60	7	1	2557	2492
LONG BEACH	0	0	0	10	126	320	353	313	182	83	22	8	1417	1711
LOS ANGELES	12	0	1	9	127	304	350	328	225	115	45	[illegible]	1522	1799
LOS ANGELES U	0	0	0	1	98	264	281	244	126	58	34	0	1106	1349
MT SHASTA R	29	54	207	250	693	966	988	849	696	428	227	163	5550	5722
OAKLAND	83	19	52	58	229	567	475	388	303	138	176	72	2560	2870
RED BLUFF	0	0	10	37	362	721	631	507	368	97	4	10	2747	2515
SACRAMENTO	0	0	19	32	303	738	591	485	326	96	36	14	2640	2773
SANDBERG U	1	3	157	98	526	824	837	767	512	260	213	103	4301	4209
SAN DIEGO	3	0	0	9	118	303	335	284	209	107	40	4	1412	1439
SAN FRANCISCO	139	64	113	101	287	617	535	449	407	214	231	123	3280	3012
SAN FRANCISCO U	230	123	120	73	199	509	393	362	336	217	300	182	3044	3001
SANTA CATALINA	38	6	77	45	213	344	378	352	272	201	213	60	2199	2052
SANTA MARIA	111	42	79	92	253	495	515	467	342	235	205	124	2960	2967
STOCKTON	0	0	15	38	328	754	644	497	332	80	16	10	2714	2676
COLORADO														
ALAMOSA	31	128	348	607	899	1316	1604	1364	983	700	383	171	8534	8529
COLORADO SPRINGS	10	31	304	366	632	931	1232	1061	744	613	249	63	6236	6423
DENVER	6	7	296	302	645	924	1122	1017	691	604	204	82	5900	6283
GRAND JUNCTION	0	0	138	209	496	960	1246	959	582	337	59	4	4990	5641
PUEBLO	3	0	180	273	566	889	1218	917	641	433	119	5	5244	5462
CONNECTICUT														
BRIDGEPORT	0	12	50	307	587	827	1078	996	872	643	366	43	5781	5617
HARTFORD	2	34	110	426	753	961	1186	1008	792	534	275	31	6112	6172
NEW HAVEN	0	21	92	376	663	920	1124	942	806	613	332	35	5924	5897
DELAWARE														
WILMINGTON	0	12	40	349	593	839	1103	921	676	507	186	24	5250	4930
DIST.OF COLUMBIA														
WASH NATL AP	0	1	18	236	458	723	1001	800	535	374	99	11	4256	4224
FLORIDA														
APALACHICOLA U	0	0	0	38	74	307	456	340	186	23	0	0	1424	1308
DAYTONA BEACH	0	0	0	10	57	173	263	192	120	26	0	0	841	879
FORT MYERS	0	0	0	0	7	52	136	74	24	1	0	0	294	442
JACKSONVILLE	0	0	0	38	81	293	402	294	188	37	0	0	1333	1239
KEY WEST	0	0	0	0	0	1	27	26	4	0	0	0	58	108
LAKELAND U	0	0	0	4	26	124	240	148	80	8	0	0	630	661
MIAMI	0	0	0	0	0	16	70	41	16	0	0	0	143	214
ORLANDO	0	0	0	1	19	112	215	122	72	5	0	0	546	766
PENSACOLA	0	0	0	48	106	350	561	346	211	33	1	0	1656	1463
TALLAHASSEE	0	0	0	58	93	338	484	347	206	57	0	0	1583	1485
TAMPA	0	0	0	5	37	160	267	172	93	18	0	0	752	683
WEST PALM BEACH	0	0	0	0	3	31	103	63	26	0	0	0	226	253
GEORGIA														
ATHENS	0	0	2	171	322	579	821	556	429	159	26	1	3066	2929
ATLANTA	0	0	3	176	332	619	874	605	451	171	26	5	3262	2983
AUGUSTA	0	0	0	119	276	543	733	492	379	141	18	0	2701	2397
COLUMBUS	0	0	0	105	219	518	707	478	335	91	8	0	2461	2383
MACON	0	0	2	131	279	538	724	493	357	99	13	0	2636	2136
ROME	0	0	10	202	378	686	907	610	454	200	43	7	3497	3326
SAVANNAH	0	0	0	92	204	454	612	387	294	88	11	0	2142	1819
IDAHO														
BOISE	7	30	234	266	613	1075	1004	884	668	467	172	97	5517	5809
IDAHO FALLS 42NW R	23	98	502	610	896	1396	1395	1307	1027	733	332	191	8510	8760
IDAHO FALLS 46W R	29	112	486	553	855	1349	1361	1267	969	715	337	203	8236	8475
LEWISTON	10	19	182	266	613	879	890	754	653	421	160	80	4927	5542
POCATELLO	16	60	393	440	725	1216	1211	1072	861	618	253	140	7005	7033
ILLINOIS														
CAIRO U	0	0	25	195	347	608	1043	753	452	253	79	2	3757	3821
CHICAGO O HARE	12	53	110	370	733	915	1502	1079	782	587	371	53	6567	6639
CHICAGO MIDWAY	0	26	99	350	683	879	1437	1031	761	511	314	33	6124	6155
MOLINE	0	21	115	363	722	939	1568	1119	794	533	287	31	6492	6408
PEORIA	0	18	100	391	707	914	1406	1037	746	502	260	22	6103	6025
ROCKFORD	1	30	134	392	758	1005	1595	1142	844	620	417	45	6983	6830
SPRINGFIELD	0	13	54	321	575	822	1329	987	670	459	242	15	5487	5429

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1965 - 1966

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
INDIANA														
EVANSVILLE	0	5	39	283	500	727	1192	894	566	356	149	10	4721	4435
FORT WAYNE	3	31	85	380	673	872	1352	1034	788	569	370	37	6194	6205
INDIANAPOLIS	0	18	66	355	603	811	1312	962	668	412	223	11	5441	5699
SOUTH BEND	3	56	121	411	727	879	1377	1028	796	584	402	47	6431	6439
IOWA														
BURLINGTON	0	16	104	326	646	865	1445	1033	716	509	246	21	5927	6114
DES MOINES	0	14	154	310	715	915	1568	1122	737	565	256	16	6372	6808
DUBUQUE	2	36	181	437	822	1044	1693	1209	848	602	368	50	7292	7376
SIOUX CITY	0	11	260	297	795	983	1643	1144	761	570	236	23	6723	6951
WATERLOO	4	60	207	412	793	999	1776	1219	809	632	336	25	7272	7320
KANSAS														
CONCORDIA	0	3	140	205	580	838	1297	963	602	481	123	13	5245	5479
DODGE CITY	0	3	127	175	473	862	1221	948	521	405	116	5	4856	4986
GOODLAND	0	11	300	303	646	992	1337	1060	682	535	149	31	6046	6141
TOPEKA	0	0	74	253	572	770	1202	922	552	423	107	6	4881	5182
WICHITA	0	1	73	179	428	733	1131	871	490	342	100	2	4350	4620
KENTUCKY														
COVINGTON	2	15	64	362	614	803	1270	931	681	442	181	15	5380	5265
LEXINGTON	0	9	52	346	558	777	1225	883	631	373	167	21	5042	4683
LOUISVILLE	0	2	45	304	526	697	1170	857	580	353	127	8	4669	4660
LOUISIANA														
ALEXANDRIA	0	0	6	112	121	420	677	483	277	75	6	1	2178	1921
BATON ROUGE	0	0	1	64	86	355	606	403	212	38	0	0	1765	1560
LAKE CHARLES	0	0	2	50	54	283	528	345	174	21	0	0	1457	1459
NEW ORLEANS	0	0	0	54	84	339	560	361	201	31	0	0	1630	1385
SHREVEPORT	0	0	3	78	103	400	703	485	238	62	8	0	2080	2184
MAINE														
CARIBOU	115	161	351	737	1191	1514	1489	1388	1135	813	499	160	9553	9767
PORTLAND	41	61	242	532	845	1145	1315	1183	994	745	449	108	7660	7511
MARYLAND														
BALTIMORE	0	5	34	336	576	819	1085	961	665	460	157	23	5121	4654
MASSACHUSETTS														
BLUE HILL OBS R	2	43	138	422	776	998	1239	1020	856	651	330	74	6549	6368
BOSTON	2	37	136	371	680	888	1115	936	776	566	258	46	5811	5634
NANTUCKET	14	30	171	434	683	909	1089	959	877	726	471	144	6507	5891
PITTSFIELD	56	81	213	572	898	1117	1399	1177	1023	718	446	95	7795	7578
WORCESTER	14	61	163	486	843	1076	1320	1093	948	685	376	80	7145	6969
MICHIGAN														
ALPENA	126	142	285	620	917	1104	1544	1174	1015	780	559	122	8388	8506
DETROIT	10	24	85	419	663	894	1346	1023	821	558	335	41	6219	6232
DETROIT M WAYNE CO	18	48	128	510	729	927	1377	1046	860	612	406	53	6714	6293
DETROIT WILLOW RUN	33	63	142	517	750	979	1408	1068	868	625	433	55	6941	6258
FLINT	31	66	142	481	717	911	1435	1100	866	645	459	73	6926	7377
GRAND RAPIDS	5	50	145	462	743	968	1414	1102	860	632	400	47	6828	6998
HOUGHTON LAKE	109	123	266	593	883	1114	1607	1205	1020	763	535	91	8309	
LANSING	29	67	148	493	764	988	1490	1164	872	656	439	55	7165	6909
MARQUETTE U	105	131	355	547	929	1113	1533	1223	1026	809	559	149	8479	8393
MUSKEGON	1	42	113	402	748	969	1424	1107	868	638	444	68	6824	6696
SAULT STE MARIE	180	162	350	671	976	1177	1684	1284	1127	806	615	156	9188	9048
MINNESOTA														
DULUTH	127	158	506	617	1109	1355	2053	1473	1166	903	546	165	10178	10000
INTERNATIONAL FALLS	88	142	552	643	1196	1479	2340	1728	1214	908	560	146	10996	10606
MINNEAPOLIS	7	40	368	447	950	1140	1909	1358	899	678	357	41	8194	8382
ROCHESTER	10	64	307	463	933	1123	1914	1393	956	717	411	53	8344	8295
ST CLOUD	14	57	435	499	1054	1260	2062	1469	988	769	410	68	9085	8879
MISSISSIPPI														
JACKSON	0	0	9	129	173	481	747	520	326	98	13	0	2496	2203
MERIDIAN	0	0	8	131	208	524	758	486	347	109	15	2	2588	2289
VICKSBURG U	0	0	13	75	101	385	708	485	257	71	14	0	2109	2041
MISSOURI														
COLUMBIA	0	3	52	227	491	692	1221	911	548	403	140	6	4694	5046
KANSAS CITY	0	0	44	175	497	646	1141	869	492	365	95	9	4333	4711
ST JOSEPH	0	0	45	189	540	735	1215	890	488	345	108	6	4561	5484
ST LOUIS	0	7	49	286	489	717	1233	915	570	397	156	4	4823	4900
SPRINGFIELD	0	0	49	269	460	667	1109	854	517	375	153	11	4464	4561
MONTANA														
BILLINGS	3	33	533	327	806	1125	1545	1094	860	742	319	155	7542	7049
GLASGOW	11	41	502	389	1137	1305	2053	1599	1016	812	316	132	9313	8996
GREAT FALLS	17	54	594	355	894	1106	1585	1054	880	736	304	182	7761	7750
HAVRE	17	57	553	443	1202	1348	1984	1425	978	769	295	161	9232	8700
HELENA	14	69	578	478	903	1153	1370	1058	874	670	267	188	7622	8129
KALISPELL	62	115	591	602	914	1201	1252	1144	1002	693	373	301	8250	8191
MILES CITY	1	28	510	375	963	1224	1826	1434	923	711	251	72	8318	7723
MISSOULA	44	88	509	555	849	1165	1194	1075	914	631	304	216	7544	8125
NEBRASKA														
GRAND ISLAND	0	11	271	284	705	956	1492	1091	703	577	188	27	6305	6530
LINCOLN U	0	4	194	227	657	888	1439	1026	672	541	179	18	5845	5864
NORFOLK	0	14	318	330	825	1016	1667	1178	820	625	234	34	7061	6979
NORTH PLATTE	0	11	345	335	718	1113	1530	1213	815	628	199	48	6955	6684
OMAHA	0	5	169	257	670	864	1440	1008	642	501	185	13	5754	6218
SCOTTSBLUFF	0	12	358	353	698	1050	1402	1187	748	667	215	74	6764	6673
VALENTINE	0	16	410	355	864	1068	1615	1341	865	699	247	67	7547	7425
NEVADA														
ELKO	11	43	375	452	793	1416	1312	1142	830	615	226	128	7343	7433
ELY	27	76	429	485	814	1248	1387	1188	869	664	291	154	7632	7733
LAS VEGAS	0	0	15	17	266	615	685	529	235	54	0	0	2416	2709
RENO	34	31	298	383	694	1079	974	838	664	439	135	105	5674	6332
WINNEMUCCA	10	39	321	417	716	1116	1055	933	759	548	172	121	6207	6761
NEW HAMPSHIRE														
CONCORD	50	78	227	556	899	1163	1376	1184	935	681	362	73	7584	7383
MT WASHINGTON OBS	606	576	651	1164	1489	1649	1848	1645	1574	1339	1077	587	14205	13817
NEW JERSEY														
ATLANTIC CITY	3	24	70	368	596	879	1125	971	726	529	275	43	5609	4812
ATLANTIC CITY U	0	8	23	284	528	783	1023	854	688	498	217	26	4932	4741
NEWARK	0	11	50	339	610	807	1066	882	717	500	212	14	5208	4859
TRENTON U	0	11	58	330	586	813	1081	888	685	498	190	20	5160	4980

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1965 - 1966

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
NEW MEXICO														
ALBUQUERQUE	0	0	56	217	492	895	1074	882	595	305	53	0	4569	4348
CLAYTON	2	0	167	292	502	812	1121	905	603	450	165	17	5036	5158
RATON	7	12	187	416	637	964	1231	956	734	528	196	37	5905	6228
ROSWELL	0	0	34	200	372	708	1052	734	407	168	33	0	3708	3793
SILVER CITY	0	0	45	198	382	754	903	793	497	236	54	0	3862	3705
NEW YORK														
ALBANY	11	49	120	421	817	1051	1342	1162	948	623	347	57	6948	6875
BINGHAMTON	41	76	184	558	836	1063	1417	1173	981	696	447	88	7560	7286
BUFFALO	23	46	122	525	742	942	1374	1114	931	648	401	68	6936	7062
NEW YORK U	0	13	54	239	538	755	1007	830	685	451	166	9	4747	4871
J.F. KENNEDY	0	14	58	289	584	810	1041	868	707	521	256	14	5162	5219
NEW YORK LA GUARDIA	0	5	26	280	565	780	1021	846	705	484	214	17	4943	4811
ROCHESTER	24	53	122	496	748	937	1307	1098	871	612	382	57	6707	6748
SYRACUSE	27	50	144	521	782	1011	1422	1168	945	665	429	80	7244	6756
NORTH CAROLINA														
ASHEVILLE	0	7	39	344	550	759	1075	800	660	383	149	42	4808	4466
CAPE HATTERAS R	0	0	0	135	267	514	665	565	478	253	104	23	3004	2612
CHARLOTTE	0	0	7	194	403	643	892	631	455	213	46	8	3492	3191
GREENSBORO	0	3	15	230	441	670	979	714	501	285	71	12	3921	3805
RALEIGH	0	5	7	208	416	650	898	629	473	263	72	12	3633	3393
WILMINGTON	0	0	0	102	217	494	671	470	360	147	35	2	2498	2347
NORTH DAKOTA														
BISMARCK	14	57	556	479	1040	1279	2106	1525	987	804	368	118	9333	8851
FARGO	19	59	477	544	1161	1415	2216	1649	1089	829	430	86	9974	9226
WILLISTON	3	62	580	494	1142	1358	2098	1547	992	839	323	128	9566	9243
OHIO														
AKRON	8	40	82	442	675	878	1329	1019	807	568	344	46	6238	6037
CINCINNATI OBS	0	8	48	299	551	742	1228	892	624	388	188	14	4982	4806
CLEVELAND	24	49	67	418	671	852	1328	1067	837	562	346	53	6274	6351
COLUMBUS	4	28	53	330	645	873	1325	989	710	465	286	29	5737	5660
DAYTON	0	19	62	371	677	886	1331	965	701	456	240	16	5724	5622
MANSFIELD	23	59	115	500	728	921	1380	1054	845	579	381	54	6639	6403
TOLEDO	27	57	129	486	759	953	1381	1058	828	579	348	30	6635	6494
YOUNGSTOWN	24	66	100	481	694	908	1367	1049	844	605	398	65	6601	6417
OKLAHOMA														
OKLAHOMA CITY	0	0	28	129	262	496	961	734	388	223	62	0	3283	3725
TULSA	0	0	15	122	283	556	992	722	395	227	67	0	3379	3860
OREGON														
ASTORIA	144	98	235	295	476	760	697	621	658	472	443	267	5166	5186
BURNS U	50	92	345	423	815	1194	1165	995	817	569	298	224	6987	6957
EUGENE	31	17	132	288	461	791	728	634	565	368	295	108	4418	4726
MEACHAM	115	178	445	379	778	1138	1106	991	930	708	473	367	7608	7874
MEDFORD	4	7	106	231	544	923	823	696	557	345	182	93	4511	5008
PENDLETON	15	19	153	226	602	865	820	702	597	382	194	75	4650	5127
PORTLAND	22	16	139	227	451	786	759	620	545	425	249	99	4338	4635
SALEM	46	26	166	293	505	836	781	679	629	425	308	114	4808	4754
SEXTON SUMMIT R	99	134	227	251	711	982	967	872	792	515	436	323	6309	6254
PENNSYLVANIA														
ALLENTOWN	0	23	81	432	705	957	1197	1017	801	573	272	29	6087	5810
ERIE	26	44	76	441	673	892	1302	1068	842	609	417	64	6454	6451
HARRISBURG	0	7	44	357	677	900	1191	932	648	472	166	12	5406	5251
PHILADELPHIA	0	18	41	342	614	862	1110	931	693	509	207	21	5348	5101
PITTSBURGH	9	40	99	518	702	848	1293	963	741	510	289	34	6046	5987
PITTSBURGH U	1	15	50	393	593	780	1230	914	705	482	261	29	5453	5053
READING U	0	12	47	320	594	816	1094	887	664	483	191	16	5124	4945
SCRANTON	7	35	99	471	731	971	1270	1053	799	565	300	41	6342	6254
WILLIAMSPORT	17	41	121	484	702	937	1213	1002	783	548	283	60	6191	5934
RHODE ISLAND														
BLOCK ISLAND	1	20	96	405	657	877	1099	931	854	675	429	105	6149	5804
PROVIDENCE	3	29	99	395	711	907	1115	975	806	630	326	57	6053	5954
SOUTH CAROLINA														
CHARLESTON	0	0	0	95	225	481	644	427	338	119	15	2	2346	2033
CHARLESTON U	0	0	0	64	145	394	576	407	292	81	15	0	1974	1794
COLUMBIA	0	0	2	138	303	543	759	502	408	128	19	1	2803	2484
GNVLE SPARTANBURG	0	0	6	186	375	615	877	616	454	194	42	5	3370	3044
SOUTH DAKOTA														
ABERDEEN	5	38	456	447	1069	1217	2017	1560	950	774	355	67	8955	8473
HURON	0	29	431	436	971	1127	1875	1396	894	707	307	51	8224	8223
RAPID CITY	3	27	461	312	797	978	1573	1273	923	784	285	103	7519	7345
SIOUX FALLS	2	37	405	408	964	1129	1856	1331	838	709	343	49	8071	7839
TENNESSEE														
BRISTOL	0	3	21	292	518	803	1096	755	547	307	109	20	4471	4143
CHATTANOOGA	0	0	15	215	399	721	982	656	486	231	63	10	3778	3254
KNOXVILLE	0	0	13	200	393	674	956	650	452	217	59	9	3623	3494
MEMPHIS	0	0	22	162	275	590	947	634	382	175	47	5	3239	3232
NASHVILLE	0	0	26	198	386	618	1007	657	452	234	78	7	3663	3578
OAK RIDGE	0	0	22	279	460	726	984	702	496	267	79	12	4027	3817
TEXAS														
ABILENE	0	0	4	67	117	424	791	570	281	122	42	0	2418	2624
AMARILLO	0	0	73	191	376	676	1145	857	456	312	99	1	4186	3985
AUSTIN	0	0	2	58	76	288	611	449	168	24	11	0	1687	1711
BROWNSVILLE	0	0	0	8	8	76	333	239	65	1	0	0	730	600
CORPUS CHRISTI	0	0	0	22	14	125	450	300	79	12	1	0	1003	914
DALLAS	0	0	6	74	124	403	746	520	253	69	24	0	2219	2363
DEL RIO	0	0	3	16	41	263	554	388	128	8	9	0	1410	1504
EL PASO	0	0	4	107	240	592	769	612	264	59	4	0	2651	2700
FORT WORTH	0	0	2	60	103	376	760	542	274	84	26	0	2227	2405
GALVESTON U	0	0	0	5	12	152	447	320	138	9	0	0	1083	1235
HOUSTON U	0	0	3	16	18	188	485	316	131	13	0	0	1170	1278
HOUSTON	0	0	2	20	23	212	516	334	144	12	0	0	1263	1396
LUBBOCK	0	0	22	94	235	551	946	677	307	166	48	0	3046	3578
MIDLAND	0	0	11	96	232	468	831	621	258	124	46	0	2687	2591
PORT ARTHUR	0	0	0	43	34	250	529	336	180	19	0	0	1391	1447
SAN ANGELO	0	0	0	76	144	416	747	538	221	55	30	0	2227	2255
SAN ANTONIO	0	0	2	62	64	301	607	426	182	39	5	0	1688	1546
VICTORIA	0	0	2	28	25	202	499	341	122	16	3	0	1238	1173
WACO	0	0	2	72	100	393	706	522	291	75	13	0	2174	2030
WICHITA FALLS	0	0	13	120	241	494	929	633	275	139	33	0	2877	2832

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

MONTHLY AND SEASONAL HEATING DEGREE DAYS

(Base 65°F)

1965 - 1966

State and Station	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total for Season	Normals July-June
UTAH														
MILFORD	0	3	264	399	674	1103	1239	1005	811	516	161	58	6233	6497
SALT LAKE CITY	0	20	239	317	564	1069	1058	989	717	456	140	40	5609	6052
WENDOVER	0	7	193	329	660	1172	1146	918	710	423	100	22	5680	5778
VERMONT														
BURLINGTON	43	80	236	558	956	1125	1531	1313	1069	707	432	91	8141	8269
VIRGINIA														
LYNCHBURG	0	9	33	317	522	718	1038	795	554	392	102	22	4502	4166
NORFOLK	0	6	1	195	398	657	897	734	527	330	121	21	3887	3421
RICHMOND	0	6	25	275	498	726	1043	759	538	371	133	27	4401	3865
ROANOKE	0	9	38	287	520	722	1058	831	565	409	118	25	4582	4150
WASHINGTON														
OLYMPIA	52	52	298	356	546	820	788	676	649	471	377	258	5343	5236
SEATTLE TACOMA	24	44	194	261	462	754	732	584	610	442	321	190	4618	5145
SPOKANE	31	62	330	377	804	1078	1088	896	808	561	291	190	6516	6655
STAMPEDE PASS R	231	290	468	573	914	1219	1205	1051	1047	842	656	542	9038	9283
TATOOSH ISLAND R	309	281	355	346	458	682	663	573	652	516	498	352	5685	5719
WALLA WALLA U	5	13	119	203	577	818	799	664	535	328	160	63	4284	4805
YAKIMA	29	38	207	378	671	1048	1104	767	662	385	218	129	5636	5941
WEST VIRGINIA														
BECKLEY	7	40	77	468	621	855	1243	946	680	490	199	53	5679	
CHARLESTON	0	15	58	382	561	776	1166	793	538	354	147	25	4815	4476
ELKINS	12	50	81	497	688	893	1258	951	741	525	254	81	6031	5675
HUNTINGTON	0	10	59	337	510	719	1182	853	583	384	167	20	4824	4446
PARKERSBURG U	0	12	44	341	547	752	1190	877	601	390	189	18	4961	4754
WISCONSIN														
GREEN BAY	26	51	245	485	885	1118	1763	1207	967	695	437	79	7958	8029
LA CROSSE	8	61	256	456	884	1061	1774	1267	852	599	312	35	7565	7589
MADISON	27	69	231	486	878	1086	1702	1220	911	684	454	83	7831	7863
MILWAUKEE	25	51	149	438	793	987	1579	1189	915	674	473	88	7361	7635
WYOMING														
CASPER	4	49	512	401	749	1108	1334	1132	887	775	289	141	7381	7410
CHEYENNE	11	47	454	397	702	1016	1208	1061	841	758	291	143	6929	7278
LANDER	1	39	507	395	786	1208	1304	1137	924	745	265	138	7449	7870
SHERIDAN	7	44	523	372	800	1116	1438	1158	869	787	345	171	7630	7683

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Note: "Heating Degree Days" has been discontinued in the June issues of this publication. Data which would usually be shown in that table for June are shown in the last three columns of the above Table.

HURRICANE ALMA, JUNE 4–14, 1966

Richard M. DeAngelis

Hurricane Alma, the first hurricane of the season and the earliest on record to cross a coastline of the United States, formed in an extensive band of cloudy, showery weather which extended from the western Caribbean to the Bahamas on June 4. Torrential rains, totaling up to 30 inches, fell over northern Honduras during the storm's formative stages, causing widespread flooding which resulted in an estimated 200 deaths. First detected as a tropical depression in the northwestern Caribbean on the 5th, Alma, plodding northward and rapidly intensifying, reached hurricane strength one day later some 340 miles south-southwest of Havana, Cuba. On the morning of June 8, the hurricane slashed across western Cuba, its 100 m.p.h. winds, heavy rains, and resultant high tides destroying over 47,000 acres of crops and more than 300 homes along the southern coast of Havana Province.

Accelerating to a forward speed of 17-20 m.p.h., Alma continued northward into the Gulf of Mexico and along the west coast of Florida. On the afternoon of the 8th, as the storm passed 50 miles west of Key West, Dry Tortugas, the westernmost portion of the Keys, recorded a minimum pressure of 28.65 inches and a maximum sustained wind of 125 m.p.h. These were the extremes observed at any land station during the hurricane's existence. Gale force winds lashed exposed coastal stations in southern Florida for up to 22 hours, with rain averaging 5-8 inches over Dade, Broward, and Palm Beach Counties and 2-4 inches in other southern counties. Tides were less than 1 foot above normal along the southeast coast but ran 2-3 feet above normal from the Keys to St. Petersburg and 3-5 feet above normal in Tampa Bay.

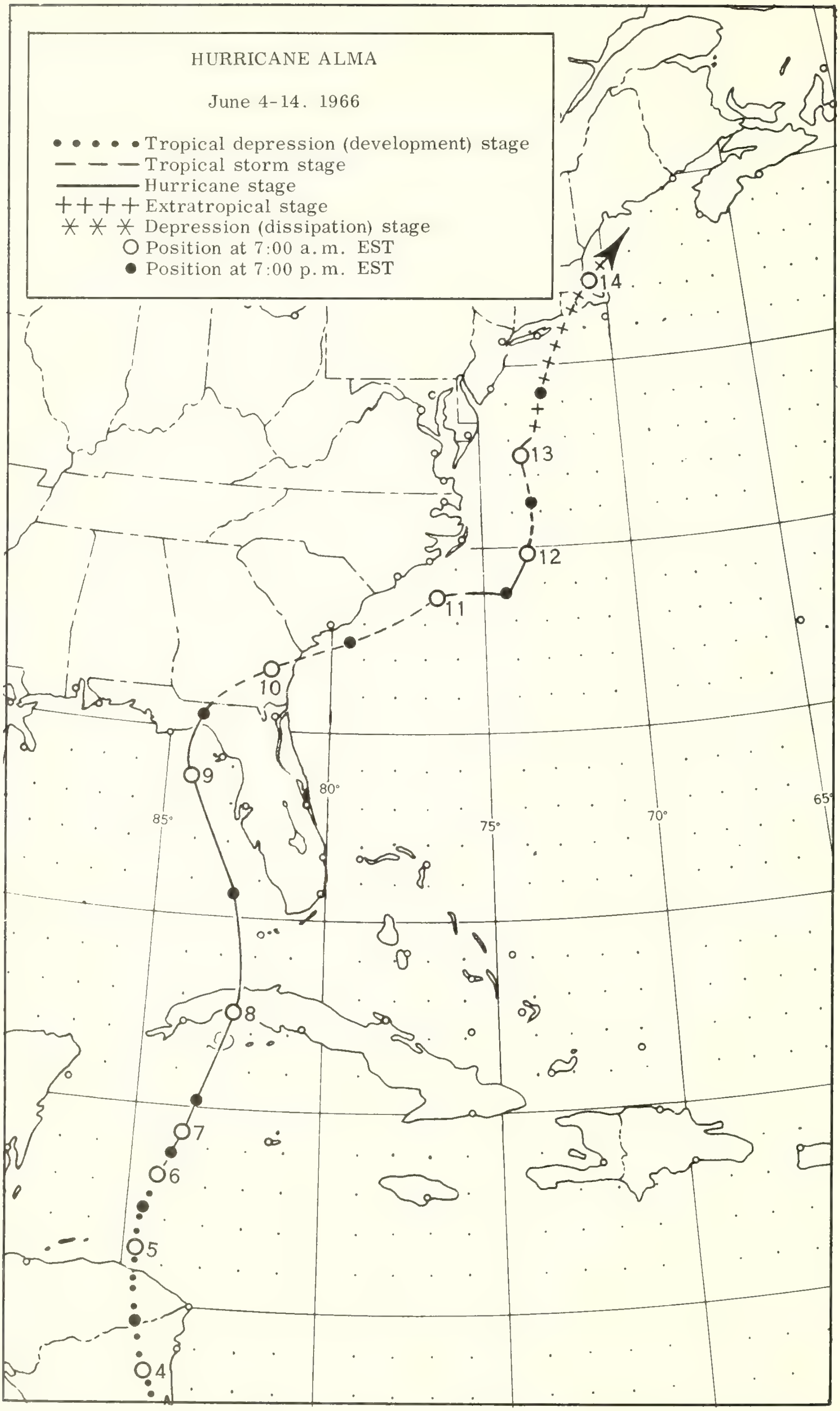
Early on the 9th, Alma, moving north-northwestward, passed 50 miles west of Tampa and by afternoon made landfall about 20 miles east-northeast of Apalachicola. Crawfordsville and Alligator Point estimated winds of 75-100 m.p.h. with an observed pressure of 29.06 inches at Alligator Point. Intensity and forward speed diminished as the storm turned northeastward, moving east of Tallahassee and reaching south-central Georgia by evening. Gale force winds extended over most of northern Florida although their duration was considerably less than in the southern sections. Total rainfall amounts were generally 2-4 inches over the northern portions of the peninsula increasing to more than 6 inches in the path of the storm and decreasing rapidly over the western portion of the panhandle. The concave nature of the Florida coastline from Tampa to Apalachee Bay along with the offshore movement of the hurricane caused tides of 4-10 feet above normal along this stretch of coastline.

Traversing southeastern Georgia late on the 9th and the 10th, Alma diminished to a tropical storm, then moved north of Savannah off the South Carolina coast that afternoon. Gale force winds occurred in gusts along the coasts of Georgia and South Carolina, while precipitation totals averaged 2-4 inches in southeastern Georgia and along the South Carolina coast. Tides ran 2-3 feet above normal. The following day Alma continued moving east-northeastward out into the Atlantic and on the 11th-12th briefly reintensified to hurricane strength but quickly diminished to tropical storm intensity as she swung northward. During this period coastal sections of North Carolina were battered by gale force winds, tides 2-5 feet above normal, and 4-8 inches of rain. Gusty winds nearing gale force buffeted coastal areas from Virginia to New England as Alma continued to parallel the east coast. During the afternoon of the 13th the storm became extratropical about 120 miles east-southeast of Atlantic City, New Jersey. The fast moving extratropical LOW turned northeastward late on the 13th passing to the west of Cape Cod and out into the North Atlantic by the morning of the 14th.

DAMAGES.--Total storm damage in Florida is estimated near $5 million. A major portion of the damage was the result of tidal inundation and beach erosion. Hardest hit was the Tampa - St. Petersburg region where an estimated $1.25 million worth of damage resulted from flooding and high winds. Direct wind damage along the west coast was mainly to power and communication facilities, residential roofs, trees, and glass breakage. Salt water inundation caused minor damage to roads and homes from the Keys to Apalachee Bay. Crop damage was most extensive in the northern farming areas where heavy rains and high winds damaged corn and tobacco fields. Rain, however, was mostly beneficial especially to the citrus crop. Storm damage in the other states was generally light with some disruption of electrical service, spotty beach erosion, and minor crop damage resulting from the high winds and locally heavy rains.

A total of 9 storm-connected tornadoes were reported during the hurricane's existence, 8 of them occurring in Florida. The tornadoes occurred at Cayman Brac, Cayman Islands (evening, June 6); southern Dade County (noon, June 8); near Miami (10:00 p.m., e.s.t., June 8); Jacksonville (afternoon, June 9). Three tornadoes occurred near Sarasota between 10:30 p.m. and 11:00 p.m., e.s.t., June 8. Two tornadoes occurred near Marianna at 6:00 a.m. and 10:00 a.m., c.s.t., June 9.

DEATHS.--Excluding the unknown total in Honduras, hurricane Alma has claimed a total of 19 lives. Twelve people lost their lives in Cuba, 6 in Florida, and 1 missing and presumed dead in Georgia.


HURRICANE ALMA
June 4-14. 1966
• • • • • Tropical depression (development) stage
— — — Tropical storm stage
———— Hurricane stage
+ + + + Extratropical stage
✳ ✳ ✳ Depression (dissipation) stage
○ Position at 7:00 a.m. EST
● Position at 7:00 p.m. EST
4
5
6
7
8
9
10
11
12
13
14
85°
80°
75°
70°
65°

TROPICAL CYCLONE DATA

HURRICANE ALMA, JUNE 4-14, 1966

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet) #		Storm Rainfall (inches)	Remarks
		Low	Time+	Fastest Mile	Time+	Gusts	Time+		Time+		
FLORIDA											
Apalachicola WBO	9	29.34	1310	N 42	0802	N 52	0835 1112			3.78	
Cedar Key	9	29.47	0600					4.5		2.90	Suffered inundation and 1,000 people were stranded when bridge to mainland washed out.
Daytona Beach WBAS	9	29.67	0250	E 37	0259	E 55	0132 0214			3.29	
Dry Tortugas	8	28.65	1315	N 125	1322						The lowest pressure and highest sustained wind reported during the hurricane.
Ft. Myers WBAS	8	29.46	1955	ESE 46	1915	ESE 64	2040	2.5	0800 E	2.36	Damage confined to power lines and trees blown down and plate glass damage. Several washouts on road on Captiva Island. Punta Rassa reported tides 2-3 feet above normal.
Ft. Myers Beach	8	29.45	2000	45-55‡		60-80‡		2-3			
Gainesville FAA	9	29.65	0425-1755	S 25	1458	E 48 S 48	0425 1455			2.97	
Jacksonville WBAS	9	29.63	10/0300-0400	E 48	0550	ESE 48	0535	2-3		1.4	A few power lines down.
Key West WBAS	8	29.42	1255	SE 60		SE 70	1231 1254 1451	2-2.5	1300-1500 E	3.56	Homes suffered roof damage and flooding. Wooden piers on south side, sections of sea wall and concrete pier damaged. Damage estimated at $350,000. Duration of gales 20 hours.
Lakeland WBO	8	29.56		NE 34	2116	NE 45 E 45	08/2000 09/1228			1.97	
Miami WBAS	8	29.73	1730 1905	E 55	1200					7.70	No tides of consequence. Gusts up to 68 m.p.h. at a few exposed places on the beaches with one gust of 75 m.p.h. reported at Jupiter. One fatality and total damage near $1 million.
Miami NHC	8	29.75	1730			E 61	1225	0.8	1215	7.65	
Orlando WBAS	8	29.67	09/0308	E 38	2304	E 53	2210			2.20	Duration of gales 6 hours. No significant damage.
Pensacola WBAS	9	29.75	1630 C	N 36	1224 C					0.01	No significant damage. Eglin Field, Valparaiso recorded peak gust of 48 m.p.h. and Tyndall Fields, Panama City had a peak gust of 46 m.p.h.
Punta Gorda	8	29.43				88	2200	1.5			
Tallahassee WBAS	9	29.15	1745	NNE 44	1510	NE 62	1657	0.5		6.90	Tide at St. Marks 11.9 feet above normal and 3 feet above normal at Shell Point. Approximately 75 percent of all roads in county were closed due to fallen trees. Crawfordsville Tower had estimated gusts over 100 m.p.h.
Tampa WBAS	8	29.43	09/0140	ESE 46	09/0057	E 68	2345	3-5		3.38	Tides north of New Port Richey to Cedar Key 7-10 feet above normal. Eye of hurricane was as close as 48 miles from Tampa (08/2342).
Tavernier	8	29.74	1555	SSE 60‡	1530			1.0		3.59	
West Palm Beach WBAS	8			E 39	1527	ESE 52	1830			1.80	
GEORGIA											
Savannah WBAS	10	29.50	1015	E 29	09/1338	SE 44	09/1958			1.69	Minor beach erosion at Savannah Beach. Tides 2-4 feet above normal along coast.
SOUTH CAROLINA											
Charleston WBAS	10	29.52	1700	29	0642	S 40	0637	1.4	09/1600	2.07	No crop damage; minor damage to trees and spotty erosion along the coast. A gust of 65 m.p.h. at Edisto Island unroofed a building and uprooted trees.
Columbia WBAS	10	29.67	1700			N 25				2.32	Some flooding in the Santee River Basin
NORTH CAROLINA											
Cape Hatteras WBO	11	29.68	1345	NNE 43	1019	NNE 62	1122			5.10	Tides 4.5-5 feet above normal reported in outer portions of Neuse River Estuary.
Wilmington WBAS	11	29.55	0145	N 35	0553	NNE 48	0558	2		7.80	Flash flooding accompanied heavy rains and a few homes in low places were invaded by water.
VIRGINIA											
Norfolk WBAS	12	29.97	13/0215	E 35	11/1043	N 39	1340	4.0†	1600	0.07	Only slight beach erosion. Cape Henry peak wind - N 40 m.p.h., 0636.
NEW JERSEY											
Atlantic City WBAS	13	29.97		N 17		NE 26	0046 0206	1.3		0.14	Atlantic City Marina peak wind N 29 m.p.h., 0840.

+ Times are Eastern Standard except Central Standard (C) where indicated.
# Tide above normal.
‡ Estimated
† Mean low water.

STORM SUMMARY

JUNE 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama										0	0	5	0																
Alaska *																													
Arizona *																													
Arkansas						0	0	°3	C																				
California *																													
Colorado	1	1	0	0	0	0	0	4	5	0	1	3	3																
Connecticut										0	0	3	0	0	0	5	0									0	0	3	0
Delaware										0	0	3	0	0	0	4	0												
Florida	9	7	0	2	5					A 6	?	°7	C	2	4	2	?												
Georgia	1	1	0	1	5	0	0	3	0	0	2	4	0	0	0	3	0									0	0	A 5	5
Hawaii *																													
Idaho									4			4																	
Illinois	3	1	1	30	5	0	0	4	6	0	0	6	0																
Indiana	1	1	0	0	4									1	3	0	0												
Iowa	11	6	0	0	5	0	0	5	6	0	0	4	5													1	0	5	6
Kansas	15	6	17	458	8	0	0	6	7	0	0	5	3	1	1	5	3									0	0	R 5	4
Kentucky	1	1		2	4							4																	
Louisiana										0	5	?	0	1	1	0	0									7	0	?	0
Maine						0	0	2	3	0	0	3	0	0	0	4	0												
Maryland	1	0	0	0	3	0	0	0	3	0	0	4	0	2	0	3	0												
Massachusetts						0	0	3	3	0	0	4	0	0	5	5	0									0	0	R 4	0
Michigan	2	2	0	0	3	0	0	2	0	0	2	5	0	1	12	5	0												
Minnesota	6	5	0	3	5	0	0	3	5	1	0	4	3	0	0	5	1									0	0	4	4
Mississippi	5	4	0	2	5	0	0	4	4	0	0	4	3	0	0	3	0												
Missouri	2	2	0	0	3	0	0	5	5																				
Montana						0	0	0	5	0	0	4	0	0	0	0	3	0	0	5	0								
Nebraska	4	3	0	0	0	0	0	3	6	0	0	5	4													0	0	0	6
Nevada *																													
New Hampshire						0	0	0	3	0	0	4	0	0	0	4	0									0	0	R 3	0
New Jersey *																													
New Mexico	3	1	0	0	4	0	0	2	6	0	0	2	0	1	0	3	0									0	0	5	0
New York	1	1	0	0	3	0	0	3	5	0	14	6	4	1	1	5	0												
North Carolina						0	0	4	6	0	1	5	3	1	0	5	0									0	0	4	4
North Dakota	9	3	1	3	5	0	0	4	5	0	0	4	4	0	0	4	0									0	0	6	5
Ohio										0	0	5		0	2	5													
Oklahoma	12	4	0	7	6	0	0	5	6	0	4	6	3	1	3	5	0									0	0	0	4
Oregon	1	1	0	0	3																								
Pacific Area *																													
Pennsylvania										0	0	4	0	0	0	5	0												
Puerto Rico *																													
Rhode Island														0	0	4	0												
South Carolina	1	1	0	0	4	0	0	4	5	0	0	3	0	1	0	4	0												
South Dakota	13	5	0	0	5	0	1	5	5																				
Tennessee	1	1	0	0	4	0	0	3	4	0	0	5	3	1	0	5	0												
Texas	14	8	0	0	5	0	4	7	5	0	24	6	0	0	0	4	0												
Utah *																													
Vermont						0	0	0	3	0	0	4	0	0	0	4	0												
U. S. Virgin Is. *																													
Virginia	1	1	0	0	3					0	0	5	0	1	0	4	0												
Washington						0	0	0	2																				
West Virginia										0	0	4	0	0	0	3	0												
Wisconsin	3	1	1	0	5					0	0	5	0	1	0	5	0												
Wyoming	1	1	0	0	4	0	0	5	C					0	12	0	0												

° Includes crop damage
C Crop damage
A Hurricane Alma
R Rain

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

JUNE 1966

Elmer R. Nelson, Office of Hydrology

The most damaging floods during June occurred along small creeks in southeastern Iowa, southwestern North Dakota, and south-central Nebraska. Crests ranking second to third highest were recorded in the Skunk River basin in Iowa. Sappa Creek at Stamford, Nebr., exceeded the previous highest stage of record reached in 1947 by nearly 2 feet. The flash flooding of small creeks flowing into the Knife and Heart Rivers in North Dakota were considered by older residents as the most severe in history.

ATLANTIC SLOPE DRAINAGE

Heavy local rains from May 22 through May 27 caused flooding along the Lumber River at Lumberton, N. C., from May 23 to June 6. Addditional heavy rains on June 9-11 caused additional overflow at Lumberton, N. C., from the 11th to the 18th. Minor flooding occurred on the Little Pee Dee River at Galivants Ferry, S. C., beginning during the latter part of May and ending on June 7. Additional flooding occurred from the 14th to the 20th. Moderate overflow occurred on the Edisto at Givhans, S. C., from May 27 to June 5. This was followed by light flooding from the 19th to the 26th. Slight inconvenience resulted from the flooding along the Edisto during June.

Minor flooding occurred on the lower portion of the Savannah and Ogeechee Rivers in Georgia during the latter part of May and the first few days of June. Damage, if any, was light.

Minor flooding occurred on the Oconee River at Mount Vernon, Ga., on the 6th and on the Altamaha River at Charlotte, Ga., on the 7th. Heavy rains in southern Georgia, totaling 13.6 inches at Folkston, caused the Satilla River to go above flood stage on May 27, cresting 2 feet above flood stage on June 1. It continued in flood until June 10. Additional heavy rains from June 16 to 19 caused minor flooding from the 19th to the 25th.

EAST GULF OF MEXICO DRAINAGE

The high water on the Apalachicola River at Blountstown, Fla., from May 31 to June 3 was due to heavy rains during the latter part of May. No damages resulted from the light flooding since only lowlands were inundated. Logging operations which had been curtailed by the high water returned to normal shortly after the end of the flooding.

The Coosa River at Gadsden, Ala., which went above flood stage on April 28 continued above 20 feet into the first part of June. The heavy rain on April 26-30 was sufficient to fill the reservoir above the recently completed Lock 3. The pool kept the stage at Gadsden above 20 feet for an extended period.

The Pearl River at Pearl River, La., which began overflowing its banks on May 25 continued above flood stage until June 4. The crest on May 29 was 1.6 feet above flood stage.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Very heavy rains during the night of the 11th and early morning of the 12th, caused some severe flooding on small streams in Iowa. Rainfall amounts of 2 to 5 inches were reported over an area 35 to 50 miles wide from Audubon to Huxley to Grinnell. Streams in this area were already high from the moderate to heavy rains of the 8th and 9th. The Skunk River at Oskaloosa, Iowa, was already in flood on the 10th. The additional heavy rains caused the Skunk to reach a crest which ranked third highest of record. The most serious flooding occurred on the North Skunk at Sigourney, Iowa, which crested nearly 8 feet above flood stage on the 14th. This crest was the second highest of record. In the Four Mile Creek area, 40 families were evacuated as the creek rose about 5 feet above its banks. The Black Hawk Creek at Hudson, Iowa, rose 2.7 feet over its banks on the 13th before receding within its banks on the 14th. The Des Moines River and tributaries in the reach from Des Moines to Ottumwa, Iowa, rose 1 to 4 feet above flood stage between the 11th and 18th. Flood damages were mainly to cropland. Much of the corn in the flooded areas had to be replanted. In areas where the flood waters were slow in receding it was replanted with soybeans. Heavy rains on the 28th caused additional flooding on the North Raccoon at Jefferson, Iowa.

The Illinois River was in flood in the beginning of the month in the reach at and below Chillicothe, Ill. It receded within its banks at Chillicothe, Ill., on June 1. The heavy rains on May 23 prolonged the flooding in the reach to Beardstown, Ill., from May 29 to June 7. Flooding continued at Meredosia, Ill., until June 18. The crests on May 25 ranged from 4 to 8 feet above flood stage. Heavy rains on June 13, totaling 2 to 4 inches, produced flooding on the Salt River at New London, Mo., from the 13th to the 17th. It crested on the 15th, 2.6 feet above bankfull stage.

Missouri Basin.--Severe flash flooding occurred in the southwestern quadrant of North Dakota from excessive rains on June 24. The torrential rains occurred over an area 10 to 20 miles wide extending from near Riverdale through extreme eastern Mercer County, most of the western half of Oliver County, extreme western Morton County, and extreme southeastern Stark County. The greatest amount of rainfall officially reported was 6.5 inches at Glen Ullin and 4.15 inches at Riverdale. Between these towns there were unofficial reports of rain estimated from 10 to 15 inches. Most of the rain fell in a period of approximately 3 hours or less beginning near noon on the 24th.

The heaviest rain fell in the headwaters of Square Butte Creek, Otter Creek, and Big Muddy Creek. Square Butte Creek, which rises in west-central Oliver County, northwest of Hannover overflowed its banks in the town of Center about 5:30 p.m. on the 24th. About one-third of the population had been evacuated to higher ground before the flood waters reached the town. Big Muddy Creek, which rises just northwest of Glen Ullin, flooded the entire town of Almont. The entire population had been evacuated before the flood. Otter Creek in western Oliver County, which flows northward to the Knife River between Hazen and Beulah, overflowed rapidly causing considerable damage to farms. In some cases all the farm buildings were destroyed and in others, the house and perhaps the barn survived but with considerable damage. Many of the older residents of eastern Mercer County and most of Oliver County considered this as the worst flood in history. Bridges and roads were washed out, livestock drowned, and complete sets of farm buildings destroyed. Damages to roads, bridges, and culverts in seven counties were estimated at $1.7 million. Practically every coulee, creek, and river was full to overflowing with the Knive River being out of its banks and running nearly a mile wide in many places.

The James River at Columbia, S. Dak., was out of its banks from March 15 to June 11. It crested 5.2 feet above flood stage on April 1-3. At Stratford, S. Dak., the James continued in flood from March 25 to

July 14 for a total of 111 days. It crested nearly 3 feet above flood stage on April 11. The main loss from the flooding was agricultural. As much as 40,000 acres of land was flooded during the peak of the flood.

Moderate to heavy rains during the night of the 11th and 12th caused brief flooding on the Nishnabotna River in southwest Iowa. The rainfall over the East Fork of the Nishnabotna River ranged from 2 to over 4 inches.

Heavy flooding occurred in the Republican Basin on the lower portion of Sappa Creek between the 23d and 26th. At Stamford, Nebr., a record crest of 22 feet, 8 feet above flood stage was observed on the 24th. The previous highest stage of record was 20.1 feet observed on June 22, 1947. A moderate overflow extended upstream to near Beaver City, Nebr., between the 23d and 25th. Light to moderate flooding occurred on Prairie Dog Creek at Woodruff, Kans., on the 24th and 25th. Light to moderate overflows were recorded on lower Stranger Creek near Tonganoxie, Kans., on the 13th and in the upper portion at Easton, Kans., on the 27th. Light flooding was reported on the extreme lower Delaware River on the 13th and on the South Fork of the Republican River near St. Francis, Kans., on the 18th. Flooding resulted from local torrential rains preceded by general rains of 1 to 2 inches on the 7-8th.

Moderate to heavy rains on the morning of the 8th caused flooding on the Little Blue River near Lake City, Mo., on the 8th and on the upper Blackwater River near Knob Noster, Mo., on the 9th.

Heavy rain on the 12th and 13th produced widespread flooding on the southern and eastern tributaries of the Missouri River from the 13th through the 18th. Minor overflow occurred on the Missouri River at Boonville, Mo., on the 14th and 15th. Heavy inflow from Brush Creek, caused the Blue River at and below Highway 50 in eastern Kansas City, Mo., to go 5 to 6 feet out of its banks. There was considerable flooding of small streams during the night of the 12th and 13th. Heavy rains fell again during the night of the 25th and 26th in southwestern Iowa and on the following night in northwestern Missouri and southeastern Nebraska. Several stations reported amounts of 4 inches or more. Flooding resulted on the Nishnabotna in Iowa and on the Platte near Agency, Mo., on the 26th and 27th. Some lowland flooding was reported at Platte City on the 27th and on Wolf Creek at Syracuse, Nebr., on the 27th and 28th.

White Basin.--The Cache River at Patterson, Ark., continued in flood from April 21 to June 17 for a total of 57 days. It crested at a stage of 10.4 feet, 1.4 feet above flood stage on April 30-May 4. No additional damages resulted from the flooding during June.

Red Basin.--The Sulphur River at Naples, Tex., was out of its banks from April 25 to June 25 for a total of 61 days. It crested at a stage of 36.3 feet, 14.3 feet above flood stage on May 3. This overflow was due to 13 to 14 inches of rain during the last decade of April.

WEST GULF OF MEXICO DRAINAGE

Excessive rains during the last decade of April caused severe flooding in the Sabine Basin in Texas which continued into June in the lower basin. Flooding continued at Bon Wier, Tex., from May 7 to June 2 and at Deweyville, Tex., from May 6 to June 7. Extensive lowland flooding near the river necessitated moving livestock to higher ground. Fishing camps along the river were flooded and some overflow into the yards of homes occurred. Some of the roads near the river were flooded and had to be closed.

Recurring heavy rains during May produced flood conditions in the lower Trinity at and below Liberty, Tex., from May 25 into June. Flooding ended at Liberty on the 7th and at Moss Bluff, Tex., on the 18th. Significant rainfall over the upper Trinity on the 13th followed by heavy rainfall from the 16th to the 20th caused a slow rise along the Trinity at Long Lake, Tex., beginning on the 15th. This rise continued downstream during the remainder of the month, causing additional overflow at Moss Bluff beginning on the 20th and continuing through June. Damage from flooding was heavy.

Minor flooding which was occurring in the beginning of the month on the middle Nueces near Tilden, Tex., continued until the 4th. In the extreme lower portion, the Nueces was in flood at Calallen, Tex., from May 29 to June 1. Some streets, roads, and fields within a radius of 50 miles of Corpus Christi, Tex., were flooded briefly in numerous heavy showers on the 14th and again in the late afternoon of the 18th. More than 6 inches of rain was reported near Taft, Tex., on the latter date. On the morning of the 22d, rainfall amounts of 1 to 2 inches caused street flooding in parts of Corpus Christi.

FLOOD STAGE DATA

(All dates in June unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
ATLANTIC SLOPE DRAINAGE	Ft.			Ft.	
Lumber: Lumberton, N. C.	8	May 23 11	6 18	#9.1 #8.7	May 30-31 14,16
Little Pee Dee: Galivants Ferry, S. C.	9T	U 14	7 20	#10.4 #9.6	2 16
Edisto: Givhans, S. C.	10	May 27 19	5 26	12.9 #11.65	May 29 22
Savannah: Clyo, Ga.	11	May 24	5	12.7	May 30,31
Ogeechee: Dover, Ga.	7	May 28		8.0	May 30,31
Edin, Ga.	9	May 28	4	E10.2	2
Oconee: Mt. Vernon, Ga.	16	6	6	16.0	6
Altamaha: Charlotte, Ga.	15	7	7	15.2	7
Satilla: Atkinson, Ga.	13	May (27 (19	10 25	15.0 13.4	1 23
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	May 31	3	16.4	1
Coosa: Gadsden, Ala.	20	Apr. 28		25.2	May 1
Pearl: Pearl River, La.	12	May 25	4	13.6	May 29
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Black Hawk Creek: Hudson, Iowa	12	13	14	14.7	13
Iowa: Marshalltown, Iowa	13	12	15	16.3	13
North Skunk: Sigourney, Iowa	T16	13	18	23.9	14
Skunk: Ames, Iowa	10	12	12	11.5	12
Oskaloosa, Iowa	15	10	20	21.1	16
Brighton, Iowa	14	13	20	17.95	16
North Raccoon: Jefferson, Iowa	10	(11 (28	14 28	14.1 11.5	12 28
South Raccoon: Redfield, Iowa	14	12	12	15.15	12
Raccoon: Van Meter, Iowa	13	12	14	15.1	13
South: Ackworth, Iowa	19	9	9	21.5	9
Des Moines: Des Moines (S.E.14th Street),Iowa	21	13	15	23.3	13
Tracy, Iowa	14	13	17	17.2	15
Eddyville, Iowa	15	13	18	18.3	17
Ottumwa, Iowa	10	16	17	12.2	17
Salt: New London, Mo.	19	13	17	21.6	15
Illinois: Chillicothe, Ill.	45	May 13	1	50.2	May 17
Havana, Ill.	14	May 30	6	17.8	May 25
Beardstown, Ill.	14	May 29	7	19.2	May 25
Meredosia, Ill.	10	May 25	18	18.0	May 25
Missouri Basin	Ft.			Ft.	
James: Columbia, S. Dak.	11	Mar. 15	11	16.2	Apr. 1-3
Stratford, S. Dak.	14	Mar. 25	July 14	16.75	Apr. 11
West Nishnabotna: Randolph, Iowa	19	26	26	19.45	26
East Nishnabotna: Red Oak, Iowa	15	12	12	#15.4	12
Nishnabotna: Hamburg, Iowa	18	(13 (26	13 27	#18.35 22.9	13 26
Platte: Agency (nr), Mo.	20	26	26	#20.5	26
South Fork Republican: St. Francis, 1N, Kans.	4	18	18	4.5	18
Sappa Creek: Beaver City (nr), Nebr.	16	23	25	20.85	23
Stamford, Nebr.	14	23	26	22.0	24
Prairie Dog Creek: Woodruff (nr), Kans.	18	24	25	25.3	24-25
Stranger Creek: Easton, Kans.	15	27	27	18.2	27
Tonganoxie (nr), Kans.	22	13	13	22.8	13
Blue: Kansas City(Bannister),Mo.	21	13	13	21.7	13
Little Blue: Lake City (nr), Mo.	18	8 13	8 14	20.7 25.5	8 13
Wakenda: Carrolton, Mo.	20	13	14	#23.45	14
Grand: Sumner, Mo.	26	13	15	29.7	14
Brunswick, Mo.	12	14	15	16.25	14
Chariton: Chariton, Mo.	12	13	13	#13.0	13
Prairie Hill, Mo.	15	13	14	19.4	13
Blackwater: Knob Noster (nr),Mo.	20E	(9 (13	9 14	27.0 26.35	9 13
Blue Lick, Mo.	25	15	18	28.0	16
Missouri: Boonville, Mo.	21	14	15	21.5	14
White Basin					
Cache: Patterson, Ark.	9	Apr. 21	17	10.4	Apr. 30- May 4
Red Basin					
Sulphur: Naples, Tex.	22	Apr. 25	25	36.3	May 3
WEST GULF OF MEXICO DRAINAGE					
Sabine: Bon Wier, Tex.	17	May 7	2	21.5	May 20-22
Deweyville, Tex.	14	May 6	7	16.0	May 22
Trinity: Liberty, Tex.	24	May 25	7	29.1	May 15
Moss Bluff, Tex.	4	May 25 20	18 1/	9.3	May 14-17
Nueces: Tilden, Tex.	14	May 30	June 4	16.1	June 3
Calallen, Tex.	7	May 29	June 1	7.1	May 30-31

* Provisional
# Highest stage observed
E Estimated
T Tentative
U Beginning unknown, station established 5/28/66
1/ Continued at end of month

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	86	15.8	85	219	2.1
1000	30	150	15.6	79	245	2.3
950	30	588	15.7	62	284	6.2
900	30	1,044	13.9	59	294	10.1
850	30	1,525	11.2	59	291	12.8
800	30	2,029	8.7	56	289	15.3
750	30	2,561	5.2	55	290	17.3
700	30	3,121	2.3	44	289	18.1
650	30	3,712	-.8	38	285	18.6
600	30	4,352	-4.4	33	286	20.2
550	30	5,026	-8.8	29	286	22.1
500	30	5,766	-13.1	28	285	23.5
450	30	6,558	-18.4	29	281	25.3
400	30	7,432	-24.5	28	274	28.0
350	30	8,392	-31.3	27	276	28.7
300	30	9,467	-39.1	29	271	32.2
250	30	10,694	-47.8		272	35.4
200	30	12,135	-56.5		275	34.6
175	30	12,976	-58.9		275	32.4
150	29	13,945	-58.5		274	25.8
125	29	15,090	-58.4		275	21.8
100	29	16,492	-58.4		272	17.3
80	29	17,900	-57.0		278	7.0
70	29	18,746	-56.1		300	2.9
60	29	19,730	-54.8		350	1.6
50	29	20,899	-53.7		75	4.9
40	27	22,331	-52.0		85	8.2
30	26	24,199	-49.6		89	[illegible].2
25	26	25,398	-47.6		83	9.1
20	24	26,874	-45.5		74	10.7
15	18	28,809	-42.2		87	16.1
10	9	31,562	-37.3			
7						

ALBUQUERQUE, N. MEX.
839 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,619	15.5	53	97	4.5
1000	30	93				
950	30	538				
900	30	1,010				
850	30	1,504				
800	30	2,022	17.0	43	208	3.1
750	30	2,570	14.0	42	251	6.8
700	30	3,148	10.2	41	268	9.3
650	30	3,754	5.5	44	264	11.7
600	30	4,408	.4	45	251	14.2
550	30	5,092	-5.0	51	249	15.5
500	30	5,842	-9.9	46	250	18.1
450	30	6,642	-15.2	40	251	20.6
400	30	7,529	-21.2	35	253	20.6
350	30	8,501	-28.4	32	257	23.1
300	30	9,587	-36.9	29	254	27.4
250	30	10,824	-46.4		257	33.6
200	30	12,273	-55.9		257	41.4
175	30	13,116	-59.2		260	42.2
150	30	14,075	-62.4		261	38.5
125	30	15,192	-65.1		261	30.3
100	30	16,546	-66.2		259	18.1
80	30	17,904	-63.6		251	4.1
70	28	18,728	-60.8		123	1.7
60	28	19,691	-58.7		99	6.8
50	28	20,841	-56.2		90	10.3
40	26	22,266	-53.9		93	13.4
30	25	24,120	-50.4		87	17.3
25	24	25,317	-47.8		89	18.5
20	24	26,798	-45.0		90	18.6
15	16	28,740	-41.8		85	19.4
10						
7						

AMARILLO, TEXAS
892 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,095	17.2	77	178	9.1
1000	30	103				
950	30	552				
900	30	1,023				
850	30	1,506	18.2	63	204	18.6
800	30	2,024	16.2	58	215	18.6
750	30	2,571	13.3	54	236	13.8
700	30	3,148	9.5	53	256	11.1
650	30	3,754	5.2	53	261	10.7
600	30	4,407	.4	50	268	10.7
550	30	5,094	-4.7	50	273	11.8
500	30	5,842	-9.7	43	273	14.0
450	30	6,644	-14.9	39	266	16.3
400	30	7,531	-21.0	33	267	18.6
350	30	8,503	-28.3	37	263	22.5
300	30	9,590	-36.8	37	264	27.4
250	30	10,827	-46.4		262	36.1
200	30	12,274	-56.5		262	45.3
175	30	13,113	-60.5		266	43.5
150	30	14,066	-63.3		271	39.8
125	29	15,179	-65.4		276	28.6
100	28	16,530	-67.1		269	15.9
80	28	17,987	-64.1		285	3.3
70	27	18,706	-61.5		87	3.7
60	27	19,667	-58.9		84	9.3
50	27	20,817	-56.7		92	13.2
40	27	22,238	-54.1		89	15.7
30	27	24,097	-50.9		87	18.3
25	27	25,289	-48.6		90	19.2
20	24	26,768	-45.3		87	19.6
15	17	28,699	-42.1		84	18.6
10	5	31,472	-39.4			
7						

ANCHORAGE, ALASKA
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	29	10.5	74	175	4.9
1000	30	113	10.1	72	175	5.4
950	30	538	8.9	68	174	6.6
900	30	985	6.3	75	151	3.7
850	30	1,451	3.3	81	113	3.9
800	30	1,941	.6	80	108	6.2
750	30	2,455	-2.1	75	114	7.6
700	30	3,002	-5.3	76	111	8.2
650	30	3,574	-8.8	72	118	8.5
600	30	4,196	-12.7	69	115	[illegible].7
550	30	4,849	-16.6	57	117	9.3
500	30	5,565	-21.6	53	119	8.7
450	30	6,325	-27.3	50	121	8.9
400	30	7,171	-33.8	44	123	8.9
350	30	8,092	-41.2	42	114	7.8
300	30	9,121	-49.0		113	8.7
250	30	10,300	-55.0		114	7.4
200	30	11,737	-50.2		123	5.2
175	30	12,613	-48.1		113	5.4
150	30	13,630	-47.8		115	5.4
125	30	14,832	-48.2		126	3.[illegible]
100	30	16,300	-48.7		121	4.1
80	30	17,766	-48.7		114	4.5
70	29	18,642	-48.6		105	4.5
60	29	19,657	-48.4		106	5.8
50	28	20,861	-47.9		97	7.2
40	28	22,335	-46.9		95	8.0
30	28	24,247	-45.5		86	13.8
25	28	25,466	-44.4		88	14.4
20	25	26,959	-42.5		88	18.[illegible]
15	21	28,908	-39.9		87	21.4
10	19	31,707	-34.8		86	24.7
7	7	34,197	-30.5			

* ANNETTE, ALASKA
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	37	9.2	86	131	2.5
1000	30	125	9.2	82	139	3.3
950	30	548	7.6	79	150	6.6
900	30	994	4.8	85	152	7.8
850	30	1,458	1.8	87	152	8.9
800	30	1,946	-.3	79	152	9.5
750	30	2,458	-2.9	73	153	8.5
700	30	3,005	-6.2	71	152	8.0
650	30	3,578	-9.6	64	156	7.4
600	30	4,197	-13.4	58	160	7.2
550	30	4,850	-17.7	51	152	6.2
500	30	5,561	-22.6	43	141	6.6
450	30	6,321	-28.3	45	142	6.6
400	30	7,162	-34.7	44	129	6.8
350	30	8,081	-41.7	40	135	5.8
300	30	9,109	-48.7		137	6.6
250	30	10,298	-51.5		206	4.7
200	30	11,748	-50.2		223	6.4
175	30	12,623	-48.8		211	7.0
150	30	13,637	-48.6		227	6.9
125	30	14,835	-48.9		220	5.6
100	30	16,298	-49.5		204	4.9
80	30	17,757	-50.2		197	2.9
70	30	18,627	-50.5		165	2.1
60	30	19,633	-50.5		124	2.5
50	30	20,823	-50.2		92	4.1
40	30	22,283	-49.4		88	7.2
30	29	24,174	-47.4		86	10.5
25	28	25,383	-46.2		86	12.4
20	28	26,871	-44.6		86	15.3
15	25	28,813	-41.1		90	17.1
10	15	31,616	-34.7		83	22.9
7						

ATHENS, GA.
991 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	246	18.1	90	359	2.1
1000	30	164				
950	30	605	19.9	64	299	1.6
900	30	1,072	17.4	62	33	2.7
850	30	1,558	14.1	66	64	2.5
800	30	2,068	10.7	67	77	3.5
750	30	2,599	8.7	48	66	2.1
700	30	3,173	6.0	43	4	2.3
650	30	3,774	2.5	41	359	3.9
600	30	4,420	-.8	33	345	5.2
550	30	5,105	-4.7	28	333	4.7
500	30	5,854	-9.3	27	307	6.0
450	30	6,655	-14.6	26	297	6.2
400	30	7,543	-21.2	27	302	7.2
350	30	8,514	-28.5	29	290	9.9
300	30	9,600	-37.1	30	286	10.5
250	30	10,834	-46.8		282	13.0
200	30	12,277	-57.2		283	15.7
175	30	13,113	-61.3		281	16.1
150	30	14,063	-63.6		286	17.5
125	30	15,182	-63.6		284	15.2
100	30	16,548	-64.4		296	[illegible].3
80	30	17,916	-62.4		[illegible]	2.9
70	30	18,745	-60.1		63	6.0
60	30	19,710	-58.6		79	10.1
50	30	20,860	-56.9		86	13.8
40	30	22,284	-53.8		87	17.5
30	30	24,147	-50.1		94	18.8
25	30	25,344	-47.8		90	21.0
20	27	26,827	-45.1		89	23.3
15	17	28,758	-41.2		85	23.9
10						
7						
5						

* BARROW, ALASKA
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	8	-.1	96	218	1.6
1000	30	93	.8	87	199	1.9
950	30	506	3.6	68	237	5.6
900	30	946	3.0	56	247	8.2
850	30	1,407	1.2	58	255	9.1
800	30	1,893	-1.0	59	256	11.3
750	30	2,405	-3.4	53	247	12.4
700	30	2,950	-6.2	46	242	12.2
650	29	3,524	-9.7	51	243	13.8
600	29	4,142	-13.3	45	247	14.4
550	29	4,796	-17.6	39	247	14.8
500	29	5,506	-22.6	39	249	16.7
450	29	6,269	-28.1	38	248	17.7
400	29	7,107	-34.5	37	247	19.0
350	29	[illegible],027	-41.4	44	248	18.5
300	29	9,057	-48.5		253	21.4
250	29	10,245	-52.0		258	19.0
200	29	11,704	-47.0		261	16.7
175	29	12,591	-45.9		261	13.4
150	29	13,617	-45.8		262	10.7
125	29	14,829	-46.3		259	7.8
100	29	16,310	-46.4		265	4.7
80	29	17,793	-45.8		279	1.7
70	29	18,682	-45.3		154	.2
60	29	19,710	-44.7		97	1.6
50	28	20,933	-44.0		78	3.7
40	28	22,432	-43.4		77	6.4
30	27	24,370	-42.2		83	10.1
25	25	25,604	-41.4		86	12.6
20	24	27,122	-40.2		86	14.2
15	22	29,099	-37.3		81	16.7
10	17	31,895	-32.0		83	16.7
7	8	34,456	-27.0			
5						

BARTER IS., ALASKA
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	15	.7	89	129	1.7
1000	28	91	1.9	82	127	1.0
950	28	515	6.6	63	246	3.9
900	28	953	5.6	57	260	8.0
850	28	1,419	3.3	54	255	11.1
800	28	1,908	.5	57	259	12.8
750	28	2,424	-2.7	59	256	13.0
700	28	2,968	-5.9	55	260	14.0
650	28	3,540	-9.3	55	261	13.4
600	28	4,161	-12.9	46	258	12.8
550	28	4,817	-16.9	40	257	13.2
500	28	5,530	-21.7	38	258	14.2
450	28	6,296	-27.5	37	256	14.4
400	28	7,135	-34.1	39	254	14.8
350	28	8,056	-41.4	40	253	15.9
300	28	9,085	-49.0		256	15.3
250	28	10,268	-53.4		260	14.2
200	28	11,721	-47.8		262	11.7
175	28	12,605	-46.7		264	9.9
150	28	13,628	-46.6		268	9.5
125	28	14,837	-46.8		270	7.8
100	28	16,316	-46.9		284	3.9
80	28	17,796	-46.3		303	1.7
70	28	18,683	-45.9		80	1.2
60	28	19,709	-45.4		93	2.7
50	28	20,927	-44.6		71	5.1
40	28	22,424	-43.9		83	8.2
30	28	24,360	-42.8		81	10.9
25	28	25,592	-42.0		85	15.2
20	28	27,109	-40.3		89	15.3
15	26	29,084	-37.5		83	17.7
10	13	31,898	-32.9			
7						
5						

BETHEL, ALASKA
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	39	7.9	91	293	4.1
1000	30	105	7.9	87	276	3.3
950	30	528	7.7	73	275	.8
900	30	974	5.9	68	153	1.9
850	30	1,440	3.4	67	129	4.7
800	30	1,929	.5	68	133	5.[illegible]
750	30	2,444	-2.4	60	129	7.2
700	30	2,991	-5.2	58	111	6.[illegible]
650	30	3,560	-8.9	58	107	7.6
600	30	4,185	-12.7	57	109	8.7
550	30	4,837	-17.1	49	105	8.5
500	30	5,552	-21.9	50	107	8.5
450	30	6,314	-27.3	44	106	6.8
400	30	7,159	-33.5	40	107	8.2
350	30	8,083	-40.6	36	109	8.7
300	30	9,116	-48.4		108	9.9
250	30	10,295	-55.3		90	10.1
200	30	11,731	-50.7		88	7.0
175	30	12,607	-48.3		99	6.0
150	30	13,623	-48.1		100	6.2
125	30	14,824	-48.6		107	6.6
100	30	16,290	-49.0		115	5.8
80	30	17,754	-48.9		113	5.8
70	30	18,631	-48.7		105	6.0
60	30	19,645	-48.5		102	6.0
50	30	20,844	-48.2		99	8.2
40	30	22,316	-47.4		92	10.7
30	30	24,222	-46.2		90	12.8
25	29	25,438	-45.3		86	15.7
20	29	26,932	-43.7		86	17.3
15	26	28,869	-40.7		86	20.8
10	25	31,657	-35.5		85	24.1
7	19	34,128	-32.2		88	28.0
5	16	36,491	-28.3			

BISMARCK, N. DAK.
954 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	505	12.3	81	182	2.1
1000	30	103				
950	30	540			177	1.7
900	30	994	15.2	57	242	8.0
850	30	1,478	13.3	53	260	11.7
800	30	1,985	10.1	55	264	12.8
750	30	2,516	6.2	59	262	12.6
700	30	3,081	2.3	57	262	14.2
650	30	3,673	-1.5	55	259	15.9
600	30	4,310	-5.5	52	255	18.5
550	30	4,980	-9.7	47	259	21.2
500	30	5,716	-14.7	47	257	23.1
450	30	6,498	-20.3	42	258	26.4
400	30	7,368	-26.7	40	257	29.3
350	30	8,317	-33.8	40	255	33.4
300	30	9,380	-41.7	35	252	37.1
250	30	10,592	-50.0		247	40.0
200	30	12,030	-55.2		248	42.2
175	30	12,881	-55.4		256	39.0
150	30	13,866	-54.5		260	29.5
125	30	15,031	-55.5		263	21.4
100	30	16,449	-56.4		264	17.1
80	30	17,866	-56.1		269	8.4
70	30	18,715	-55.4		278	5.2
60	29	19,701	-54.1		295	2.3
50	29	20,874	-52.7		80	1.4
40	29	22,318	-51.2		67	5.4
30	29	24,195	-49.2		83	7.8
25	28	25,397	-47.7		76	8.7
20	27	26,875	-45.7		83	12.2
15	23	28,796	-43.1		94	11.1
10	9	31,478	-39.5			
7						
5						

BOISE, IDAHO
915 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	868	11.6	62	214	.8
1000	30	114				
950	30	550				
900	30	1,007	13.8	49	307	2.3
850	30	1,490	13.6	42	325	6.8
800	30	1,997	10.3	43	316	7.6
750	30	2,530	6.9	43	283	7.6
700	30	3,094	2.8	49	258	11.1
650	30	3,686	-1.5	54	253	16.5
600	30	4,322	-6.1	55	249	20.8
550	30	4,993	-10.6	50	250	23.9
500	30	5,725	-15.6	53	247	26.0
450	30	6,510	-20.9	49	248	29.1
400	30	7,373	-27.1	45	248	31.3
350	30	8,321	-34.4	43	252	35.2
300	30	9,383	-41.9	40	254	38.9
250	30	10,595	-50.3		256	38.3
200	30	12,029	-56.1		259	40.4
175	30	12,876	-57.0		256	39.0
150	30	13,855	-55.5		255	34.4
125	30	15,017	-55.7		256	26.2
100	30	16,437	-56.4		250	17.3
80	29	17,849	-56.6		250	9.1
70	29	18,696	-56.1		244	4.9
60	29	19,676	-55.5		224	2.7
50	29	20,842	-54.0		101	2.9
40	29	22,278	-52.4		92	5.1
30	27	24,149	-49.9		89	8.9
25	27	25,345	-48.1		86	9.9
20	26	26,822	-46.2		85	10.5
15	22	28,753	-42.7		87	14.2
10	12	31,555	-36.8			
7						
5						

* BOOTHVILLE, LA.
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1	23.7	88	72	1.4
1000	30	144	24.1	80	80	1.9
950	30	594	21.3	74	105	2.1
900	30	1,060	18.1	70	120	2.1
850	30	1,548	15.6	62	105	2.9
800	30	2,060	13.1	56	64	1.7
750	30	2,600	10.5	47	31	3.5
700	30	3,172	7.6	41	28	4.1
650	30	3,777	3.7	42	10	5.4
600	30	4,424	-.4	44	7	6.2
550	30	5,109	-4.3	37	12	6.0
500	29	5,859	-9.0	35	353	7.6
450	29	6,665	-14.3	29	341	8.4
400	29	7,549	-20.7	29	328	9.5
350	29	8,523	-27.8	31	322	10.3
300	29	9,612	-36.0	25	320	12.6
250	29	10,953	-45.7		319	14.6
200	28	12,304	-55.7		311	22.0
175	28	13,147	-59.5		314	24.9
150	28	14,105	-62.1		311	25.1
125	28	15,221	-65.9		308	18.5
100	28	16,568	-67.4		322	10.1
80	28	17,915	-65.4		53	7.2
70	28	18,732	-62.3		73	10.3
60	28	19,689	-59.8		78	14.8
50	27	20,830	-57.5		81	21.6
40	27	22,238	-54.8		90	23.5
30	26	24,097	-51.2		87	27.0
25	26	25,288	-48.5		90	27.8
20	26	26,764	-45.6		90	28.4
15	24	28,694	-42.5		85	29.1
10	15	31,457	-38.0		83	35.9
7	6	33,925	-33.6			
5						

* BROWNSVILLE, TEXAS
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	7	22.9	93	125	3.7
1000	30	120	24.0	91	127	7.8
950	30	572	21.5	86	151	16.1
900	30	1,037	18.9	75	157	15.5
850	30	1,528	17.0	58	154	12.0
800	30	2,043	14.7	51	150	8.7
750	30	2,589	12.1	44	138	7.0
700	30	3,162	9.0	45	118	5.4
650	30	3,773	5.3	47	91	4.7
600	30	4,422	1.6	45	58	3.5
550	30	5,112	-2.3	38	356	4.9
500	30	5,870	-6.9	33	342	7.2
450	30	6,683	-12.2	34	334	9.5
400	30	7,576	-18.1	34	329	13.0
350	30	8,560	-25.2	36	314	15.9
300	30	9,660	-33.7	34	313	22.0
250	30	10,913	-43.4		313	28.0
200	30	12,377	-54.8		308	34.4
175	30	13,219	-60.5		310	33.4
150	30	14,166	-66.2		304	26.6
125	30	15,255	-71.8		307	18.8
100	30	16,562	-73.4		341	8.9
80	30	17,876	-69.8		62	9.7
70	30	18,678	-65.7		78	15.9
60	30	19,621	-63.0		89	19.6
50	30	20,749	-60.1		86	24.3
40	30	22,152	-56.8		89	28.9
30	30	23,994	-52.1		90	32.6
25	29	25,179	-49.4		89	34.0
20	29	26,652	-45.9		88	33.6
15	24	28,578	-43.4		84	31.9
10	17	31,323	-39.0		87	40.6
7						
5						

BUFFALO, N. Y.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	218	15.3	81	210	4.3
1000	30	151				
950	30	587	17.0	52	261	10.1
900	30	1,047	14.1	52	281	12.2
850	30	1,527	11.4	55	284	13.4
800	30	2,031	8.0	56	284	14.6
750	30	2,561	5.2	50	280	15.5
700	30	3,122	2.6	40	279	16.5
650	30	3,716	-.7	37	280	16.9
600	30	4,354	-4.6	35	280	17.9
550	30	5,030	-8.8	33	284	19.0
500	30	5,766	-13.1	31	285	21.0
450	30	6,561	-18.2	30	286	22.0
400	30	7,430	-24.8	28	286	23.5
350	30	8,388	-32.0	29	286	25.4
300	30	9,458	-40.0	27	284	28.0
250	30	10,680	-48.5		282	31.1
200	30	12,121	-56.3		288	32.4
175	30	12,965	-58.3		287	29.3
150	30	13,932	-58.6		281	25.4
125	30	15,078	-58.7		281	22.3
100	30	16,481	-58.1		280	15.0
80	29	17,887	-57.3		280	8.7
70	29	18,733	-55.8		290	4.3
60	29	19,716	-54.4		8	1.7
50	29	20,887	-53.3		77	5.1
40	29	22,329	-51.6		75	8.0
30	29	24,205	-49.2		79	11.1
25	27	25,400	-47.7		79	9.7
20	25	26,872	-45.7		75	10.5
15	20	28,793	-43.1		82	7.2
10	15	31,537	-38.6			
7						
5						

*CANTON IS., PACIFIC AREA
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	30.6	64	82	8.5
1000	30	90	28.8	62	81	8.7
950	30	533	23.4	65	82	9.3
900	30	1,013	20.3	62	88	11.7
850	30	1,506	18.5	48	93	14.0
800	30	2,024	16.8	38	91	15.3
750	30	2,566	14.3	31	90	16.5
700	30	3,150	11.2	27	93	16.9
650	30	3,759	7.7	27	90	17.3
600	30	4,419	3.8	25	90	18.1
550	30	5,111	-.2	25	88	18.3
500	30	5,878	-4.5	26	84	18.8
450	30	6,694	-9.4	22	85	18.3
400	30	7,602	-15.1	21	87	16.1
350	30	8,598	-22.0	21	85	12.8
300	30	9,714	-30.3	20	80	12.6
250	30	10,984	-40.7	23	97	11.3
200	30	12,464	-53.0		100	12.6
175	30	13,311	-59.9		111	9.3
150	30	14,257	-67.5		119	6.6
125	30	15,334	-75.3		134	6.8
100	30	16,609	-79.5		102	14.6
80	30	17,885	-75.5		86	22.5
70	30	18,670	-69.0		85	19.8
60	30	19,600	-64.9		91	13.2
50	30	20,727	-59.7		246	1.9
40	30	22,132	-56.4		271	17.5
30	30	23,992	-50.7		269	31.5
25	30	25,177	-48.0		270	35.7
20	30	26,660	-44.9		271	32.2
15	29	28,594	-41.3		268	26.2
10	24	31,362	-38.5		276	12.8
7	19	33,835	-33.4		279	3.9
5	13	36,231	-28.4			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

• CAPE HATTERAS, N. C.
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	4	19.7	89	300	2.1
1000	30	153	20.2	73	277	2.7
950	30	593	17.9	69	299	4.9
900	30	1,057	15.6	66	319	4.3
850	30	1,540	13.0	63	322	4.5
800	30	2,049	10.5	54	308	5.1
750	30	2,580	7.6	51	298	5.6
700	30	3,150	4.9	42	281	7.8
650	30	3,746	2.0	38	273	9.1
600	30	4,394	- 1.6	37	270	11.1
550	30	5,074	- 5.3	35	273	11.3
500	30	5,825	- 9.6	31	266	11.7
450	30	6,627	-15.0	30	266	12.0
400	30	7,512	-21.2	28	264	12.2
350	30	8,485	-28.3	31	254	14.4
300	30	9,572	-36.6	30	249	14.8
250	30	10,810	-46.0		265	16.7
200	30	12,259	-56.8		262	19.6
175	30	13,096	-61.7		265	23.5
150	30	14,045	-63.8		268	23.5
125	30	15,168	-62.8		270	17.1
100	29	16,541	-63.3		278	9.9
80	29	17,918	-61.1		20	2.1
70	29	18,750	-59.3		70	6.0
60	29	19,719	-57.7		79	11.7
50	29	20,873	-56.0		86	15.5
40	28	22,301	-53.1		92	17.1
30	28	24,170	-49.5		90	18.1
25	26	25,364	-47.4		88	17.9
20	25	26,846	-45.1		87	18.8
15	21	28,769	-41.9		87	20.0
10	7	31,531	-37.9			

• CARIBOU, ME.
993 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	191	12.4	82	250	3.1
1000	30	130				
950	30	559	12.6	63	277	6.6
900	30	1,013	10.8	57	294	10.1
850	30	1,497	8.0	60	289	11.3
800	30	1,985	5.0	65	283	13.0
750	30	2,514	2.3	57	282	18.1
700	30	3,065	- .4	48	286	20.8
650	30	3,656	- 3.3	43	283	21.8
600	30	4,285	- 6.7	42	277	24.1
550	30	4,956	-10.5	36	278	26.0
500	30	5,687	-15.2	35	278	30.3
450	30	6,474	-20.5	32	277	32.1
400	30	7,338	-26.6	28	273	34.6
350	30	8,289	-33.7	26	271	39.6
300	30	9,354	-40.8	25	272	46.0
250	30	10,574	-48.4		273	50.3
200	30	12,020	-54.4		276	43.1
175	30	12,873	-54.6		278	37.1
150	30	13,862	-54.0		274	31.9
125	30	15,031	-54.2		271	26.2
100	30	16,456	-55.5		276	18.1
80	30	17,881	-54.2		285	9.9
70	30	18,739	-53.2		272	5.8
60	30	19,732	-52.4		249	1.9
50	30	20,913	-51.3		87	.4
40	30	22,365	-50.1		89	3.9
30	28	24,249	-47.9		82	7.8
25	28	25,455	-46.1		88	11.8
20	27	26,946	-44.3		91	13.6
15	22	28,905	-40.7		88	14.6
10	17	31,701	-34.6		99	18.8

CHARLESTON, S. C.
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	13	19.1	87	4	2.7
1000	30	159	20.8	76	21	2.3
950	30	599	19.2	65	48	2.3
900	30	1,066	16.4	62	72	3.3
850	30	1,551	13.8	58	66	3.9
800	30	2,060	11.1	53	72	1.7
750	30	2,595	9.0	42	156	1.7
700	30	3,166	6.2	40	261	1.9
650	30	3,766	2.9	37	260	2.9
600	30	4,414	- .6	34	252	3.3
550	30	5,099	- 4.3	29	260	2.9
500	30	5,851	- 9.0	28	259	4.7
450	30	6,653	-14.7	28	257	5.2
400	30	7,541	-21.3	32	270	7.0
350	30	8,514	-28.2	32	269	5.8
300	30	9,601	-36.9	31	263	7.4
250	30	10,838	-46.4		261	11.3
200	30	12,284	-56.9		265	15.0
175	30	13,120	-61.7		267	19.2
150	30	14,069	-63.7		268	19.8
125	30	15,187	-64.3		275	13.8
100	30	16,548	-65.0		291	7.4
80	30	17,914	-62.6		34	2.7
70	30	18,740	-61.0		69	6.4
60	30	19,701	-59.0		77	12.0
50	30	20,851	-56.4		86	16.9
40	30	22,277	-53.2		92	19.8
30	30	24,143	-49.9		93	21.4
25	29	25,340	-47.8		92	22.0
20	28	26,819	-45.7		89	24.1
15	24	28,751	-41.9		87	29.1
10	7	31,509	-36.6			

CHIHUAHUA, MEXICO
857 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,428	19.6	52	249	.6
1000	30	74				
950	30	525				
900	30	1,001				
850	30	1,499	19.8	51	316	.4
800	30	2,021	18.9	46	260	1.6
750	30	2,571	15.4	45	194	2.2
700	30	3,152	11.4	50	157	1.6
650	30	3,761	6.7	55	152	4.1
600	30	4,417	1.8	58	161	3.9
550	29	5,103	- 3.1	58	188	5.1
500	29	5,860	- 7.9	49	226	8.2
450	29	6,669	-12.6	36	251	11.3
400	29	7,561	-18.8	36	266	12.8
350	28	8,545	-25.5	38	266	14.6
300	28	9,644	-33.7	36	259	18.8
250	28	10,896	-43.3		261	26.2
200	26	12,367	-53.2		260	34.8
175	24	13,218	-58.6		260	34.0
150	24	14,173	-64.0		261	30.1
125	24	15,275	-69.4		265	20.0
100	23	16,595	-70.7		265	10.7
80	23	17,924	-68.3		353	4.5
70	21	18,731	-64.3		64	9.5
60	20	19,694	-60.4		93	16.1
50	19	20,830	-58.2		89	18.1
40	19	22,247	-55.3		83	21.2
30	14	24,095	-51.4		93	26.0
25	12	25,288	-49.1			
20	11	26,769	-45.7			
15	6	28,690	-43.1			
10						

• COLD BAY, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	30	5.4	87	129	1.6
1000	30	89			179	1.6
950	30	507	3.2	92	108	4.3
900	30	945	2.4	82	76	5.4
850	30	1,407	1.4	71	83	6.0
800	30	1,894	- .4	69	96	6.6
750	30	2,406	- 2.8	64	98	5.8
700	30	2,953	- 5.7	63	99	6.2
650	30	3,524	- 9.2	63	98	7.8
600	30	4,145	-13.0	57	107	8.0
550	30	4,799	-17.3	56	99	9.3
500	30	5,511	-22.0	53	102	8.0
450	30	6,272	-27.5	52	100	7.2
400	30	7,114	-33.9	47	92	8.4
350	30	8,036	-41.0	48	102	8.9
300	30	9,066	-48.5		110	9.1
250	30	10,250	-53.2		123	9.9
200	30	11,702	-48.6		120	3.9
175	30	12,582	-47.5		140	3.7
150	30	13,602	-47.3		149	4.1
125	30	14,805	-48.1		130	4.1
100	30	16,274	-48.6		135	4.7
80	29	17,739	-49.2		124	5.1
70	29	18,614	-49.1		120	5.6
60	29	19,623	-49.2		123	5.6
50	28	20,821	-49.2		113	6.6
40	28	22,287	-48.7		93	8.
30	28	24,180	-47.7		90	9.3
25	28	25,386	-46.6		90	10.1
20	26	26,873	-45.1		82	11.8
15	23	28,808	-42.3		86	15.0
10	12	31,571	-37.5		86	18.8

COLUMBIA, MO.
989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	238	17.4	81	181	4.7
1000	30	139				
950	30	580	20.0	60	215	13.0
900	30	1,045	17.4	58	239	12.6
850	30	1,532	14.6	56	251	11.7
800	30	2,042	11.6	54	258	10.7
750	30	2,575	8.5	52	258	10.3
700	30	3,146	5.7	47	252	12.2
650	30	3,743	2.1	42	254	12.0
600	30	4,391	- 1.7	37	254	13.6
550	30	5,069	- 6.2	37	266	14.6
500	30	5,817	-10.8	34	269	16.7
450	30	6,612	-16.4	34	267	18.6
400	30	7,495	-22.5	32	276	21.0
350	29	8,463	-29.6	26	281	23.9
300	29	9,544	-38.0	27	284	26.0
250	29	10,775	-47.4		287	28.4
200	29	12,216	-57.5		291	32.8
175	29	13,051	-60.7		285	33.6
150	29	14,008	-61.5		284	31.5
125	29	15,139	-61.4		293	22.5
100	29	16,518	-62.6		294	15.0
80	29	17,898	-61.2		317	5.1
70	29	18,730	-59.4		14	3.9
60	29	19,698	-57.4		64	7.0
50	28	20,854	-55.6		88	9.5
40	28	22,282	-53.6		92	12.0
30	28	24,144	-50.7		92	13.4
25	28	25,336	-48.9		85	15.2
20	23	26,811	-46.4		82	13.0
15	14	28,710	-43.4		75	17.3
10						
7						

CORPUS CHRISTI, TEXAS
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	23	[illegible]	25.4	86	161	5.2
1000	23	120	24.5	87	169	8.2
950	23	567	21.2	91	151	10.7
900	23	1,037	18.4	84	157	12.0
850	23	1,526	16.5	73	152	10.3
800	23	2,041	14.1	68	152	10.5
750	23	2,593	11.5	65	147	8.4
700	23	3,159	8.8	60	134	5.2
650	23	3,765	5.7	58	106	3.7
600	23	4,420	1.7	56	78	2.5
550	23	5,109	- 2.2	52	9	3.1
500	23	5,868	- 6.6	49	335	5.4
450	23	6,676	-11.9	49	333	7.0
400	23	7,576	-18.0	49	324	8.5
350	23	8,560	-25.1	52	322	14.2
300	23	9,661	-33.5	49	321	18.1
250	23	10,915	-43.2		312	23.9
200	23	12,382	-54.2		308	28.0
175	23	13,228	-59.3		303	27.8
150	23	14,182	-64.5		305	21.6
125	23	15,284	-69.2		308	18.6
100	23	16,609	-70.6		335	9.9
80	22	17,940	-67.1		43	7.4
70	21	18,755	-63.9		81	11.7
60	21	19,707	-60.8		92	17.5
50	21	20,848	-58.2		87	20.4
40	20	22,263	-55.0		90	22.0
30	20	24,119	-50.7		89	24.7
25	20	25,313	-48.3		87	27.4
20	19	26,791	-45.6		86	27.8
15	19	28,724	-41.8		84	29.3
10	13	31,466	-38.1			
7	10	33,913	-35.0			

DAYTON, OHIO
984 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	297	16.4	79	156	1.0
1000	30	158				
950	30	599	19.3	57	248	7.0
900	30	1,062	16.2	55	267	8.5
850	30	1,546	13.2	54	267	9.7
800	30	2,053	9.9	52	269	10.1
750	30	2,584	6.7	44	274	10.5
700	30	3,151	3.7	41	277	11.8
650	30	3,747	.4	41	279	13.0
600	30	4,388	- 3.1	36	275	14.2
550	30	5,067	- 7.1	31	276	13.8
500	30	5,810	-11.5	27	276	15.3
450	30	6,603	-17.1	27	279	18.5
400	30	7,484	-23.3	26	282	20.4
350	30	8,447	-30.7	26	284	22.1
300	30	9,523	-39.1	28	283	23.5
250	30	10,748	-48.4		281	25.4
200	30	12,185	-57.6		283	29.3
175	30	13,021	-60.2		288	28.9
150	30	13,982	-60.6		288	22.1
125	30	15,117	-60.6		281	18.1
100	29	16,504	-61.0		281	12.6
80	29	17,895	-59.5		294	4.7
70	29	18,733	-57.7		334	2.5
60	29	19,709	-55.9		50	4.9
50	29	20,873	-54.7		74	9.3
40	28	22,309	-52.7		92	12.0
30	27	24,176	-50.0		82	13.6
25	26	25,375	-47.9		83	13.4
20	26	26,857	-44.9		84	12.8
15	20	28,767	-41.7		76	12.4
10	13	31,532	-37.2		95	11.8
7	5	34,036	-33.3			

DEL RIO, TEXAS
979 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	314	22.2	86	113	8.2
1000	30	120				
950	30	570	20.9	87	139	15.9
900	30	1,035	18.9	85	161	20.8
850	30	1,526	17.1	74	158	17.1
800	30	2,042	15.1	64	161	14.2
750	30	2,590	13.0	49	161	9.1
700	30	3,166	10.6	39	157	3.3
650	30	3,778	6.5	38	100	2.1
600	30	4,431	1.9	38	333	2.1
550	30	5,121	- 2.8	37	323	4.3
500	30	5,877	- 7.7	35	310	4.9
450	30	6,682	-13.1	34	300	7.0
400	30	7,578	-19.1	34	295	9.5
350	30	8,558	-25.8	36	291	16.3
300	30	9,657	-34.0	32	288	23.3
250	30	10,908	-43.6		284	33.0
200	29	12,372	-54.5		285	42.9
175	29	13,215	-60.0		289	41.4
150	27	14,161	-64.7		286	34.8
125	27	15,260	-69.6		290	27.0
100	26	16,585	-70.4		288	11.3
80	25	17,913	-68.5		19	4.7
70	25	18,719	-64.8		68	12.2
60	25	19,667	-61.1		83	18.8
50	25	20,807	-58.2		90	22.0
40	25	22,220	-55.1		91	25.4
30	25	24,076	-50.4		88	28.9
25	25	25,271	-48.2		87	29.1
20	25	26,750	-45.1		87	28.7
15	21	28,679	-42.1		87	31.3
10	8	31,440	-37.8			
7						

DENVER, COLO.
838 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,611	11.2	71	188	2.9
1000	30	101				
950	30	540				
900	30	1,005				
850	30	1,490				
800	30	2,002	14.9	47	252	4.9
750	30	2,544	12.5	44	271	7.0
700	30	3,121	8.8	44	274	9.3
650	30	3,727	4.5	43	269	12.8
600	30	4,377	- .5	45	276	15.0
550	30	5,057	- 5.9	48	272	17.7
500	30	5,805	-11.2	47	262	20.0
450	30	6,604	-16.3	35	259	22.7
400	30	7,482	-22.4	35	255	24.7
350	30	8,449	-29.9	36	253	28.6
300	30	9,528	-38.6	34	254	34.8
250	30	10,755	-47.9		255	41.0
200	30	12,195	-56.8		254	43.7
175	30	13,036	-59.0		255	45.6
150	30	14,002	-59.4		257	40.8
125	30	15,139	-60.8		259	30.3
100	30	16,526	-60.7		258	17.7
80	30	17,915	-59.8		257	6.0
70	30	18,752	-57.7		339	.8
60	30	19,729	-56.1		87	3.3
50	30	20,892	-54.6		88	6.6
40	30	22,328	-52.7		83	11.3
30	28	24,206	-49.6		83	12.2
25	27	25,407	-48.0		84	12.6
20	27	26,888	-45.3		82	13.2
15	18	28,812	-42.3		82	10.1
10	10	31,588	-38.6			
7						

DODGE CITY, KANS.
924 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	792	17.7	77	174	8.2
1000	30	104				
950	30	548				
900	30	1,014	18.3	67	190	18.8
850	30	1,504	17.8	58	220	23.9
800	30	2,021	15.5	52	229	19.4
750	30	2,561	12.5	50	230	14.6
700	30	3,141	8.5	53	235	13.0
650	30	3,744	4.2	53	243	12.8
600	30	4,396	- .3	50	255	13.4
550	30	5,078	- 5.2	48	256	15.0
500	30	5,828	-10.1	44	259	15.3
450	30	6,624	-15.4	36	262	18.1
400	30	7,512	-21.9	31	262	21.8
350	30	8,481	-29.0	31	265	26.6
300	30	9,565	-37.3	30	265	28.9
250	30	10,799	-46.9		260	36.5
200	30	12,242	-56.9		261	42.5
175	30	13,080	-60.6		266	44.1
150	30	14,035	-62.4		269	40.6
125	30	15,156	-63.9		276	28.9
100	30	16,524	-64.1		270	15.2
80	30	17,893	-62.4		273	6.2
70	30	18,720	-60.6		31	1.9
60	30	19,684	-58.0		79	6.8
50	30	20,838	-55.7		85	10.5
40	30	22,264	-53.8		87	13.6
30	26	24,119	-51.4		90	15.7
25	26	25,308	-49.0		87	14.4
20	24	26,778	-46.5		87	14.8
15	17	28,691	-44.0		86	12.0
10	9	31,479	-38.7			
7						
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EL PASO, TEXAS
882 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,193	20.0	51	131	2.3
1000	30	89				
950	30	541				
900	30	1,014				
850	30	1,511	21.6	45	154	2.9
800	30	2,034	18.7	44	220	6.2
750	30	2,581	15.0	45	234	9.3
700	30	3,165	10.9	45	237	9.5
650	30	3,775	6.3	49	229	8.4
600	30	4,430	1.0	55	237	7.8
550	30	5,114	- 4.1	57	237	10.1
500	30	5,870	- 9.0	53	234	14.2
450	30	6,675	-14.2	47	243	15.7
400	30	7,563	-20.3	38	249	17.3
350	30	8,539	-27.6	37	258	19.8
300	30	9,631	-35.7	37	258	27.0
250	30	10,874	-45.2		255	35.0
200	30	12,333	-54.9		259	44.5
175	30	13,177	-59.7		261	44.5
150	30	14,131	-63.8		263	38.9
125	30	15,238	-67.5		263	24.5
100	30	16,574	-68.9		264	15.5
80	30	17,915	-66.1		251	1.0
70	30	18,729	-63.0		89	7.6
60	30	19,695	-59.9		93	13.2
50	30	20,832	-57.4		90	15.5
40	30	22,251	-54.4		88	19.2
30	30	24,107	-50.7		88	23.3
25	30	25,300	-48.6		90	23.9
20	28	26,774	-45.7		88	23.5
15	21	28,689	-43.0		84	23.9

ELY, NEV.
809 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,908	7.8	41	192	4.9
1000	30	109				
950	30	550				
900	30	1,012				
850	30	1,491				
800	30	1,998	11.7	35	178	4.3
750	30	2,539	11.1	32	186	4.1
700	29	3,110	7.1	34	234	7.4
650	29	3,716	2.5	36	245	11.8
600	29	4,356	- 2.4	40	234	14.2
550	29	5,034	- 7.7	44	231	15.7
500	29	5,775	-12.9	45	240	18.1
450	29	6,566	-18.1	38	247	23.1
400	29	7,440	-24.5	35	253	27.0
350	29	8,398	-31.9	33	252	29.1
300	29	9,468	-40.6	28	256	31.5
250	29	10,685	-49.7		259	37.1
200	29	12,117	-57.5		252	39.6
175	29	12,956	-59.0		248	39.8
150	29	13,922	-59.4		248	40.0
125	29	15,060	-60.6		251	33.0
100	28	16,447	-61.1		248	16.1
80	28	17,834	-60.3		231	8.2
70	28	18,668	-59.3		219	2.7
60	27	19,634	-57.9		90	3.7
50	26	20,787	-56.3		93	6.2
40	25	22,212	-54.2		82	10.3
30	24	24,069	-51.0		84	13.6
25	23	25,257	-49.2		84	13.4
20	22	26,725	-46.6		81	13.0
15	21	28,651	-42.6		84	14.2
10	14	31,411	-37.7			
7	7	33,850	-34.4			
5	5	36,220	-29.0			

EMPALME, MEXICO
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	12	23.4	69	46	1.9
1000	30	89	25.5	66	57	1.6
950	30	541	26.6	40	158	.9
900	30	1,017	24.7	35	175	1.9
850	30	1,515	22.2	34	178	3.3
800	30	2,039	18.9	36	177	4.5
750	30	2,582	14.9	39	182	5.1
700	30	3,168	10.5	43	194	5.2
650	29	3,776	6.1	45	205	7.8
600	29	4,433	1.4	42	211	8.2
550	29	5,121	- 3.2	39	214	9.5
500	29	5,876	- 7.8	37	226	10.5
450	29	6,681	-13.2	27	239	13.4
400	29	7,575	-19.2	20	249	15.7
350	29	8,554	-26.4	23	251	19.8
300	29	9,649	-34.7	23	253	24.7
250	29	10,897	-44.1		252	30.1
200	29	12,360	-54.4		254	36.5
175	29	13,204	-59.9		254	35.9
150	29	14,155	-65.0		252	33.6
125	27	15,247	-69.4		253	26.4
100	26	16,572	-71.8		249	12.2
80	25	17,895	-69.1		65	1.9
70	24	18,699	-64.9		85	10.1
60	23	19,647	-61.5		92	16.3
50	23	20,785	-59.3		95	19.4
40	21	22,194	-55.1		86	22.7
30	20	24,046	-51.8		90	28.0
25	19	25,229	-50.0		91	27.6
20	18	26,700	-46.8		82	30.5
15	9	28,625	-41.2			

• FAIRBANKS, ALASKA
995 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	135	13.4	61	305	2.1
1000	30	88				
950	30	519	13.0	55	267	4.7
900	30	973	10.3	54	258	5.8
850	30	1,446	6.7	57	257	4.9
800	30	1,941	2.5	67	251	5.2
750	30	2,454	- 1.5	74	237	5.6
700	30	3,005	- 5.2	73	250	4.9
650	30	3,580	- 8.7	64	228	5.4
600	30	4,200	-12.4	52	223	4.9
550	30	4,855	-16.8	45	230	4.9
500	30	5,569	-21.9	50	256	4.3
450	30	6,331	-27.5	45	264	4.3
400	30	7,173	-33.9	43	262	5.2
350	30	8,095	-41.3	39	257	6.0
300	30	9,124	-49.3		246	3.5
250	30	10,300	-55.7		255	2.7
200	30	11,738	-49.7		209	1.6
175	30	12,616	-47.9		210	2.1
150	30	13,634	-47.7		177	1.7
125	30	14,837	-48.0		176	1.9
100	30	16,307	-48.5		162	1.4
80	30	17,773	-48.4		132	2.1
70	30	18,653	-47.8		95	3.9
60	30	19,671	-47.3		102	6.8
50	30	20,877	-46.7		94	8.0
40	30	22,359	-45.7		89	10.3
30	30	24,279	-44.6		87	13.6
25	29	25,501	-43.6		88	17.3
20	29	27,006	-41.7		88	20.0
15	28	28,973	-38.2		84	23.1
10	24	31,787	-32.9		87	25.1
7	14	34,327	-27.9		86	25.9

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FLINT, MICH. 990 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	234	15.0	79	222	3.5
1000	30	148				
950	30	586	17.3	54	263	9.5
900	30	1,046	15.0	54	273	11.3
850	30	1,528	11.9	56	272	12.4
800	30	2,033	8.4	59	268	13.0
750	30	2,562	5.4	54	270	13.8
700	30	3,125	2.7	46	274	14.8
650	30	3,716	- .5	40	271	16.1
600	30	4,358	- 4.1	35	274	16.7
550	30	5,031	- 8.2	34	275	18.3
500	30	5,773	-13.2	32	273	21.8
450	30	6,562	-18.0	30	274	22.5
400	30	7,439	-24.2	29	276	23.3
350	30	8,398	-31.6	28	283	25.1
300	30	9,470	-39.9	30	281	25.8
250	30	10,691	-48.9		282	26.6
200	30	12,131	-56.3		288	31.5
175	30	12,974	-58.3		290	29.9
150	30	13,944	-58.4		286	22.0
125	30	15,091	-58.3		280	18.6
100	30	16,494	-58.4		282	12.8
80	30	17,902	-57.3		292	7.0
70	30	18,746	-56.2		305	3.7
60	30	19,730	-54.5		2	1.9
50	29	20,900	-53.3		63	5.4
40	29	22,343	-51.4		77	[illegible]
30	28	24,222	-49.3		87	11.7
25	26	25,426	-47.6		82	13.0
20	20	26,903	-45.3		86	15.0
15	12	28,845	-41.4			
10						
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FORT WORTH, TEXAS 996 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	180	21.2	85	181	4.3
1000	30	140				
950	30	589	20.7	77	187	14.0
900	30	1,052	18.7	72	197	14.8
850	30	1,542	16.5	64	209	12.4
800	30	2,056	14.3	50	218	9.7
750	30	2,599	11.1	47	220	7.8
700	30	3,171	7.5	46	239	5.1
650	30	3,778	3.9	41	269	4.5
600	30	4,423	- .1	40	285	4.1
550	30	5,111	- 4.5	32	288	3.9
500	30	5,859	- 8.9	31	281	6.6
450	30	6,664	-14.3	31	283	9.7
400	29	7,553	-20.5	28	294	11.5
350	29	8,528	-27.6	30	299	16.9
300	29	9,619	-35.8	30	301	21.2
250	29	10,860	-45.6		299	26.8
200	29	12,312	-56.2		295	36.9
175	29	13,152	-60.4		295	37.7
150	29	14,102	-64.4		296	34.8
125	29	15,210	-66.9		299	23.3
100	29	16,551	-68.0		299	10.9
80	29	17,898	-64.7		4	2.1
70	29	18,716	-62.6		70	7.8
60	28	19,674	-59.8		83	12.2
50	28	20,818	-57.5		89	15.3
40	26	22,235	-54.2		86	17.5
30	26	24,088	-51.3		87	21.2
25	26	25,279	-48.8		89	22.0
20	24	26,753	-45.5		90	24.5
15	13	28,669	-43.0			
10						
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GLASGOW, MONT. 932 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	696	11.1	78	54	1.4
1000	30	99				
950	30	530				
900	30	987	13.9	59	269	1.9
850	30	1,468	11.7	58	290	8.0
800	30	1,973	8.9	58	283	9.9
750	30	2,496	5.0	58	278	12.0
700	30	3,063	1.3	58	272	13.8
650	30	3,648	- 2.8	58	272	16.9
600	30	4,285	- 7.0	53	270	21.8
550	30	4,952	-11.3	47	267	24.1
500	30	5,682	-16.5	42	266	24.7
450	30	6,454	-22.2	40	263	25.4
400	30	7,320	-28.5	39	257	28.7
350	30	8,262	-36.0	42	257	30.5
300	30	9,314	-44.0		255	33.0
250	30	10,518	-50.9		251	37.9
200	30	11,955	-54.3		256	39.0
175	30	12,813	-53.3		253	35.4
150	30	13,806	-53.0		254	31.3
125	30	14,980	-53.6		253	23.3
100	30	16,411	-54.4		262	15.3
80	30	17,836	-55.0		258	10.3
70	30	18,689	-54.6		266	6.2
60	30	19,676	-53.7		264	3.1
50	30	20,850	-52.4		143	.4
40	29	22,295	-51.2		80	4.3
30	29	24,173	-49.0		90	7.4
25	28	25,375	-47.5		94	8.5
20	27	26,852	-45.5		85	10.9
15	27	28,782	-42.3		92	15.5
10	21	31,540	-37.6		91	15.0
7	15	34,021	-32.3		86	18.8
5	13	36,416	-27.8			

*** GRAND JUNCTION, COLO. 851 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,474	16.6	40	122	7.0
1000	30	73				
950	30	514				
900	30	991				
850	30	1,483			129	8.0
800	30	2,001	16.9	33	160	9.5
750	30	2,541	13.5	33	221	9.2
700	30	3,125	9.2	37	251	10.3
650	30	3,725	4.3	41	255	13.4
600	30	4,379	- 1.1	47	253	14.4
550	30	5,056	- 6.7	53	249	17.9
500	30	5,803	-12.1	51	254	20.6
450	30	6,596	-17.3	45	254	25.4
400	30	7,474	-23.7	40	255	28.9
350	30	8,436	-31.0	34	255	33.6
300	30	9,509	-39.6	32	256	39.6
250	30	10,732	-48.6		256	44.5
200	29	12,169	-56.7		254	48.2
175	29	13,011	-58.8		253	47.2
150	29	13,975	-60.0		252	41.8
125	29	15,109	-61.8		254	31.7
100	28	16,487	-62.1		250	18.3
80	28	17,870	-60.8		231	5.2
70	28	18,702	-59.2		138	2.1
60	28	19,674	-57.0		101	[illegible]
50	28	20,833	-55.5		90	8.4
40	28	22,261	-53.7		81	10.5
30	27	24,125	-50.4		86	14.2
25	27	25,320	-48.3		86	16.1
20	26	26,797	-45.7		87	16.5
15	24	28,723	-42.4		91	13.6
10	16	31,495	-37.0		93	12.6
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*** GREAT FALLS, MONT. 887 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,123	10.4	73	225	5.4
1000	30	105				
950	30	538				
900	30	998				
850	30	1,475	10.9	52	246	9.5
800	30	1,978	7.7	55	259	7.2
750	30	2,502	4.1	60	259	8.0
700	30	3,066	.3	63	259	10.3
650	30	3,652	- 3.3	58	256	14.0
600	30	4,286	- 7.4	55	254	19.0
550	30	4,949	-11.8	48	255	22.1
500	30	5,684	-16.6	44	256	24.5
450	30	6,457	-22.1	42	260	26.6
400	30	7,325	-28.3	41	260	29.3
350	30	8,269	-35.4	38	260	31.1
300	30	9,325	-43.4	37	258	33.2
250	30	10,530	-50.8		256	35.7
200	30	11,967	-54.4		253	36.9
175	30	12,823	-53.6		253	34.0
150	29	13,920	-52.6		252	29.5
125	29	14,998	-52.5		250	22.1
100	29	16,433	-54.2		245	18.3
80	29	17,963	-54.3		260	11.1
70	29	18,718	-54.1		259	7.0
60	29	19,707	-53.1		242	3.3
50	29	20,885	-52.0		159	1.2
40	29	22,333	-50.4		91	1.9
30	29	24,216	-48.7		84	7.8
25	29	25,417	-47.3		86	9.7
20	28	26,899	-44.9		84	11.3
15	27	28,935	-41.2		87	14.8
10	22	31,639	-35.5		87	20.4
7	14	34,147	-30.3		83	21.8
5	5	36,591				

GREEN BAY, WIS. 991 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	210	14.5	81	235	2.9
1000	29	135				
950	29	572	16.8	62	259	10.7
900	29	1,032	14.8	58	268	12.2
850	29	1,513	11.8	56	269	13.4
800	29	2,018	9.1	50	263	13.8
750	29	2,547	6.3	48	261	14.6
700	29	3,113	3.1	46	264	16.9
650	29	3,703	- .4	45	269	18.[illegible]
600	29	4,345	- 4.2	39	278	20.0
550	29	5,018	- 8.4	36	281	21.2
500	29	5,759	-13.2	36	278	21.8
450	29	6,547	-18.5	36	279	23.3
400	29	7,420	-24.5	33	274	24.7
350	29	8,379	-31.7	32	274	27.4
300	29	9,451	-39.9	30	277	28.4
250	29	10,673	-48.7		279	35.4
200	29	12,111	-56.6		280	37.5
175	29	12,954	-58.2		285	35.0
150	29	13,925	-57.8		285	27.2
125	29	15,075	-57.9		281	19.6
100	28	16,478	-57.9		282	12.8
80	28	17,887	-57.0		295	7.6
70	28	18,733	-56.2		328	4.1
60	28	19,717	-54.5		22	2.3
50	28	20,888	-52.9		69	4.5
40	28	22,333	-51.3		79	8.[illegible]
30	28	24,212	-48.8		85	11.8
25	27	25,414	-47.3		[illegible]	12.8
20	27	26,897	-45.1		87	13.6
15	21	28,806	-41.3		91	15.7
10	12	31,558	-35.8		94	14.6

GREENSBORO, N. C. 988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	273	18.2	92	263	1.2
1000	30	165				
950	30	610	19.2	63	281	4.7
900	30	1,071	17.0	55	315	5.4
850	30	1,557	14.2	55	328	4.1
800	30	2,067	10.7	58	334	3.1
750	30	2,600	7.7	51	317	3.7
700	30	3,169	5.0	41	308	6.2
650	30	3,770	2.0	35	308	7.2
600	30	4,413	- 1.3	29	294	8.5
550	30	5,099	- 5.1	27	280	10.3
500	30	5,845	- 9.7	24	280	11.8
450	30	6,649	-15.2	25	283	11.3
400	30	7,531	-21.6	24	279	12.0
350	30	8,501	-28.7	24	288	13.6
300	30	9,586	-37.2	24	284	17.1
250	30	10,822	-46.5		280	21.2
200	30	12,268	-56.9		278	19.6
175	30	13,106	-61.1		277	21.0
150	30	14,059	-62.8		278	21.4
125	30	15,182	-62.4		280	16.1
100	30	16,561	-62.2		287	8.5
80	30	17,943	-60.5		305	3.5
70	30	18,776	-59.2		67	2.5
60	30	19,747	-57.4		74	7.6
50	30	20,904	-55.7		87	12.4
40	30	22,334	-52.7		93	15.0
30	30	24,206	-49.2		92	16.1
25	28	25,407	-46.9		91	16.9
20	25	26,898	-44.4		92	18.5
15	17	28,840	-41.5		92	18.8
10	8	31,564	-38.5			

GUAM, MARIANA IS. 1000 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	111	25.8	89	92	6.8
1000	30	110			89	6.4
950	30	559	23.3	88	92	16.7
900	30	1,033	20.7	77	96	17.5
850	30	1,526	18.2	72	95	15.3
800	30	2,044	15.5	68	93	14.0
750	30	2,589	12.7	57	95	13.6
700	30	3,166	9.6	55	96	13.2
650	30	3,776	6.1	48	95	12.6
600	30	4,430	2.4	45	93	12.0
550	30	5,125	- 1.7	42	92	12.4
500	30	5,880	- 5.7	41	90	12.2
450	30	6,695	-10.4	38	89	12.2
400	30	7,597	-16.2	35	87	9.9
350	30	8,587	-23.3	35	85	6.4
300	30	9,697	-31.6	38	106	3.7
250	30	10,959	-41.8		214	2.1
200	30	12,429	-54.1		236	6.6
175	30	13,272	-61.2		256	6.4
150	30	14,211	-68.7		260	5.4
125	30	15,282	-75.9		321	1.6
100	27	16,561	-77.8		66	9.3
80	22	17,854	-74.1		80	21.6
70	22	18,636	-71.5		85	28.2
60	22	19,555	-67.6		87	34.0
50	22	20,666	-63.1		87	37.3
40	22	22,051	-58.5		87	36.7
30	21	23,887	-53.0		87	33.8
25	21	25,069	-50.2		86	31.5
20	19	26,538	-46.9		83	29.7
15	13	28,466	-44.0		88	31.5
10	7	31,185	-43.7			

HILO, HAWAII 1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	11	21.3	87	221	4.3
1000	29	156	21.6	82	218	2.3
950	29	598	18.2	87	78	5.6
900	29	1,061	15.0	91	79	8.5
850	29	1,544	12.6	89	80	7.6
800	29	2,052	10.4	73	81	8.9
750	29	2,596	9.8	44	87	12.0
700	29	3,161	8.7	28	88	13.6
650	29	3,774	6.6	21	86	12.8
600	29	4,424	2.9	20	87	9.9
550	29	5,112	- 1.6	20	87	7.4
500	29	5,875	- 6.3	21	84	[illegible]
450	29	6,685	-12.1	24	79	2.3
400	29	7,581	-18.7	27	218	2.7
350	29	8,561	-26.4	27	240	7.0
300	29	9,656	-34.9	29	256	13.6
250	29	10,902	-44.6		255	20.0
200	29	12,359	-55.7		255	32.2
175	29	13,198	-61.2		256	35.5
150	29	14,144	-65.9		255	31.9
125	29	15,239	-70.2		248	22.9
100	29	16,554	-73.8		223	8.4
80	29	17,861	-71.3		87	14.0
70	28	18,657	-68.1		90	22.1
60	28	19,589	-64.5		92	28.2
50	28	20,712	-61.4		92	33.2
40	28	22,105	-58.3		88	38.9
30	28	23,935	-53.7		89	42.2
25	28	25,115	-51.0		89	41.6
20	28	26,578	-47.6		89	40.6
15	26	28,494	-44.3		89	42.[illegible]
10	17	31,228	-41.3		89	47.6

HUNTINGTON, W. VA. 990 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	246	15.5	89	151	1.4
1000	30	161				
950	30	601	20.4	55	254	4.7
900	30	1,067	17.5	55	279	6.8
850	30	1,553	13.9	58	273	8.4
800	30	2,062	10.6	55	273	9.9
750	30	2,593	7.1	53	273	10.7
700	30	3,162	4.2	40	273	10.5
650	30	3,759	1.0	37	281	11.7
600	30	4,402	- 2.4	33	295	12.0
550	30	5,080	- 6.1	29	284	11.7
500	30	5,829	-10.4	26	288	13.2
450	30	6,629	-15.9	23	289	15.3
400	30	7,511	-22.2	23	286	16.1
350	30	8,478	-29.5	22	285	17.3
300	29	9,565	-38.0	25	286	18.1
250	29	10,797	-47.1		284	20.2
200	29	12,241	-56.9		287	24.9
175	29	13,079	-60.3		287	24.9
150	29	14,038	-61.0		288	20.2
125	29	15,168	-61.8		281	15.2
100	29	16,551	-60.6		287	9.1
80	29	17,943	-59.2		319	4.7
70	29	18,782	-58.0		18	2.3
60	29	19,758	-55.9		70	4.9
50	29	20,922	-54.6		88	8.5
40	29	22,356	-52.8		83	11.5
30	29	24,227	-49.2		87	13.6
25	29	25,429	-46.9		85	15.0
20	28	26,911	-44.8		91	13.6
15	22	28,948	-41.4		85	12.6
10	14	31,622	-38.3			

*** INTERNAT. FALLS, MINN. 971 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	360	11.7	82	201	[illegible]
1000	30	108				
950	30	538	13.5	72	215	6.2
900	30	995	12.4	65	238	12.0
850	30	1,473	10.2	64	251	14.6
800	30	1,975	7.5	60	259	15.7
750	30	2,496	4.3	60	263	17.5
700	30	3,063	1.2	56	267	17.7
650	30	3,647	- 2.5	52	268	19.8
600	30	4,286	- 6.4	46	271	20.6
550	30	4,952	-10.6	39	271	21.8
500	30	5,688	-15.3	36	269	24.5
450	30	6,467	-20.9	35	270	25.8
400	30	7,337	-27.2	35	268	27.8
350	30	8,286	-33.9	33	265	33.4
300	30	9,349	-41.5	33	265	33.8
250	30	10,564	-49.6		266	38.3
200	30	12,004	-55.0		271	38.9
175	30	12,857	-55.2		272	33.8
150	30	13,842	-54.9		270	26.8
125	30	15,004	-55.7		275	21.0
100	30	16,427	-55.1		280	14.0
80	30	17,851	-55.1		274	9.3
70	30	18,704	-54.6		280	6.4
60	30	19,693	-53.6		301	3.9
50	30	20,870	-51.9		32	2.9
40	30	22,320	-50.6		72	5.6
30	29	24,205	-48.4		72	8.2
25	29	25,409	-47.0		82	10.7
20	28	26,888	-45.2		87	12.[illegible]
15	24	28,829	-41.7		86	14.8
10	17	31,590	-35.2		86	18.8

JACKSON, MISS. 1006 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	94	20.1	88	152	1.2
1000	30	150	20.8	84	145	1.7
950	30	594	20.5	68	158	3.1
900	30	1,061	18.2	63	152	2.5
850	30	1,549	15.1	63	178	2.3
800	30	2,060	12.6	52	94	.4
750	30	2,598	10.0	48	8	2.9
700	30	3,170	6.7	41	10	2.9
650	30	3,770	2.8	43	7	3.9
600	30	4,418	- 1.3	42	10	4.7
550	30	5,099	- 5.3	38	6	4.7
500	30	5,849	- 9.9	34	340	4.3
450	30	6,648	-15.1	33	337	5.2
400	30	7,535	-21.4	36	331	5.8
350	30	8,505	-28.4	32	324	9.1
300	30	9,592	-36.8	29	316	11.3
250	30	10,828	-46.6		318	14.4
200	30	12,273	-56.6		329	23.3
175	30	13,111	-61.0		326	23.3
150	30	14,062	-63.3		313	23.7
125	30	15,176	-65.7		308	20.6
100	30	16,528	-66.2		314	11.1
80	30	17,881	-65.1		19	3.9
70	30	18,699	-61.8		69	7.0
60	30	19,658	-59.9		80	12.6
50	30	20,801	-58.0		89	17.7
40	30	22,216	-54.6		90	19.8
30	30	24,071	-51.2		90	21.0
25	29	25,261	-48.8		87	23.3
20	28	26,737	-46.2		88	25.1
15	24	28,667	-43.0		86	26.2
10	13	31,416	-40.1			

*** JACKSONVILLE, FLA. 1018 MB**

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	5	21.6	89	65	1.6
1000	29	159	22.0	81	74	3.9
950	29	601	19.2	79	105	6.0
900	29	1,068	17.0	69	123	5.4
850	29	1,554	14.4	67	137	4.3
800	29	2,065	11.9	58	135	2.9
750	29	2,601	9.6	43	181	2.1
700	29	3,172	6.4	37	201	2.9
650	29	3,771	3.1	36	210	3.7
600	29	4,422	- .2	35	210	3.1
550	29	5,103	- 4.1	32	215	3.3
500	29	5,858	- 8.7	29	185	2.7
450	29	6,660	-14.1	27	238	1.9
400	29	7,550	-20.4	25	250	1.6
350	29	8,525	-27.4	26	281	4.5
300	29	9,616	-35.8	26	283	6.4
250	29	10,858	-45.3		266	12.0
200	29	12,312	-55.8		255	18.3
175	29	13,152	-60.7		257	23.9
150	29	14,103	-63.8		267	18.8
125	29	15,218	-65.1		280	13.4
100	29	16,573	-66.1		282	5.1
80	29	17,929	-64.4		76	2.9
70	29	18,749	-62.1		66	9.4
60	29	19,706	-59.8		78	16.5
50	29	20,852	-57.0		90	21.4
40	28	22,272	-54.0		95	22.3
30	28	24,132	-50.6		91	24.5
25	26	25,324	-48.9		88	26.4
20	24	26,798	-45.8		84	27.9
15	21	28,716	-42.6		91	32.4
10	9	31,501	-38.4			

JOHN F. KENNEDY INT. ARPT.NY 1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	18.4	75	317	3.3
1000	30	153	18.0	68	326	4.1
950	30	596	18.0	59	313	5.8
900	30	1,054	15.4	56	308	8.2
850	30	1,537	12.7	53	296	9.5
800	30	2,043	9.4	52	297	10.5
750	30	2,575	6.1	49	289	10.9
700	30	3,138	3.1	42	290	14.0
650	30	3,735	.0	40	290	15.9
600	30	4,373	- 3.6	40	285	16.7
550	30	5,052	- 7.2	35	282	18.6
500	30	5,792	-11.9	34	281	21.4
450	30	6,589	-17.3	33	277	23.1
400	30	7,464	-23.1	31	272	24.9
350	30	8,429	-30.2	30	270	26.2
300	30	9,509	-38.2	30	268	28.4
250	30	10,739	-47.3		270	32.2
200	29	12,185	-57.3		275	33.0
175	29	13,023	-60.7		275	31.3
150	29	13,983	-60.4		278	27.6
125	29	15,123	-59.8		278	19.0
100	29	16,518	-59.1		280	12.2
80	29	17,919	-58.1		289	6.0
70	29	18,762	-57.0		306	2.7
60	29	19,742	-55.1		54	2.1
50	29	20,909	-54.1		77	5.4
40	28	22,348	-52.2		85	9.5
30	27	24,224	-48.9		90	12.8
25	26	25,432	-46.5		91	12.2
20	22	26,925	-43.8		84	12.4
15	[illegible]	28,882	-39.0			
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JOHNSTON IS., PACIFIC AREA 1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	3	26.2	73	88	13.0
1000	30	135	24.9	78	83	15.9
950	30	584	21.0	85	82	19.0
900	30	1,052	18.2	79	84	18.6
850	30	1,540	15.2	81	85	17.5
800	30	2,053	13.1	63	84	14.8
750	30	2,593	12.1	37	85	11.1
700	30	3,170	9.8	23	84	9.3
650	30	3,780	6.6	22	82	9.5
600	30	4,434	2.9	20	84	10.3
550	30	5,130	- 1.5	21	79	8.5
500	30	5,885	- 6.0	18	59	6.6
450	30	6,693	-11.5	20	61	4.9
400	30	7,593	-18.2	24	306	2.7
350	30	8,576	-25.5	22	280	8.5
300	30	9,675	-34.0	24	266	18.8
250	30	10,926	-43.7		265	27.8
200	30	12,388	-55.2		274	37.5
175	30	13,228	-61.2		271	38.3
150	30	14,171	-67.4		268	36.9
125	30	15,254	-72.7		265	27.8
100	29	16,555	-74.8		265	6.6
80	29	17,859	-72.5		84	14.6
70	29	18,648	-69.2		89	24.5
60	28	19,579	-65.7		90	30.7
50	28	20,697	-62.2		87	35.7
40	28	22,089	-59.6		85	36.5
30	28	23,918	-53.2		87	38.5
25	28	25,103	-50.0		90	37.9
20	28	26,571	-47.4		90	34.6
15	25	28,483	-44.5		87	34.4
10	10	31,203	-42.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1966

KEY WEST, FLORIDA
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	20	3	25.7	85	96	6.6
1000	20	135	24.6	86	85	8.0
950	20	585	21.4	84	101	10.1
900	20	1,053	18.6	76	115	8.2
850	20	1,542	15.8	75	108	6.8
800	20	2,055	13.0	71	104	6.2
750	20	2,594	10.0	67	127	4.3
700	20	3,168	7.1	62	148	3.9
650	20	3,770	3.6	56	156	2.7
600	20	4,421	.6	48	133	2.7
550	20	5,102	- 3.4	41	138	1.2
500	20	5,863	- 8.2	37	318	2.9
450	20	6,668	-13.6	35	284	5.4
400	20	7,561	-19.3	32	260	10.1
350	20	8,540	-26.2	35	264	14.4
300	20	9,638	-34.5	33	255	20.4
250	20	10,886	-44.7		260	30.9
200	20	12,340	-56.8		262	35.2
175	20	13,175	-62.6		268	33.8
150	20	14,117	-67.1		275	30.9
125	20	15,207	-70.6		284	21.4
100	19	16,526	-71.3		321	5.2
80	19	17,956	-68.3		95	8.4
70	19	18,662	-65.6		79	13.2
60	18	19,607	-62.7		84	22.7
50	18	20,740	-59.5		91	28.6
40	18	22,150	-55.8		100	32.1
30	18	24,001	-51.5		95	32.6
25	17	25,193	-48.5		92	30.3
20	16	26,680	-46.3		92	30.9
15	15	28,619	-42.7		86	32.8
10	13	31,373	-39.0		88	37.9
7	7	33,783	-35.1			
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KING SALMON, ALASKA
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	25	15	7.1	93	140	2.7
1000	25	94	7.3	89	140	3.7
950	25	518	6.8	78	130	5.8
900	25	960	4.8	78	109	6.2
850	25	1,424	2.3	81	107	8.2
800	25	1,912	- .4	82	118	9.5
750	25	2,429	- 3.2	73	119	11.3
700	25	2,970	- 6.4	72	116	12.4
650	25	3,547	- 9.7	66	113	11.8
600	25	4,160	-13.4	61	107	12.6
550	25	4,815	-17.6	53	109	12.4
500	25	5,525	-22.2	48	112	13.2
450	25	6,287	-27.5	47	109	12.8
400	25	7,129	-33.9	45	111	12.6
350	25	8,051	-40.9	42	114	13.2
300	25	9,083	-48.3		119	11.7
250	25	10,264	-54.8		129	10.1
200	25	11,702	-49.9		133	6.6
175	25	12,579	-48.0		134	5.6
150	25	13,595	-48.1		138	6.4
125	25	14,795	-48.7		138	6.6
100	25	16,260	-49.1		146	5.1
80	25	17,723	-49.3		136	6.0
70	25	18,598	-49.3		129	5.6
60	25	19,609	-49.2		119	6.4
50	25	20,806	-49.0		108	7.2
40	25	22,272	-48.4		103	8.2
30	24	24,165	-47.5		94	12.2
25	24	25,373	-46.5		90	12.4
20	24	26,859	-45.0		90	15.5
15	20	28,787	-41.9		89	20.0
10	20	31,563	-37.2		91	19.8
7	13	34,058	-32.0			
5	7	36,438	-28.3			

+ KOROR, CAROLINE IS.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	30	28.1	81	130	1.4
1000	30	99	27.2	77	104	1.7
950	30	547	23.4	75	135	2.7
900	30	1,022	20.7	71	127	3.9
850	30	1,515	18.1	68	119	5.1
800	30	2,033	15.5	64	104	6.4
750	30	2,578	12.6	60	98	7.2
700	30	3,155	9.4	59	103	8.0
650	30	3,764	5.9	57	97	9.1
600	30	4,418	2.1	54	98	9.9
550	30	5,113	- 1.6	51	103	9.7
500	30	5,871	- 5.6	44	102	10.1
450	30	6,688	-10.4	42	101	11.5
400	30	7,589	-15.9	36	95	10.5
350	30	8,582	-22.8	31	87	12.4
300	30	9,694	-31.2	26	88	13.0
250	30	10,959	-41.3		81	13.6
200	30	12,433	-53.7		84	14.6
175	30	13,277	-60.9		80	15.2
150	30	14,218	-68.4		66	13.8
125	30	15,292	-75.3		71	14.6
100	30	16,573	-77.7		78	12.0
80	30	17,855	-75.6		77	24.3
70	30	18,631	-71.8		89	29.9
60	29	19,554	-66.3		93	28.4
50	29	20,671	-62.0		91	25.1
40	29	22,068	-57.0		88	22.0
30	29	23,911	-51.9		95	12.8
25	28	25,099	-49.6		98	11.3
20	26	26,570	-46.6		96	14.2
15	14	28,484	-43.2		117	16.5
10	7	31,211	-40.9			

KOTZEBUE, ALASKA
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	2.2	89	284	4.9
1000	30	96	5.0	81	285	5.8
950	30	516	6.9	66	263	6.2
900	30	962	5.4	62	243	7.2
850	30	1,427	3.2	62	234	7.6
800	30	1,917	.8	57	228	8.2
750	30	2,433	- 2.1	59	237	8.9
700	30	2,978	- 5.2	55	235	9.3
650	30	3,553	- 8.8	52	233	9.3
600	30	4,173	-12.7	47	236	9.7
550	30	4,828	-17.1	40	242	7.4
500	30	5,540	-22.0	40	239	8.7
450	30	6,303	-27.7	40	229	9.7
400	30	7,143	-34.1	39	234	9.9
350	30	8,064	-40.9	34	238	10.7
300	30	9,097	-48.2		243	11.3
250	30	10,281	-53.7		260	9.7
200	30	11,724	-49.9		257	5.6
175	30	12,601	-48.0		265	4.5
150	30	13,618	-47.6		255	2.9
125	30	14,821	-48.2		230	1.6
100	30	16,291	-48.4		111	.4
80	30	17,761	-47.7		110	2.1
70	30	18,643	-47.3		97	3.1
60	30	19,665	-46.7		80	4.9
50	30	20,875	-46.1		91	8.4
40	29	22,362	-45.3		91	9.5
30	29	24,286	-44.3		81	13.2
25	27	25,511	-43.4		89	16.1
20	26	27,019	-41.6		89	18.1
15	25	28,983	-38.7		86	17.7
10	21	31,797	-34.1		86	23.5
7	15	34,325	-29.9		89	23.5
5	6	36,748	-26.1			

KWAJALEIN, MARSHALL IS.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	27.1	84	68	9.1
1000	30	103	26.4	85	70	10.7
950	30	555	23.4	88	77	13.2
900	30	1,026	20.7	83	83	13.2
850	30	1,520	18.1	76	89	12.6
800	30	2,037	15.8	74	90	12.0
750	30	2,583	13.3	62	87	12.6
700	30	3,163	10.2	58	87	12.6
650	30	3,774	6.6	64	86	12.6
600	30	4,427	2.7	65	89	12.8
550	30	5,125	- 1.0	52	93	13.2
500	30	5,883	- 5.6	53	89	13.[illegible]
450	30	6,698	-10.5	49	89	9.1
400	30	7,6[illegible]	-15.9	48	112	6.6
350	30	8,588	-23.0	47	121	3.3
300	30	9,705	-31.2	43	193	2.7
250	30	10,969	-41.6		195	3.5
200	30	12,441	-54.3		229	5.6
175	30	13,278	-61.1		240	5.8
150	30	14,223	-68.8		249	7.0
125	30	15,287	-76.1		210	6.2
100	28	16,564	-79.2		117	8.5
80	25	17,836	-75.1		93	21.4
70	25	18,618	-71.8		93	25.1
60	23	19,536	-67.0		86	25.1
50	23	20,654	-62.7		82	24.3
40	21	22,040	-58.4		82	22.9
30	20	23,885	-52.4		90	16.3
25	20	25,065	-50.2		80	12.2
20	19	26,533	-46.8		87	11.8
15	16	28,454	-45.2		84	16.3
10	13	31,177	-43.2		96	29.1
7	6	33,601	-37.4			

LAKE CHARLES, LA.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	21.7	89	61	2.3
1000	30	144	22.9	82	108	3.1
950	30	590	20.8	73	163	5.6
900	30	1,057	18.0	69	160	6.2
850	30	1,545	15.8	57	164	5.8
800	30	2,058	13.3	52	173	3.5
750	30	2,599	10.5	45	136	.8
700	30	3,171	7.2	45	76	1.2
650	30	3,776	3.7	46	19	1.4
600	30	4,423	- .2	37	27	3.3
550	30	5,111	- 4.3	37	5	3.5
500	30	5,860	- 9.0	31	353	5.4
450	30	6,664	-14.4	26	340	7.2
400	30	7,552	-20.2	24	330	11.1
350	30	8,527	-27.4	25	323	15.5
300	30	9,618	-35.7	25	324	21.0
250	30	10,862	-44.9		322	28.2
200	30	12,319	-55.2		324	32.8
175	30	13,161	-59.9		320	32.6
150	30	14,115	-63.5		313	34.6
125	30	15,226	-66.6		308	24.1
100	30	16,568	-68.1		324	12.4
80	30	17,911	-66.2		45	6.4
70	30	18,724	-63.2		69	9.7
60	30	19,678	-60.6		76	14.8
50	30	20,818	-57.9		84	20.2
40	30	22,234	-54.8		88	22.9
30	29	24,087	-51.1		87	25.3
25	28	25,281	-48.5		88	27.8
20	27	26,755	-46.0		87	29.9
15	16	28,679	-43.4		82	30.5
10	6	31,445	-40.2			
7						
5						

LANDER, WYO.
829 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,696	10.7	61	250	2.9
1000	30	101				
950	30	542				
900	30	1,001				
850	30	1,487				
800	30	1,995	12.4	47	297	2.9
750	30	2,528	9.6	46	271	4.3
700	30	3,103	6.0	46	260	7.8
650	30	3,701	1.9	47	263	13.2
600	30	4,347	- 2.9	47	260	19.0
550	30	5,022	- 8.2	50	257	23.5
500	30	5,763	-13.8	55	254	27.0
450	30	6,550	-19.6	47	254	29.3
400	30	7,422	-25.5	39	251	33.2
350	30	8,376	-33.0	36	252	37.7
300	30	9,442	-41.1	39	254	40.4
250	30	10,658	-49.6		256	49.5
200	30	12,095	-56.2		255	48.4
175	30	12,941	-57.2		253	46.2
150	30	13,918	-56.4		250	38.9
125	29	15,073	-57.1		251	26.8
100	29	16,479	-58.6		253	17.7
80	29	17,884	-57.4		243	7.6
70	29	18,728	-56.9		232	4.1
60	29	19,708	-55.5		153	2.3
50	29	20,874	-54.1		85	4.7
40	29	22,311	-52.6		93	8.5
30	28	24,177	-49.9		87	12.4
25	27	25,370	-48.7		82	13.4
20	26	26,845	-46.5		82	15.7
15	19	28,785	-42.6		86	16.3

LAS VEGAS, NEV.
934 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	660	22.6	22	223	6.6
1000	30	52				
950	30	500				
900	30	980	25.2	22	233	7.6
850	30	1,478	22.5	23	242	7.6
800	30	2,001	18.7	25	235	7.6
750	30	2,545	14.4	28	219	7.8
700	30	3,128	9.7	31	203	7.4
650	30	3,732	4.7	37	185	9.1
600	30	4,383	- .3	37	201	11.7
550	30	5,064	- 5.0	37	226	14.6
500	30	5,916	-10.0	34	237	15.5
450	30	6,613	-15.7	32	245	18.6
400	30	7,497	-22.4	33	252	20.4
350	30	8,462	-30.0	31	252	24.9
300	30	9,540	-38.4	28	255	28.2
250	30	10,768	-47.6		254	33.2
200	29	12,219	-55.6		252	42.2
175	29	13,063	-58.7		253	43.1
150	29	14,027	-60.6		251	39.8
125	29	15,154	-63.0		253	30.7
100	29	16,523	-63.5		251	16.3
80	29	17,898	-61.8		230	4.5
70	29	18,727	-60.2		166	1.9
60	29	19,692	-57.8		97	4.5
50	28	20,851	-55.8		86	7.8
40	28	22,277	-53.8		85	10.3
30	28	24,139	-50.3		83	17.3
25	28	25,334	-48.2		86	19.2
20	27	26,811	-45.4		85	18.1
15	20	28,737	-41.9		85	18.6
10	8	31,496	-37.9			

• LIHUE, HAWAII
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	36	23.5	80	66	11.3
1000	29	164	22.7	80	68	13.6
950	29	600	19.2	89	74	17.3
900	29	1,073	16.0	88	77	17.7
850	29	1,558	13.1	88	77	16.7
800	29	2,067	11.4	54	82	17.5
750	29	2,601	11.1	30	87	17.9
700	29	3,190	9.5	21	93	15.2
650	29	3,786	6.3	21	95	13.4
600	29	4,442	2.3	23	91	11.3
550	29	5,131	- 2.3	23	88	9.5
500	29	5,889	- 7.5	27	109	6.4
450	29	6,697	-13.4	24	128	4.3
400	29	7,586	-19.8	25	211	5.2
350	29	8,562	-27.6	27	230	6.8
300	29	9,652	-35.8	24	247	9.7
250	29	10,893	-45.5		250	12.6
200	29	12,344	-56.3		250	16.7
175	29	13,182	-61.2		251	17.5
150	29	14,127	-66.0		256	20.2
125	29	15,224	-69.0		252	18.6
100	29	16,551	-70.6		235	7.4
80	29	17,875	-69.6		88	8.0
70	29	18,675	-66.8		85	16.3
60	29	19,612	-63.7		88	23.3
50	29	20,739	-60.7		88	29.1
40	29	22,136	-57.9		89	33.6
30	29	23,966	-54.1		88	39.2
25	29	25,144	-51.2		[illegible]	40.0
20	29	26,606	-47.9		88	40.2
15	28	28,521	-44.3		91	38.5
10	25	31,267	-40.2		89	39.8
7	23	33,715	-37.0		93	40.2
5	16	36,053	-35.1			

LITTLE ROCK, ARK.
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	79	19.2	86	212	1.9
1000	30	150	20.7	73	214	3.7
950	30	593	21.1	60	205	7.0
900	30	1,061	18.2	61	213	7.2
850	30	1,549	15.4	57	226	7.2
800	30	2,061	12.9	48	223	5.6
750	30	2,599	9.8	44	233	5.4
700	30	3,171	6.4	47	252	5.8
650	30	3,771	3.0	40	268	6.4
600	30	4,420	- 1.0	38	274	5.8
550	30	5,105	- 5.2	36	273	4.9
500	30	5,852	- 9.7	32	275	7.6
450	30	6,650	-15.2	31	277	9.[illegible]
400	30	7,538	-21.5	31	281	11.1
350	30	8,508	-28.6	28	294	12.0
300	30	9,594	-36.9	26	304	16.5
250	30	10,831	-46.3		309	23.3
200	30	12,279	-56.7		309	31.1
175	30	13,117	-60.7		309	31.3
150	30	14,070	-63.1		310	26.2
125	28	15,191	-64.8		310	21.4
100	28	16,548	-65.6		307	14.8
80	28	17,910	-63.3		342	4.[illegible]
70	28	18,735	-61.1		43	5.9
60	28	19,697	-58.8		78	9.1
50	28	20,847	-56.6		89	12.2
40	28	22,268	-54.3		90	15.5
30	28	24,128	-50.4		91	16.7
25	28	25,321	-48.4		90	18.3
20	26	26,793	-45.5		82	17.9
15	20	28,725	-42.2		85	18.6

MCGRATH, ALASKA
999 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	103	11.0	76	251	2.5
1000	29	92			235	3.1
950	29	520	12.0	58	269	3.1
900	29	973	9.1	59	235	2.3
850	29	1,443	5.6	65	199	3.3
800	29	1,936	1.9	75	191	4.7
750	29	2,450	- 1.7	81	174	5.6
700	29	3,000	- 4.7	70	163	4.7
650	29	3,576	- 8.2	64	155	2.9
600	29	4,198	-12.1	54	150	3.3
550	29	4,852	-16.3	50	138	3.1
500	29	5,570	-21.2	49	140	2.5
450	29	6,331	-26.9	50	128	4.3
400	29	7,177	-33.2	48	108	3.9
350	29	8,101	-40.6	56	130	2.9
300	29	9,133	-48.3		90	4.1
250	29	10,314	-54.9		57	3.5
200	29	11,752	-49.5		92	4.1
175	29	12,631	-47.8		93	4.1
150	28	13,647	-47.4		107	4.1
125	27	14,849	-47.5		114	3.3
100	26	16,319	-47.9		115	3.7
80	26	17,791	-47.7		103	3.9
70	26	18,673	-47.4		102	4.5
60	26	19,693	-47.0		98	5.2
50	26	20,902	-46.4		96	6.6
40	26	22,385	-45.6		88	8.9
30	26	24,308	-44.1		87	11.9
25	26	25,533	-42.9		86	15.3
20	26	27,043	-41.2		84	17.7
15	26	29,007	-38.5		86	19.8
10	16	31,807	-33.3		86	28.9
7						

+ MAJURO, MARSHALL IS.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	28.6	81	78	6.0
1000	30	102	27.2	76	77	7.4
950	30	549	23.4	74	83	9.9
900	30	1,026	20.8	71	93	10.7
850	30	1,519	18.3	67	98	11.5
800	30	2,038	16.1	59	96	12.2
750	30	2,583	13.5	52	95	12.8
700	30	3,163	10.1	51	96	14.2
650	30	3,773	6.5	50	98	12.8
600	30	4,429	3.0	50	95	13.6
550	30	5,121	- 1.0	47	94	14.6
500	30	5,885	- 5.1	40	95	14.0
450	30	6,700	- 9.8	35	96	12.6
400	30	7,608	-15.0	31	105	10.3
350	30	8,605	-21.7	27	100	7.4
300	30	9,723	-30.0	23	108	2.9
250	30	10,995	-40.2	22	147	2.3
200	30	12,477	-53.1		205	2.5
175	30	13,323	-60.3		235	2.1
150	30	14,268	-67.7		226	2.7
125	30	15,344	-75.0		130	3.5
100	30	16,622	-79.0		97	12.4
80	30	17,901	-74.2		92	23.7
70	30	18,684	-70.8		87	26.2
60	30	19,606	-66.0		89	26.8
50	30	20,727	-60.9		95	21.6
40	30	22,127	-56.8		100	14.2
30	29	23,974	-51.0		107	8.2
25	28	25,165	-48.4		109	7.2
20	24	26,642	-46.0		112	5.8
15	16	28,572	-43.0		104	12.0
10	5	31,332	-40.9			

+ MARCUS IS., N. PACIFIC
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	9	28.5	74	174	1.7
1000	30	131	26.6	70	172	2.3
950	30	579	22.3	68	190	3.9
900	30	1,051	19.5	60	205	3.9
850	30	1,542	17.2	52	214	4.7
800	30	2,058	15.3	41	227	4.3
750	30	2,601	12.7	36	224	4.5
700	30	3,179	9.6	32	229	4.7
650	30	3,787	6.1	32	241	5.2
600	30	4,442	2.2	32	239	5.8
550	30	5,135	- 2.1	30	246	5.1
500	30	5,890	- 6.8	30	268	4.7
450	30	6,699	-11.6	27	280	3.7
400	30	7,598	-17.5	26	326	1.9
350	30	8,585	-24.4	24	355	2.3
300	30	9,690	-32.8	23	16	4.1
250	30	10,945	-43.0		46	6.2
200	30	12,411	-55.0		40	8.4
175	30	13,252	-61.3		27	9.5
150	30	14,194	-67.7		24	10.7
125	30	15,276	-72.2		16	9.9
100	30	16,588	-72.0		46	6.8
80	30	17,913	-68.4		79	8.9
70	30	18,719	-65.0		83	13.2
60	30	19,665	-62.2		88	19.8
50	30	20,798	-59.7		94	25.1
40	29	22,208	-55.7		91	30.7
30	24	24,052	-51.5		96	37.7
25	23	25,242	-48.8		95	38.5
20	16	26,711	-46.2		98	38.9
15	5	28,620	-42.7			

• MEDFORD, OREG.
970 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	401	10.8	74	291	1.2
1000	30	148				
950	30	582	12.3	66	300	2.7
900	30	1,031	10.5	69	313	3.1
850	30	1,506	8.2	72	323	1.2
800	30	2,005	6.0	60	258	2.7
750	30	2,529	3.9	44	259	7.6
700	30	3,090	.7	39	251	12.2
650	30	3,678	- 2.9	37	252	15.3
600	30	4,311	- 6.7	30	253	19.8
550	30	4,979	-10.9	32	254	22.3
500	30	5,712	-15.4	32	258	26.4
450	30	6,496	-20.5	32	262	32.2
400	30	7,363	-26.9	39	262	35.2
350	30	8,313	-33.8	36	263	38.7
300	30	9,377	-41.5	39	263	41.5
250	30	10,592	-49.7		267	43.5
200	30	12,029	-56.6		266	44.9
175	30	12,874	-57.4		260	41.8
150	30	13,849	-56.3		258	37.7
125	30	15,009	-56.2		256	29.1
100	30	16,424	-56.6		256	18.5
80	30	17,839	-56.6		249	8.9
70	30	18,685	-56.4		243	5.4
60	30	19,665	-55.6		240	1.4
50	30	20,829	-54.4		73	2.3
40	30	22,264	-52.5		91	7.0
30	29	24,130	-50.1		87	10.9
25	29	25,325	-48.2		81	11.5
20	28	26,802	-45.6		84	12.8
15	26	28,735	-42.2		84	13.0
10	25	31,511	-37.1		90	15.0
7	15	33,994	-31.8		91	17.7

MERIDA, MEXICO
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	11	22.5	98	90	4.9
1000	30	130	24.0	94	99	8.9
950	30	581	22.7	82	107	12.6
900	30	1,051	20.3	73	106	12.0
850	30	1,544	17.6	68	105	11.7
800	30	2,060	14.8	64	107	10.7
750	30	2,597	11.9	57	108	8.7
700	30	3,179	8.7	51	107	8.0
650	30	3,781	5.2	49	96	5.8
600	30	4,438	1.8	43	66	5.1
550	30	5,121	- 2.1	36	31	6.4
500	30	5,887	- 6.4	36	12	5.[illegible]
450	30	6,697	-11.3	29	348	7.0
400	30	7,599	-17.3	27	331	9.7
350	30	8,587	-23.8	22	312	13.9
300	30	9,693	-32.0	20	304	16.3
250	30	10,953	-41.9		290	20.2
200	30	12,425	-53.7		291	22.7
175	30	13,270	-60.1		300	22.9
150	29	14,218	-66.3		304	20.8
125	29	15,304	-72.3		303	14.6
100	29	16,605	-74.2		12	10.7
80	29	17,917	-70.2		83	18.8
70	29	18,717	-66.8		93	21.6
60	29	19,655	-63.2		90	25.8
50	28	20,787	-59.6		89	31.3
40	27	22,193	-55.9		97	36.7
30	27	24,040	-51.5		98	36.7
25	26	25,230	-48.5		94	37.3
20	24	26,710	-44.9		92	37.3
15	19	28,648	-42.[illegible]		88	38.3

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1966

Standard pressure surface (mb.)	* MIAMI, FLA. 1015 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	29	4	23.6	94	104	3.3
1000	29	134	24.4	87	106	6.0
950	29	582	21.7	84	125	11.1
900	29	1,052	18.8	80	130	10.1
850	29	1,541	15.8	79	135	8.4
800	29	2,055	12.9	74	148	7.8
750	29	2,596	10.2	67	162	6.6
700	29	3,168	7.2	61	178	6.4
650	29	3,770	3.7	52	185	6.8
600	29	4,421	.1	48	183	6.0
550	29	5,108	- 3.7	46	204	5.1
500	29	5,861	- 8.3	45	225	5.2
450	28	6,666	-13.1	39	244	7.0
400	28	7,560	-19.1	41	254	10.7
350	28	8,540	-25.9	39	253	15.5
300	28	9,638	-34.4	37	251	24.1
250	28	10,887	-44.2		253	32.4
200	27	12,345	-56.0		251	42.0
175	25	13,183	-62.2		256	41.4
150	25	14,123	-67.1		262	36.3
125	25	15,214	-69.8		270	21.8
100	25	16,539	-70.4		298	4.7
80	24	17,871	-67.8		73	8.0
70	24	18,678	-65.4		72	13.2
60	24	19,625	-62.1		78	22.7
50	23	20,760	-59.1		91	27.8
40	21	22,175	-55.8		96	31.7
30	19	24,024	-51.7		97	32.4
25	15	25,209	-49.6		90	31.7
20	14	26,682	-45.7		87	34.2
15	13	28,617	-42.8		86	31.7
10	5	31,351	-40.2			
7						

Standard pressure surface (mb.)	* MIDLAND, TEXAS 915 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	874	19.9	77	153	6.4
1000	30	100				
950	30	548				
900	30	1,020	19.6	73	163	12.4
850	30	1,512	19.0	61	185	19.2
800	30	2,033	17.3	51	192	12.0
750	30	2,581	14.4	40	195	6.0
700	30	3,161	10.6	39	256	3.3
650	30	3,769	6.0	43	291	4.3
600	30	4,423	.8	53	306	6.2
550	30	5,109	- 4.0	49	292	7.0
500	30	5,863	- 8.6	39	276	9.9
450	30	6,666	-14.0	34	269	13.6
400	30	7,558	-19.9	35	271	14.4
350	30	8,534	-27.1	32	274	17.7
300	30	9,627	-35.3	34	269	25.1
250	30	10,872	-45.0		272	33.2
200	30	12,325	-55.8		275	42.9
175	30	13,165	-60.5		277	42.7
150	30	14,116	-64.5		279	36.9
125	30	15,220	-68.0		283	24.7
100	29	16,557	-68.4		283	11.7
80	29	17,900	-66.3		344	1.6
70	29	18,714	-63.0		80	6.6
60	29	19,671	-59.7		93	13.0
50	29	20,816	-57.6		89	17.7
40	29	22,234	-54.9		92	20.8
30	29	24,085	-51.5		85	22.1
25	29	25,275	-48.8		90	22.5
20	28	26,752	-45.8		90	24.7
15	28	28,682	-42.5		82	26.8
10	17	31,440	-38.5		91	29.1
7	[illegible]	33,909	-33.1			

Standard pressure surface (mb.)	MONTERREY, MEXICO 965 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	29	423	21.7	90	103	3.3
1000	29	113				
950	29	562	20.7	91	113	6.4
900	29	1,028	18.0	92	127	10.9
850	29	1,517	16.3	77	141	14.8
800	29	2,033	14.8	63	135	13.0
750	29	2,580	12.7	54	138	8.0
700	29	3,155	10.2	48	108	2.9
650	29	3,767	6.5	43	30	2.9
600	29	4,420	2.1	42	356	5.4
550	29	5,109	- 2.5	44	356	6.2
500	29	5,867	- 7.2	38	350	7.4
450	29	6,680	-12.0	38	342	8.4
400	29	7,574	-17.8	32	313	9.1
350	29	8,560	-24.8	25	301	13.6
300	29	9,663	-33.3	26	297	20.2
250	29	10,918	-43.3		299	23.7
200	29	12,385	-54.5		295	30.3
175	29	13,228	-60.6		297	32.4
150	28	14,176	-66.1		295	26.2
125	28	15,268	-71.3		299	15.9
100	27	16,581	-72.7		337	6.4
80	27	17,899	-69.6		51	8.5
70	27	18,703	-65.0		75	15.0
60	26	19,651	-62.5		85	20.8
50	25	20,783	-59.7		83	24.3
40	24	22,192	-55.7		83	28.7
30	24	24,041	-51.6		86	32.2
25	24	25,230	-49.4		87	31.7
20	21	26,708	-46.5		83	34.6
15	9	28,651	-43.3			
10						
7						

Standard pressure surface (mb.)	MONTGOMERY, ALA. 1011 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	61	18.9	90	26	2.3
1000	30	156	20.4	80	53	2.5
950	30	601	20.6	64	91	4.3
900	30	1,067	17.9	61	84	3.9
850	30	1,554	14.7	61	61	4.7
800	30	2,065	12.1	54	58	4.3
750	30	2,601	9.6	45	54	3.9
700	30	3,173	6.2	46	36	3.9
650	30	3,776	3.4	37	26	4.7
600	30	4,423	- .2	32	12	4.1
550	30	5,109	- 4.5	31	358	3.9
500	30	5,859	- 8.9	27	356	4.3
450	30	6,665	-14.2	27	352	4.1
400	30	7,551	-20.5	30	335	3.5
350	30	8,525	-27.9	30	324	5.6
300	30	9,613	-36.2	27	316	8.7
250	30	10,852	-45.9		305	10.7
200	30	12,302	-56.5		299	14.4
175	30	13,140	-60.7		299	14.8
150	30	14,094	-62.5		289	15.2
125	30	15,215	-63.8		294	16.3
100	29	16,580	-64.9		309	9.9
80	29	17,942	-63.7		18	2.9
70	29	18,764	-61.3		58	5.2
60	29	19,726	-59.0		74	11.1
50	29	20,874	-57.1		83	15.7
40	29	22,295	-53.8		88	19.6
30	29	24,158	-49.9		89	21.6
25	29	25,357	-47.2		89	24.3
20	26	26,842	-44.3		86	26.0
15	15	28,771	-40.7		89	21.2
10						
7						

Standard pressure surface (mb.)	* NANTUCKET, MASS. 1016 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	14	15.4	87	239	4.3
1000	30	144	15.8	77	242	5.8
950	30	580	17.1	59	278	8.5
900	30	1,042	14.5	60	278	9.3
850	30	1,523	11.5	61	278	10.7
800	30	2,028	8.9	53	280	13.2
750	30	2,555	6.1	48	277	15.2
700	30	3,122	2.7	46	272	17.3
650	30	3,713	- .6	45	269	18.6
600	30	4,353	- 4.1	37	267	19.8
550	30	5,028	- 7.4	32	265	20.6
500	30	5,772	-11.9	30	260	23.3
450	30	6,563	-17.1	28	260	25.6
400	30	7,445	-23.2	27	258	28.9
350	30	8,408	-30.2	26	254	29.9
300	30	9,487	-38.2	27	253	31.7
250	30	10,718	-47.2		257	32.6
200	30	12,161	-56.9		263	35.0
175	30	12,999	-60.4		265	33.6
150	30	13,960	-59.8		270	26.4
125	30	15,101	-59.2		272	18.8
100	30	16,499	-58.8		271	13.2
80	29	17,904	-57.3		272	6.6
70	29	18,749	-56.3		275	2.9
60	29	19,731	-55.3		96	1.0
50	29	20,898	-53.7		77	4.1
40	29	22,338	-51.8		85	7.0
30	28	24,210	-49.3		89	8.5
25	27	25,405	-47.5		93	10.1
20	26	26,890	-44.8		84	12.2
15	24	28,824	-41.5		93	10.7
10	13	31,598	-35.3		99	12.4
7						

Standard pressure surface (mb.)	* NASHVILLE, TENN. 998 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	29	177	17.7	87	79	1.2
1000	29	163			115	1.4
950	29	608	20.4	57	207	3.5
900	29	1,070	17.5	57	213	5.6
850	29	1,555	14.1	60	243	4.5
800	29	2,064	10.7	57	271	4.5
750	29	2,597	8.1	41	283	5.6
700	29	3,166	5.4	32	288	5.6
650	29	3,763	1.8	38	294	6.4
600	29	4,408	- 1.6	33	295	7.0
550	29	5,089	- 5.6	29	292	7.8
500	28	5,836	-10.0	28	293	8.7
450	28	6,636	-15.5	25	285	9.3
400	28	7,519	-21.8	25	291	10.5
350	28	8,487	-28.9	26	293	10.7
300	28	9,571	-37.4	27	285	10.7
250	28	10,803	-47.3		285	14.2
200	27	12,249	-57.4		297	15.0
175	27	13,083	-61.3		295	16.7
150	26	14,039	-62.8		302	14.0
125	26	15,160	-63.1		304	11.7
100	26	16,534	-62.7		313	8.9
80	26	17,910	-61.6		347	3.5
70	26	18,741	-59.7		42	5.4
60	26	19,709	-57.6		73	9.9
50	25	20,862	-55.7		83	11.8
40	25	22,290	-53.2		86	12.8
30	25	24,154	-49.9		90	17.3
25	23	25,345	-47.8		87	17.1
20	22	26,829	-44.7		88	18.1
15	17	28,742	-41.8		93	17.3
10	13	31,496	-37.4			
7						

Standard pressure surface (mb.)	NOME, ALASKA 1011 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	7	4.5	88	298	2.9
1000	30	96	6.1	82	293	1.9
950	30	517	6.5	76	233	1.9
900	30	960	5.3	67	206	4.1
850	30	1,426	3.5	65	202	5.1
800	30	1,916	1.5	62	202	6.6
750	30	2,429	- 1.3	62	204	6.8
700	30	2,981	- 4.5	57	207	7.0
650	30	3,556	- 8.0	54	204	6.2
600	30	4,178	-12.0	54	214	6.0
550	30	4,829	-16.5	54	211	4.9
500	30	5,549	-21.4	50	223	5.1
450	30	6,307	-27.2	47	220	4.9
400	30	7,155	-33.3	42	224	6.6
350	30	8,080	-40.3	40	238	7.4
300	30	9,114	-47.8		247	7.0
250	30	10,297	-54.5		259	3.5
200	30	11,734	-50.3		185	1.2
175	30	12,610	-48.1		99	.8
150	30	13,627	-47.9		107	1.7
125	30	14,829	-48.3		101	2.3
100	30	16,297	-48.6		94	5.1
80	30	17,766	-48.3		119	5.1
70	30	18,646	-47.8		99	5.6
60	30	19,665	-47.2		97	6.6
50	30	20,873	-46.6		97	7.8
40	30	22,356	-45.8		92	10.5
30	30	24,277	-44.5		88	12.0
25	29	25,501	-43.6		86	16.7
20	29	27,007	-41.9		89	19.0
15	27	28,973	-38.8		87	21.4
10	19	31,779	-34.3			
7						

Standard pressure surface (mb.)	* NORTH PLATTE, NEBR. 917 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	848	14.6	83	133	2.3
1000	30	102				
950	30	544				
900	30	1,003	15.9	73	148	4.3
850	30	1,490	16.1	55	201	6.2
800	30	2,004	14.1	47	204	5.4
750	30	2,545	10.7	51	204	7.4
700	30	3,116	6.7	52	225	7.6
650	30	3,717	2.6	54	248	12.0
600	30	4,363	- 1.8	56	253	15.2
550	30	5,046	- 6.6	50	252	19.8
500	30	5,787	-12.0	48	261	23.5
450	30	6,581	-17.3	41	256	26.4
400	30	7,459	-23.4	37	258	27.6
350	30	8,422	-30.6	33	258	31.1
300	30	9,497	-39.2	32	258	33.8
250	30	10,721	-48.5		258	39.8
200	30	12,158	-57.5		258	40.8
175	30	12,996	-59.4		258	41.0
150	30	13,962	-59.1		259	38.5
125	30	15,101	-60.1		268	27.4
100	30	16,490	-61.2		267	15.3
80	30	17,879	-59.5		263	7.4
70	30	18,717	-58.1		270	2.1
60	30	19,692	-56.3		51	2.1
50	30	20,855	-54.6		77	5.1
40	30	22,289	-52.9		85	8.9
30	29	24,153	-50.5		91	11.5
25	29	25,347	-48.6		89	13.2
20	28	26,826	-46.1		83	13.8
15	25	28,765	-42.4		82	13.0
10	8	31,506	-38.4			
7						

Standard pressure surface (mb.)	* OAKLAND, CALIF. 1014 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	6	14.7	76	269	2.3
1000	30	118	13.3	80	258	2.9
950	30	555	14.9	58	296	6.6
900	30	1,011	17.0	34	317	10.9
850	30	1,496	15.1	30	313	9.9
800	30	2,007	12.6	27	300	9.1
750	30	2,539	9.4	29	293	9.3
700	30	3,114	6.1	26	283	10.5
650	30	3,712	2.3	27	277	13.2
600	30	4,359	- 2.1	30	275	16.3
550	30	5,036	- 6.5	36	275	19.2
500	30	5,784	-11.7	34	271	21.0
450	30	6,575	-17.6	34	271	26.0
400	30	7,456	-24.1	34	269	27.6
350	30	8,416	-31.3	30	268	32.1
300	29	9,492	-39.7	28	266	32.1
250	29	10,714	-49.0		267	34.8
200	28	12,145	-57.4		266	34.4
175	28	12,985	-59.2		263	36.1
150	28	13,950	-59.3		257	34.6
125	28	15,090	-60.3		255	29.5
100	27	16,474	-60.9		259	19.6
80	27	17,864	-59.9		239	7.0
70	27	18,699	-58.9		220	1.9
60	27	19,668	-57.8		84	5.1
50	27	20,821	-56.2		87	8.0
40	27	22,244	-54.3		84	10.5
30	26	24,098	-51.3		86	14.0
25	25	25,292	-49.1		87	15.5
20	25	26,765	-46.2		86	14.8
15	23	28,689	-42.6		83	15.9
10	22	31,455	-37.5		89	17.3
7	10	33,909	-33.1			

Standard pressure surface (mb.)	OKLAHOMA CITY, OKLA. 969 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	392	19.2	80	152	5.8
1000	30	121				
950	30	565	20.4	69	174	13.2
900	30	1,032	19.2	64	199	20.8
850	30	1,523	17.1	65	211	16.7
800	30	2,038	14.4	57	219	11.8
750	30	2,581	11.0	56	240	7.8
700	30	3,155	7.8	45	250	7.4
650	30	3,757	4.2	43	236	7.4
600	30	4,409	.1	38	251	8.0
550	30	5,092	- 4.6	39	265	9.9
500	30	5,843	- 9.6	35	259	11.8
450	30	6,646	-14.9	30	261	13.6
400	30	7,530	-21.0	33	272	16.3
350	30	8,503	-28.1	32	282	18.5
300	30	9,591	-36.5	34	284	23.5
250	30	10,830	-46.2		280	28.7
200	30	12,279	-56.2		278	36.7
175	30	13,119	-60.6		282	38.9
150	30	14,071	-63.2		288	39.4
125	30	15,189	-64.4		292	25.8
100	30	16,548	-65.3		286	13.6
80	30	17,910	-63.0		309	5.4
70	30	18,736	-60.5		35	4.5
60	30	19,700	-58.5		79	9.4
50	30	20,852	-56.1		90	12.6
40	30	22,277	-53.7		92	16.1
30	29	24,133	-50.2		84	17.9
25	28	25,326	-48.1		83	18.1
20	28	26,806	-45.3		83	19.0
15	22	28,740	-41.8		86	16.5
10	[illegible]	31,455	-38.6			
7						

Standard pressure surface (mb.)	OMAHA, NEBR. 968 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	403	17.0	80	153	4.3
1000	30	122				
950	30	560	18.0	70	179	7.6
900	30	1,025	17.8	58	216	12.0
850	30	1,512	15.3	55	234	10.5
800	30	2,024	12.2	59	250	8.9
750	30	2,555	8.7	60	249	10.7
700	30	3,129	5.3	52	256	12.2
650	30	3,723	1.5	46	261	13.4
600	30	4,371	- 2.5	41	271	16.1
550	30	5,048	- 7.1	41	271	19.2
500	30	5,792	-12.0	38	269	21.4
450	30	6,582	-17.4	34	266	23.9
400	30	7,463	-23.4	29	265	28.4
350	30	8,426	-30.5	29	266	31.7
300	30	9,504	-38.5	30	267	34.6
250	30	10,732	-48.1		266	37.1
200	30	12,171	-57.0		267	40.2
175	30	13,010	-59.8		268	39.8
150	30	13,974	-59.1		271	35.0
125	29	15,116	-60.6		279	25.3
100	29	16,503	-61.1		279	17.5
80	29	17,892	-59.8		294	6.6
70	29	18,729	-58.4		337	3.1
60	29	19,702	-56.4		53	2.9
50	29	20,863	-54.7		68	5.8
40	29	22,297	-52.8		83	8.0
30	29	24,165	-50.3		86	9.3
25	29	25,359	-48.6		91	10.5
20	26	26,834	-46.0		87	10.1
15	18	28,761	-43.1		68	9.3
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Standard pressure surface (mb.)	PAGO PAGO AMERICAN SAMOA + 1013 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	5	28.1	77	107	10.7
1000	30	121	26.7	74	108	12.2
950	30	571	22.6	77	101	16.1
900	30	1,042	19.4	75	93	15.7
850	30	1,533	16.6	70	88	13.6
800	30	2,049	15.1	57	80	8.2
750	30	2,594	13.1	49	62	4.9
700	30	3,173	10.3	44	41	3.7
650	30	3,783	6.9	42	40	3.9
600	30	4,440	3.0	39	34	3.5
550	30	5,134	- 1.1	38	34	3.1
500	30	5,895	- 5.6	34	327	2.5
450	30	6,710	-10.4	33	302	4.9
400	30	7,613	-15.8	29	286	8.2
350	30	8,607	-22.4	27	286	12.0
300	30	9,721	-30.9	27	280	17.9
250	30	10,988	-40.9	32	285	20.8
200	30	12,466	-53.0		287	24.5
175	30	13,313	-59.5		285	24.5
150	30	14,261	-66.6		271	21.8
125	30	15,344	-73.7		272	16.5
100	30	16,630	-77.9		292	8.5
80	30	17,915	-74.6		33	1.4
70	30	18,697	-70.9		63	3.1
60	30	19,622	-65.9		76	4.9
50	29	20,741	-61.1		45	3.7
40	26	22,137	-57.7		16	3.5
30	24	23,975	-52.5		280	9.9
25	19	25,159	-50.3		275	15.2
20	9	26,634	-46.8			
15	5	28,536	-44.3			
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Standard pressure surface (mb.)	* PEORIA, ILL. 994 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	200	16.6	80	166	2.1
1000	30	145				
950	30	587	19.3	54	240	8.4
900	30	1,049	16.5	54	253	8.5
850	30	1,533	13.2	55	260	9.1
800	30	2,041	10.2	53	255	11.1
750	30	2,577	7.6	49	255	12.4
700	30	3,141	4.7	44	263	11.8
650	30	3,739	1.3	41	270	14.0
600	30	4,382	- 2.3	36	270	15.3
550	30	5,063	- 6.6	35	271	17.7
500	30	5,806	-11.3	34	267	19.6
450	30	6,601	-16.8	34	270	21.4
400	30	7,480	-23.0	31	272	22.3
350	30	8,444	-30.1	30	275	24.9
300	30	9,523	-38.5	30	274	27.8
250	30	10,752	-47.6		280	29.3
200	29	12,200	-56.6		283	31.3
175	29	13,042	-59.0		283	31.1
150	29	14,007	-59.7		285	27.2
125	29	15,146	-59.7		286	19.4
100	29	16,540	-60.0		287	13.4
80	29	17,934	-58.8		313	4.1
70	29	18,774	-57.3		12	2.7
60	29	19,753	-55.6		63	4.9
50	29	20,918	-54.1		81	8.0
40	29	22,355	-52.0		88	11.3
30	28	24,229	-49.0		85	13.2
25	28	25,428	-47.7		84	13.4
20	28	26,910	-44.9		84	12.8
15	27	28,850	-41.2		82	12.8
10	25	31,636	-35.8		96	15.0
7	14	34,150	-30.8			
5						
4						

Standard pressure surface (mb.)	* PITTSBURGH, PA. 977 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	353	15.7	81	263	1.7
1000	30	158				
950	30	595	18.0	55	263	4.7
900	30	1,058	15.5	53	281	8.5
850	30	1,540	12.1	55	284	11.3
800	30	2,045	8.8	54	281	12.6
750	30	2,575	5.6	55	281	14.4
700	30	3,138	2.5	48	282	13.8
650	30	3,730	- .5	42	286	14.4
600	30	4,370	- 3.8	36	289	15.5
550	30	5,046	- 7.8	34	286	15.0
500	30	5,787	-12.3	31	288	17.7
450	30	6,579	-17.6	26	289	19.4
400	30	7,457	-23.7	24	288	20.8
350	30	8,419	-30.9	22	286	22.9
300	30	9,494	-39.0	20	284	24.7
250	30	10,720	-48.0		283	26.6
200	30	12,161	-57.0		284	28.2
175	30	13,000	-60.0		285	28.6
150	30	13,961	-60.1		283	22.3
125	30	15,098	-59.9		278	17.1
100	30	16,491	-59.8		285	9.7
80	30	17,890	-58.6		311	4.1
70	30	18,731	-57.2		357	2.5
60	30	19,707	-55.6		73	4.9
50	30	20,874	-54.0		80	5.8
40	30	22,311	-52.4		86	7.2
30	30	24,183	-49.6		81	7.2
25	30	25,381	-48.0		83	9.5
20	30	26,863	-45.1		83	9.9
15	29	28,803	-41.2		80	12.0
10	26	31,576	-36.7		90	13.4
7	17	34,030	-32.0		97	13.8
5	12	36,393	-27.4			
4	6	37,979	-21.7			

Standard pressure surface (mb.)	PONAPE, CAROLINE IS. + 1006 MB				Wind	
	Number of observations	Dynamic height	Temperature	Relative humidity	Direction	Speed
SURFACE	30	39	29.0	78	66	5.4
1000	30	91	28.3	76	68	6.4
950	30	540	24.3	71	85	10.5
900	30	1,017	21.0	69	92	12.0
850	30	1,511	18.5	64	95	12.4
800	30	2,029	15.9	58	96	12.0
750	30	2,573	13.2	54	96	11.3
700	30	3,154	10.0	53	97	11.5
650	30	3,763	6.6	50	96	12.6
600	30	4,420	3.1	45	93	14.4
550	30	5,116	- .9	42	95	13.6
500	30	5,876	- 5.2	42	97	12.2
450	30	6,692	- 9.9	39	95	11.7
400	30	7,598	-15.3	32	101	9.1
350	30	8,594	-21.9	27	100	7.0
300	30	9,710	-30.3	23	92	5.2
250	30	10,980	-40.6	22	101	4.5
200	30	12,460	-53.2		97	5.4
175	30	13,306	-60.3		107	7.6
150	29	14,250	-67.9		100	7.0
125	29	15,325	-75.3		97	8.2
100	29	16,604	-78.2		90	10.7
80	28	17,989	-74.3		95	21.6
70	28	18,672	-70.7		91	23.9
60	28	19,596	-65.9		90	24.9
50	28	20,715	-61.3		90	21.8
40	25	22,110	-57.4		92	18.5
30	23	23,957	-51.4		103	9.5
25	23	25,149	-48.7		113	7.6
20	20	26,625	-45.6		110	9.7
15	14	28,562	-43.0		103	15.2
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

PORTLAND, ME. 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	20	15.7	83	313	2.1
1000	30	143	15.5	68	294	3.5
950	30	578	15.4	60	297	5.8
900	30	1,036	13.0	59	285	7.2
850	30	1,515	10.7	56	285	11.3
800	30	2,018	7.8	54	283	13.8
750	30	2,548	4.9	52	279	15.2
700	30	3,108	1.7	51	286	16.3
650	30	3,697	-1.5	46	282	20.8
600	30	4,337	-5.5	45	280	22.3
550	30	5,006	-9.4	39	279	24.3
500	30	5,746	-13.8	32	275	27.6
450	30	6,533	-18.8	30	270	28.6
400	30	7,409	-24.7	31	267	31.7
350	30	8,369	-31.3	30	260	37.3
300	30	9,443	-39.3	26	258	40.2
250	30	10,669	-48.0		259	41.2
200	30	12,112	-56.4		268	41.4
175	30	12,955	-58.1		269	36.3
150	30	13,927	-58.0		268	27.8
125	30	15,078	-57.4		269	22.1
100	30	16,487	-57.4		278	14.8
80	30	17,898	-56.5		289	4.9
70	30	18,748	-55.1		293	2.7
60	30	19,733	-54.3		27	1.7
50	30	20,904	-53.1		60	3.3
40	30	22,346	-51.7		79	5.6
30	30	24,223	-48.7		83	7.2
25	30	25,426	-46.8		86	7.6
20	23	26,903	-45.2		89	10.5
15	18	28,839	-41.9		88	14.4
10	12	31,611	-36.5		99	14.8
7	9	34,090	-31.7			
5	6	36,523	-28.1			

RAPID CITY, S. DAK. 903 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	966	13.4	69	286	1.9
1000	30	99				
950	30	535				
900	30	997			281	2.9
850	30	1,481	15.0	50	236	7.8
800	30	1,992	12.5	47	235	11.1
750	30	2,525	9.1	44	242	10.1
700	30	3,097	5.3	44	257	11.7
650	30	3,692	.8	44	259	14.6
600	30	4,335	-3.9	49	260	17.3
550	30	5,007	-9.2	55	262	19.6
500	30	5,744	-14.5	54	260	22.9
450	30	6,529	-19.9	46	258	28.6
400	30	7,398	-25.9	42	256	31.5
350	30	8,352	-32.8	34	258	36.1
300	30	9,419	-40.8	33	257	40.4
250	30	10,637	-49.4		253	42.9
200	30	12,072	-56.6		253	45.6
175	30	12,917	-56.9		255	42.9
150	30	13,896	-56.1		259	34.4
125	30	15,050	-57.7		261	26.0
100	30	16,456	-58.1		257	17.7
80	30	17,863	-57.6		254	8.0
70	30	18,706	-56.8		265	3.7
60	30	19,687	-55.5		8	.6
50	30	20,854	-53.8		93	2.1
40	29	22,295	-52.1		87	5.8
30	29	24,166	-50.0		81	9.3
25	28	25,361	-48.5		86	9.9
20	28	26,837	-46.1		86	10.5
15	20	28,765	-43.1		80	12.4
10	13	31,537	-38.4			
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5						

ST. CLOUD, MINN. 977 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	316	14.5	84	200	3.7
1000	30	116				
950	30	555	16.6	66	226	8.0
900	30	1,013	15.1	60	239	11.3
850	30	1,495	12.6	59	249	11.7
800	30	2,002	9.8	52	258	13.2
750	30	2,535	6.6	51	255	13.4
700	30	3,100	3.2	48	262	15.3
650	30	3,697	-.3	45	263	17.7
600	30	4,335	-4.1	38	265	18.8
550	30	5,009	-8.7	33	267	21.4
500	30	5,749	-13.4	32	267	24.3
450	30	6,536	-18.8	30	270	26.2
400	30	7,410	-25.1	32	270	28.7
350	30	8,367	-32.2	34	269	32.4
300	30	9,437	-40.2	33	265	32.8
250	30	10,656	-49.1		267	38.5
200	30	12,099	-55.6		270	38.1
175	30	12,946	-56.7		270	34.6
150	29	13,914	-56.7		270	31.1
125	29	15,070	-56.5		274	22.3
100	29	16,484	-56.8		274	15.5
80	29	17,897	-56.7		284	8.9
70	29	18,745	-55.6		293	5.6
60	29	19,731	-54.3		309	2.5
50	29	20,905	-52.4		65	2.7
40	29	22,350	-51.6		86	6.0
30	29	24,226	-49.4		85	8.0
25	29	25,425	-47.6		75	10.3
20	28	26,907	-45.5		88	12.6
15	19	28,820	-42.4		95	16.3
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ST. PAUL IS., ALASKA 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	10	3.9	94	52	2.1
1000	30	101	3.7	94	52	2.3
950	30	522	2.5	92	94	5.2
900	30	954	1.6	80	100	5.4
850	30	1,414	.2	63	109	6.2
800	30	1,898	-1.6	55	115	6.9
750	30	2,415	-3.8	52	112	8.0
700	30	2,953	-6.8	50	110	9.9
650	30	3,527	-9.9	49	111	10.7
600	30	4,142	-13.6	46	115	10.7
550	30	4,796	-17.9	37	116	11.5
500	30	5,505	-22.5	38	120	12.2
450	30	6,264	-28.1	38	117	13.2
400	30	7,107	-33.9	36	117	13.2
350	30	8,029	-40.9	33	117	13.8
300	30	9,060	-48.3		118	14.6
250	30	10,243	-54.3		107	16.1
200	30	11,683	-49.9		102	9.7
175	29	12,554	-47.8		107	9.3
150	29	13,572	-47.7		112	8.4
125	29	14,773	-48.5		117	6.6
100	29	16,238	-48.8		119	6.8
80	29	17,704	-48.9		116	5.8
70	29	18,580	-48.9		116	6.4
60	29	19,591	-48.8		112	6.8
50	29	20,790	-48.6		106	7.8
40	29	22,258	-48.4		101	8.7
30	29	24,156	-47.3		93	11.7
25	29	25,365	-46.4		95	13.6
20	28	26,856	-44.9		96	14.8
15	24	28,792	-42.2		93	17.3
10	17	31,537	-37.0		93	18.6
7	7	33,983	-34.3			
5						

SALEM, OREG. 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	61	10.5	84	208	1.9
1000	30	148	11.3	79	222	1.9
950	30	576	10.2	71	277	2.5
900	30	1,026	8.3	71	247	4.5
850	30	1,497	5.8	71	245	6.8
800	30	1,991	3.4	65	[illegible]	9.3
750	30	2,509	1.0	60	248	12.2
700	30	3,065	-2.0	50	247	13.8
650	30	3,646	-5.1	45	247	16.5
600	30	4,276	[illegible]	50	248	20.6
550	30	4,939	-13.2	52	250	22.3
500	30	5,666	-17.9	47	250	25.4
450	29	6,438	-23.2	47	250	28.6
400	29	7,297	-29.1	42	252	32.8
350	29	8,238	-35.3	30	258	36.9
300	29	9,295	-42.6	36	256	40.8
250	29	10,505	-50.1		258	44.5
200	29	11,940	-55.4		262	42.7
175	29	12,792	-54.8		259	38.9
150	29	13,779	-54.1		257	34.4
125	29	14,948	-54.0		256	26.2
100	29	16,380	-54.2		251	15.5
80	29	17,805	-55.1		246	12.4
70	29	18,656	-55.2		246	7.6
60	29	19,641	-54.6		224	3.7
50	29	20,800	-53.5		133	1.6
40	29	22,247	-52.3		85	6.6
30	28	24,118	-49.6		82	8.2
25	28	25,315	-48.0		80	10.9
20	28	26,793	-45.8		86	12.4
15	22	28,722	-42.9		81	12.2
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SALT LAKE CITY, UTAH 870 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,288	14.1	45	135	3.9
1000	30	89				
950	30	530				
900	30	998				
850	30	1,483	17.2	35	150	6.0
800	30	1,999	15.3	33	181	8.2
750	30	2,540	11.5	34	218	7.0
700	30	3,115	7.1	38	250	8.7
650	30	3,720	2.6	42	254	12.6
600	30	4,361	-2.4	44	249	17.9
550	30	5,046	-7.8	49	250	23.1
500	30	5,780	-13.3	50	247	25.3
450	30	6,573	-18.7	45	250	27.2
400	30	7,443	-24.7	37	250	29.9
350	30	8,401	-32.0	35	254	32.8
300	30	9,470	-40.5	30	257	34.4
250	30	10,687	-50.0		256	37.1
200	30	12,120	-56.5		257	38.3
175	30	12,964	-57.9		251	37.3
150	30	13,934	-58.4		252	38.1
125	30	15,080	-59.0		253	29.7
100	30	16,476	-59.7		251	17.1
80	30	17,871	-59.0		246	7.4
70	30	18,710	-57.9		239	2.7
60	30	19,685	-56.3		115	2.3
50	29	20,848	-54.8		94	4.7
40	29	22,280	-53.3		85	9.9
30	29	24,143	-50.4		83	12.6
25	29	25,336	-48.3		86	12.6
20	29	26,814	-45.6		83	12.4
15	25	28,746	-42.4		86	12.4
10	9	31,534	-37.3			
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‡ SAN ANTONIO, TEXAS 987 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	20	243	21.4	89	159	3.9
1000	20	130				
950	20	575	20.0	90	173	12.2
900	20	1,043	17.7	85	180	15.0
850	20	1,531	16.4	61	177	13.2
800	20	2,047	15.5	44	180	9.9
750	20	2,587	13.4	40	169	7.0
700	20	3,170	10.0	34	119	2.9
650	20	3,776	5.7	34	31	3.5
600	20	4,431	1.2	34	4	3.9
550	20	5,116	-3.6	37	335	5.6
500	20	5,872	-8.6	32	299	7.4
450	20	6,672	-14.0	32	294	11.1
400	20	7,566	-20.2	33	292	14.0
350	20	8,541	-26.9	32	292	22.9
300	20	9,635	-35.0	31	286	31.3
250	20	10,881	-44.5		284	41.0
200	20	12,339	-55.4		287	49.9
175	20	13,180	-60.5		285	48.6
150	20	14,131	-64.6		284	44.9
125	20	15,233	-69.1		284	32.1
100	20	16,563	-69.6		277	15.0
80	20	17,992	-68.1		306	4.3
70	20	18,701	-64.6		60	7.4
60	19	19,645	-61.7		90	14.4
50	19	20,792	-58.7		90	19.2
40	19	22,193	-55.6		90	23.1
30	17	24,037	-51.2		92	24.9
25	16	25,228	-49.1		89	23.5
20	11	26,688	-46.9			
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SAN DIEGO, CALIF. 998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	124	15.8	89	327	1.4
1000	30	104				
950	30	541	14.5	82	330	.8
900	30	1,000	18.6	37	304	2.1
850	30	1,490	18.4	30	274	4.9
800	30	2,007	16.4	29	259	5.8
750	30	2,545	13.2	28	253	6.4
700	30	3,130	9.2	32	241	6.6
650	30	3,733	5.1	32	240	8.4
600	30	4,389	.9	32	243	9.9
550	30	5,072	-3.4	30	252	10.7
500	30	5,830	-8.6	29	260	12.8
450	30	6,630	-14.5	25	257	15.0
400	30	7,522	-21.2	27	258	15.3
350	30	8,493	-28.7	29	256	19.8
300	30	9,578	-37.2	27	255	24.5
250	30	10,814	-46.1		252	32.1
200	30	12,270	-54.3		250	39.8
175	30	13,119	-58.1		250	42.9
150	29	14,081	-61.7		254	39.2
125	29	15,201	-64.6		250	28.7
100	28	16,562	-65.8		255	17.3
80	28	17,919	-64.2		202	2.5
70	28	18,740	-62.1		99	3.5
60	28	19,699	-59.2		101	7.6
50	26	20,945	-57.0		93	12.0
40	26	22,262	-55.1		82	15.9
30	26	24,118	-50.5		85	20.0
25	26	25,314	-47.9		88	21.0
20	25	26,790	-45.5		91	22.5
15	24	28,718	-42.4		86	23.5
10	23	31,486	-38.0		88	26.4
7	20	33,959	-34.1		92	27.0
5	16	36,340	-30.0			

* SAN JUAN, P. R. 1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	6	25.8	81	100	6.0
1000	30	147	24.9	80	97	14.0
950	30	593	21.4	80	96	17.7
900	30	1,065	18.5	75	101	18.1
850	30	1,554	16.0	66	98	16.9
800	30	2,069	14.1	51	97	16.7
750	30	2,605	11.8	41	101	13.6
700	30	3,187	8.8	37	110	10.7
650	30	3,787	4.9	36	118	8.5
600	30	4,445	.9	34	115	8.5
550	30	5,129	-2.7	29	105	5.6
500	30	5,890	-7.0	28	80	4.7
450	30	6,697	-12.0	27	38	3.3
400	30	7,598	-18.0	26	348	6.2
350	30	8,582	-25.0	25	336	8.7
300	30	9,685	-33.3	25	326	11.5
250	30	10,940	-43.4		333	17.1
200	27	12,397	-55.0		323	28.7
175	27	13,237	-61.7		327	32.1
150	27	14,176	-68.3		322	29.5
125	27	15,255	-73.2		320	19.2
100	27	16,557	-73.3		329	6.4
80	26	17,967	-71.0		66	14.0
70	25	18,662	-67.2		81	23.7
60	25	19,600	-63.6		88	29.1
50	24	20,727	-61.0		87	35.4
40	22	22,121	-58.1		90	39.6
30	21	23,955	-52.4		91	42.3
25	20	25,145	-49.0		92	38.5
20	20	26,620	-46.0		92	35.5
15	16	28,554	-42.4		85	36.3
10	10	31,307	-38.3			
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SAN NICOLAS, CALIF. 992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	174	12.6	93	313	6.8
1000	30	105				
950	30	541	16.9	54	333	4.9
900	30	1,004	19.4	31	328	7.0
850	30	1,494	18.3	26	315	8.2
800	30	2,010	15.5	26	306	7.6
750	30	2,553	12.4	25	288	6.6
700	30	3,128	9.0	19	281	6.8
650	30	3,736	5.1	20	284	8.4
600	30	4,384	.6	21	288	9.3
550	30	5,076	-4.2	25	283	10.5
500	30	5,820	-9.5	26	277	12.2
450	30	6,624	-15.8	25	272	13.0
400	30	7,502	-21.7	26	269	15.3
350	30	8,471	-29.4	25	268	18.6
300	30	9,551	-38.3	26	267	22.0
250	30	10,781	-47.2	24	258	29.9
200	30	12,228	-55.3	24	255	37.3
175	30	13,073	-58.8	23	252	38.3
150	30	14,034	-61.9	23	254	35.7
125	30	15,153	-64.9		254	29.5
100	30	16,509	-65.8		258	17.9
80	30	17,869	-63.8		241	2.7
70	30	18,691	-62.2		85	5.1
60	30	19,680	-59.4		93	10.7
50	30	20,798	-57.3		94	11.7
40	30	22,218	-54.4		84	17.1
30	30	24,075	-51.0		88	21.0
25	29	25,269	-48.4		91	21.4
20	27	26,744	-46.2		86	23.3
15	26	28,675	-42.2		83	25.6
10	24	31,436	-38.4		86	28.4
7	19	33,912	-33.5		90	31.1
5	8	36,250	-29.5			

* SAULT STE. MARIE, MICH. 990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	221	11.8	87	89	1.4
1000	30	133				
950	30	564	14.1	66	244	6.8
900	30	1,020	12.9	58	262	11.3
850	30	1,498	10.0	61	266	14.2
800	30	2,001	7.5	59	268	16.3
750	30	2,529	4.7	58	269	16.9
700	30	3,090	1.7	50	271	17.9
650	30	3,681	-1.3	43	272	19.2
600	30	4,318	-5.2	43	269	21.8
550	30	4,994	-9.4	42	272	22.1
500	30	5,726	-14.2	38	275	24.5
450	30	6,512	-19.5	37	279	26.2
400	30	7,383	-25.4	34	278	28.0
350	30	8,338	-32.5	33	280	29.3
300	30	9,405	-40.6	33	279	31.7
250	30	10,622	-49.4		281	36.9
200	30	12,062	-55.4		286	39.2
175	30	12,909	-56.8		285	32.4
150	30	13,886	-56.2		285	26.6
125	30	15,044	-56.1		281	20.6
100	30	16,461	-56.0		283	14.6
80	30	17,880	-55.6		292	8.4
70	30	18,732	-54.5		293	5.2
60	30	19,722	-53.6		315	3.1
50	29	20,893	-52.3		39	1.9
40	29	22,340	-51.0		70	4.9
30	29	24,222	-48.5		76	9.5
25	29	25,425	-46.8		85	10.7
20	28	26,908	-44.9		86	12.2
15	27	28,852	-41.4		88	15.0
10	25	31,646	-35.0		87	20.2
7	19	34,183	-29.3		98	20.8
5	11	36,605	-24.4			

SHEMYA, ALASKA 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	38	4.3	95	24	1.0
1000	29	95			33	3.5
950	29	513	1.5	94	41	5.6
900	29	944	-.1	83	58	5.4
850	29	1,401	-1.1	67	66	4.3
800	29	1,883	-2.6	58	34	2.9
750	29	2,393	-4.7	51	21	3.5
700	29	2,934	-7.5	51	20	4.7
650	29	3,507	-10.7	43	19	4.1
600	29	4,119	-14.5	41	8	4.5
550	29	4,772	-18.9	40	360	5.4
500	29	5,476	-23.5	36	348	6.4
450	29	6,234	-28.8	32	343	8.0
400	29	7,072	-34.7	37	345	9.5
350	29	7,991	-41.1	31	8	7.2
300	29	9,023	-47.8		5	11.3
250	29	10,214	-51.4		356	10.7
200	29	11,672	-47.9		[illegible]	8.0
175	29	12,554	-47.4		357	6.8
150	28	13,568	-47.9		353	5.6
125	28	14,768	-48.9		358	4.3
100	28	16,232	-49.3		29	2.9
80	28	17,692	-49.7		48	3.1
70	28	18,565	-50.0		57	3.9
60	28	19,573	-50.0		70	4.9
50	28	20,764	-49.8		75	6.4
40	28	22,225	-49.1		84	7.6
30	28	24,117	-48.1		83	9.5
25	26	25,323	-47.1		92	10.5
20	26	26,905	-45.6		92	11.5
15	20	28,732	-43.3		87	13.4
10	14	31,453	-39.8			
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* SHREVEPORT, LA. 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	79	20.5	89	130	2.5
1000	30	143	21.1	82	142	3.7
950	30	595	20.7	68	175	8.5
900	30	1,056	18.0	66	180	8.7
850	30	1,544	15.8	60	197	6.8
800	30	2,057	13.3	50	214	4.5
750	30	2,600	10.0	52	234	3.7
700	30	3,169	6.8	45	244	2.9
650	30	3,773	3.2	44	277	1.6
600	30	4,418	-1.0	46	322	2.3
550	30	5,108	-4.9	35	342	2.3
500	30	5,852	-9.6	32	295	3.3
450	30	6,657	-14.8	29	310	5.4
400	30	7,541	-20.9	29	320	8.2
350	30	8,513	-28.1	30	317	13.2
300	30	9,600	-36.5	27	320	18.8
250	30	10,937	-45.8		321	25.8
200	30	12,287	-56.1		314	31.1
175	30	13,126	-60.7		308	31.5
150	30	14,077	-63.6		306	30.5
125	30	15,187	-66.2		306	24.3
100	30	16,534	-67.1		313	13.6
80	30	17,885	-64.9		16	4.1
70	30	18,703	-62.5		61	7.2
60	30	19,659	-59.7		79	12.9
50	30	20,805	-57.2		89	17.3
40	30	22,224	-54.4		86	19.6
30	30	24,079	-51.2		87	20.9
25	29	25,271	-48.8		88	23.3
20	29	26,746	-45.8		88	25.3
15	29	28,676	-42.4		87	26.2
10	21	31,440	-38.5		86	31.9
7	6	33,938	-33.0			
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SPOKANE, WASH. 932 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	717	9.6	71	170	4.5
1000	30	121				
950	30	547				
900	30	1,004	11.3	55	205	8.2
850	30	1,480	9.3	51	234	9.1
800	30	1,980	5.8	56	238	8.5
750	30	2,500	2.0	60	237	9.7
700	30	3,058	-1.6	62	240	9.9
650	30	3,639	-5.2	60	243	12.4
600	30	4,270	-8.8	54	243	15.5
550	30	4,931	-13.1	55	245	19.0
500	30	5,659	-17.9	51	243	22.3
450	30	6,428	-23.4	52	245	25.1
400	30	7,291	-29.5	48	243	30.3
350	30	8,229	-36.8	45	242	32.2
300	30	9,278	-44.8		243	35.4
250	30	10,478	-51.6		247	38.5
200	30	11,912	-54.4		253	38.9
175	30	12,771	-52.9		252	33.2
150	30	13,769	-51.6		250	27.2
125	29	14,952	-52.4		249	24.1
100	29	16,394	-52.8		244	15.0
80	28	17,829	-53.8		248	8.9
70	28	18,685	-53.7		250	4.9
60	28	19,677	-53.0		238	2.7
50	28	20,855	-51.9		85	1.7
40	27	22,307	-50.4		94	4.5
30	26	24,192	-48.3		89	9.7
25	26	25,396	-46.7		84	10.1
20	26	26,983	-44.5		84	12.4
15	24	28,914	-41.4		82	13.8
10	13	31,628	-35.5			
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SWAN ISLAND, W. I. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	10	26.2	90	96	5.6
1000	30	95	25.5	91	88	7.8
950	30	541	22.5	89	111	11.7
900	30	1,017	20.0	83	115	12.6
850	30	1,510	17.4	80	117	11.7
800	30	2,027	15.0	75	119	10.3
750	30	2,572	12.3	70	126	8.9
700	30	3,149	9.1	68	130	8.7
650	30	3,755	5.8	69	142	8.0
600	30	4,413	1.8	72	157	8.9
550	30	5,103	-1.8	67	161	[illegible]
500	30	5,866	-5.6	62	177	[illegible]
450	30	6,684	-10.0	54	182	5.6
400	29	7,585	-16.0	51	208	5.4
350	29	8,578	-22.8	46	226	[illegible]
300	29	9,689	-31.3	40	238	6.8
250	29	10,953	-41.6		236	[illegible]
200	29	12,424	-54.1		250	9.1
175	29	13,266	-61.2		250	12.0
150	29	14,206	-68.5		279	[illegible]
125	24	15,277	-74.2		320	9.4
100	23	16,573	-75.0		50	5.1
80	22	17,873	-72.8		81	17.1
70	22	18,661	[illegible]		87	23.5
60	22	19,592	-65.5		86	30.5
50	22	20,710	-61.9		88	36.1
40	22	22,106	-57.9		92	41.8
30	21	23,938	-53.0		97	37.5
25	21	25,122	-49.7		94	35.4
20	19	26,596	-46.7		94	[illegible]
15	12	28,536	-43.0		85	35.5
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

JUNE 1966

TAMPA, FLA.
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	8	22.4	91	77	3.5
1000	30	139	22.2	87	89	5.6
950	30	587	20.4	80	115	5.6
900	30	1,051	18.0	74	160	4.7
850	30	1,540	15.5	67	179	4.5
800	30	2,053	13.1	56	192	4.9
750	30	2,593	10.6	47	199	4.3
700	30	3,166	7.5	46	197	4.1
650	30	3,776	3.8	47	217	4.9
600	30	4,420	.2	41	213	5.1
550	30	5,109	- 3.7	37	201	3.9
500	30	5,861	- 8.2	30	235	3.5
450	30	6,673	-13.5	30	244	4.7
400	30	7,558	-19.6	32	266	6.6
350	30	8,536	-26.7	30	258	10.9
300	30	9,631	-34.8	26	256	11.5
250	30	10,879	-44.4		256	17.3
200	30	12,339	-55.2		253	26.2
175	30	13,179	-60.8		254	29.9
150	30	14,129	-64.6		260	25.4
125	30	15,237	-66.4		276	15.7
100	30	16,582	-67.9		286	5.4
80	29	17,923	-66.3		55	3.9
70	29	18,737	-63.7		65	9.9
60	29	19,688	-60.8		76	18.1
50	29	20,828	-58.2		89	23.9
40	29	22,244	-55.1		91	25.4
30	29	24,098	-51.0		92	28.0
25	28	25,292	-48.6		90	28.6
20	24	26,768	-45.7		89	30.5
15	9	28,664	-42.9			
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• TATOOSH IS., WASH
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	31	10.5	91	159	3.5
1000	30	140	10.0	87	174	3.5
950	30	564	8.0	79	232	5.4
900	30	1,010	5.8	70	233	7.0
850	30	1,476	3.4	75	230	8.7
800	30	1,966	.9	72	225	9.9
750	30	2,484	- 1.7	66	230	10.7
700	30	3,029	- 4.7	64	228	12.4
650	30	3,607	- 7.9	55	232	13.2
600	30	4,227	-11.9	46	238	16.7
550	30	4,883	-15.8	48	236	18.5
500	30	5,600	-20.6	47	235	22.9
450	30	6,368	-25.9	45	240	23.9
400	30	7,214	-31.9	44	243	26.6
350	30	8,144	-38.7	44	239	28.9
300	30	9,186	-45.9		246	32.6
250	30	10,382	-51.7		254	35.4
200	30	11,823	-52.8		254	34.2
175	30	12,688	-51.2		251	29.9
150	30	13,691	-50.8		253	24.5
125	30	14,877	-51.0		249	19.0
100	30	16,324	-52.4		256	12.8
80	30	17,765	-52.9		240	8.7
70	30	18,625	-53.2		241	3.9
60	30	19,619	-53.0		221	3.3
50	30	20,796	-52.3		158	2.1
40	29	22,241	-51.1		94	4.5
30	28	24,116	-49.2		85	8.9
25	27	25,315	-47.8		89	9.3
20	26	26,795	-45.7		78	13.6
15	22	28,740	-42.6		83	18.3
10	17	31,520	-36.4		89	20.0
7	6	34,085	-29.7			

TOPEKA, KANS.
984 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	269	18.1	82	172	2.5
1000	30	131				
950	30	571	19.5	66	194	12.0
900	30	1,038	17.4	64	216	16.5
850	30	1,525	15.4	58	233	15.3
800	30	2,037	12.6	59	242	13.0
750	30	2,572	9.6	57	248	13.4
700	30	3,147	6.5	51	250	12.0
650	30	3,745	2.9	50	245	11.5
600	30	4,396	- 1.3	48	249	13.8
550	30	5,073	- 5.5	52	256	16.7
500	30	5,826	-10.3	53	261	17.5
450	30	6,622	-15.5	45	266	20.4
400	30	7,510	-21.9	41	263	25.8
350	30	8,479	-29.0	37	270	29.3
300	30	9,564	-37.4	36	270	30.1
250	30	10,797	-47.1		274	32.1
200	28	12,234	-57.2		272	37.3
175	28	13,069	-61.5		276	39.0
150	28	14,022	-61.6		282	36.3
125	28	15,152	-62.0		287	24.7
100	28	16,529	-62.0		283	13.6
80	28	17,910	-60.9		315	5.4
70	28	18,743	-59.1		8	3.1
60	28	19,715	-56.7		63	4.5
50	28	20,875	-55.1		82	8.0
40	28	22,305	-53.3		94	9.7
30	27	24,167	-50.1		85	12.4
25	26	25,364	-47.8		86	14.0
20	25	26,848	-45.4		81	14.4
15	16	28,779	-41.8		84	15.7
10	5	31,582	-35.9			
7						

TRUK, CAROLINE IS.
+ 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	2	28.4	78	79	4.9
1000	30	101	27.4	77	84	5.8
950	30	551	23.7	74	96	9.9
900	30	1,026	21.2	68	98	12.4
850	30	1,520	18.4	67	99	13.0
800	30	2,039	15.8	63	100	12.2
750	30	2,582	13.0	59	101	12.8
700	30	3,163	10.0	55	99	12.2
650	30	3,774	6.3	56	96	13.2
600	30	4,428	2.5	54	99	12.6
550	30	5,119	- 1.4	50	104	11.8
500	30	5,882	- 5.5	46	100	10.3
450	30	6,700	-10.0	43	96	10.7
400	30	7,604	-15.1	33	90	9.3
350	30	8,599	-22.0	28	95	9.5
300	30	9,714	-30.3	26	101	9.7
250	30	10,984	-40.6	27	105	8.0
200	30	12,463	-53.1		117	8.7
175	30	13,309	-60.1		110	8.5
150	30	14,254	-67.6		102	7.2
125	30	15,329	-75.1		83	5.6
100	30	16,605	-79.4		80	11.7
80	29	17,886	-74.0		91	22.9
70	29	18,671	-70.8		96	27.8
60	29	19,596	-65.3		98	28.7
50	29	20,717	-61.1		99	24.5
40	29	22,119	-56.3		97	20.4
30	29	23,969	-51.5		108	12.2
25	28	25,160	-48.7		105	9.7
20	24	26,633	-46.2		121	6.8
15	8	28,531	-44.1			
10						
7						

• TUCSON, ARIZ.
922 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	789	21.0	36	145	6.4
1000	30	73				
950	30	520				
900	30	997	24.8	30	170	4.3
850	30	1,496	22.4	30	227	1.2
800	30	2,019	18.6	32	222	3.5
750	30	2,565	14.5	35	210	7.4
700	30	3,147	10.2	37	209	10.1
650	30	3,755	5.6	37	214	10.9
600	30	4,408	.8	41	217	13.0
550	30	5,095	- 4.0	42	224	14.6
500	30	5,847	- 8.9	42	234	15.5
450	30	6,650	-14.5	37	241	17.7
400	30	7,538	-20.7	29	245	21.4
350	30	8,511	-27.8	29	247	23.7
300	30	9,600	-36.0	30	249	30.7
250	30	10,841	-45.4		249	36.3
200	30	12,296	-55.2		253	43.3
175	30	13,140	-59.3		255	45.1
150	29	14,098	-63.5		254	40.2
125	29	15,206	-67.2		256	31.7
100	28	16,547	-67.8		249	15.0
80	28	17,889	-66.6		184	1.6
70	28	18,703	-63.0		97	6.4
60	28	19,657	-59.9		96	10.7
50	28	20,802	-57.6		92	12.6
40	28	22,218	-55.0		86	18.1
30	27	24,072	-51.3		88	22.9
25	27	25,262	-49.2		90	24.7
20	26	26,730	-46.5		87	23.7
15	24	28,650	-42.8		81	24.7
10	15	31,420	-38.2		87	31.1
7						

• VANDENBERG AFB, CALIF.
1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	100	10.9	95	328	1.9
1000	30	114			327	2.5
950	30	548	16.1	55	358	8.0
900	30	1,008	18.6	36	9	9.5
850	30	1,496	16.9	33	358	8.2
800	30	2,010	14.5	31	333	8.4
750	30	2,550	12.1	23	322	7.8
700	30	3,127	8.9	22	310	8.0
650	30	3,730	4.9	22	298	7.8
600	30	4,384	.7	23	293	10.3
550	30	5,068	- 3.9	27	283	12.6
500	30	5,821	-10.2	28	277	14.6
450	30	6,618	-15.3	27	273	18.1
400	30	7,505	-22.4	29	268	19.6
350	30	8,471	-30.2	26	265	21.2
300	30	9,548	-39.0	26	266	23.3
250	30	10,773	-48.4		265	26.8
200	30	12,214	-56.3		262	32.8
175	30	13,057	-59.0		257	33.6
150	30	14,019	-61.0		255	33.6
125	30	15,146	-63.3		252	30.1
100	30	16,514	-64.0		253	17.7
80	30	17,886	-62.1		261	5.4
70	30	18,712	-61.0		90	1.2
60	30	19,673	-59.2		97	5.2
50	30	20,820	-57.3		90	9.9
40	28	22,236	-55.1		83	14.4
30	27	24,085	-51.5		85	17.7
25	27	25,275	-49.1		86	18.1
20	26	26,745	-46.2		85	19.4
15	26	28,669	-43.3		84	19.2
10	22	31,422	-38.6		85	21.4
7	15	33,913	-33.0		86	29.1
5						

• WAKE IS., PACIFIC AREA
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	27.4	80	74	9.1
1000	30	144	26.0	83	79	12.0
950	30	591	21.7	90	88	14.4
900	30	1,064	19.2	77	91	14.2
850	30	1,555	16.6	70	92	13.4
800	30	2,070	14.3	58	89	12.8
750	30	2,609	11.9	48	87	13.2
700	30	3,189	9.5	29	83	12.6
650	30	3,795	6.5	24	82	10.9
600	30	4,453	2.8	22	88	11.1
550	30	5,144	- 1.9	21	95	8.4
500	30	5,903	- 6.9	22	93	7.6
450	30	6,712	-12.2	24	94	6.8
400	30	7,609	-18.5	27	94	5.2
350	30	8,591	-25.5	27	91	4.1
300	30	9,690	-34.0	26	315	1.0
250	30	10,941	-44.1		259	5.2
200	30	12,399	-55.9		260	7.8
175	30	13,236	-61.9		268	10.1
150	30	14,176	-67.8		253	12.8
125	30	15,263	-70.7		260	7.8
100	30	16,579	-72.2		117	3.1
80	29	17,895	-70.9		90	13.2
70	29	18,689	-68.2		83	19.8
60	29	19,621	-64.7		85	26.4
50	29	20,743	-61.3		88	31.5
40	29	22,136	-58.1		86	35.5
30	29	23,964	-53.3		85	37.7
25	27	25,143	-50.4		83	40.4
20	27	26,608	-47.2		86	38.9
15	25	28,524	-44.0		88	40.0
10	23	31,268	-40.0		89	41.0
7	19	33,731	-36.0		92	43.1
5	6	36,070	-32.6			

• WALLOPS IS. VA. NASA
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	17.6	84	290	2.3
1000	30	165	19.0	70	284	4.9
950	30	606	18.5	59	305	8.4
900	30	1,069	15.9	57	319	6.4
850	30	1,553	12.8	58	320	5.6
800	30	2,059	9.3	56	308	5.8
750	30	2,590	6.6	48	283	7.8
700	30	3,157	4.1	42	280	9.3
650	30	3,755	1.0	37	283	11.5
600	30	4,396	- 2.6	31	288	13.2
550	30	5,076	- 6.4	29	283	14.8
500	30	5,822	-10.9	27	277	16.3
450	30	6,619	-16.2	25	275	18.5
400	30	7,502	-22.5	26	273	18.9
350	30	8,469	-29.5	27	268	19.4
300	30	9,551	-37.6	24	260	20.4
250	30	10,784	-47.0		258	22.0
200	30	12,227	-57.5		261	25.8
175	29	13,057	-61.8		263	27.0
150	29	14,008	-62.2		267	23.5
125	29	15,138	-61.5		273	17.7
100	29	16,521	-61.2		278	8.9
80	29	17,910	-59.6		307	2.9
70	29	18,747	-57.9		64	3.3
60	29	19,721	-56.5		70	6.8
50	29	20,881	-54.9		78	11.5
40	29	22,313	-52.9		86	13.0
30	29	24,184	-49.2		89	13.2
25	29	25,384	-47.4		87	15.3
20	29	26,867	-44.8		90	15.5
15	27	28,812	-41.5		90	16.5
10	23	31,582	-37.2		88	18.6
7	9	34,076	-32.6			
5						

WASHINGTON, D. C.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	84	16.9	86	278	.4
1000	30	159	17.9	76	286	1.6
950	30	601	19.1	53	327	6.2
900	30	1,063	16.3	51	327	6.4
850	30	1,546	12.9	52	313	7.4
800	30	2,053	9.5	52	313	9.1
750	30	2,585	6.2	48	309	10.3
700	30	3,148	3.2	41	298	10.7
650	30	3,743	.1	39	289	12.2
600	30	4,382	- 3.3	32	284	14.8
550	30	5,059	- 7.2	33	281	16.9
500	30	5,802	-11.6	30	279	18.6
450	30	6,594	-17.0	27	276	21.8
400	30	7,476	-23.1	26	273	21.6
350	30	8,440	-30.1	26	271	22.5
300	30	9,519	-38.3	26	271	23.5
250	30	10,749	-47.3		265	26.2
200	30	12,192	-57.0		266	29.3
175	30	13,029	-60.9		276	27.8
150	30	13,984	-61.4		275	22.5
125	29	15,119	-60.6		277	17.5
100	29	16,507	-61.0		280	11.5
80	28	17,898	-59.3		312	3.5
70	28	18,736	-57.7		43	2.3
60	28	19,710	-56.7		64	5.4
50	28	20,869	-55.0		79	8.4
40	28	22,300	-53.0		85	12.8
30	28	24,165	-50.0		87	11.8
25	26	25,368	-47.6		83	13.6
20	24	26,852	-45.2		87	16.1
15	21	28,783	-42.0		89	15.0
10	19	31,546	-37.6		95	14.0
7	13	34,019	-34.2			
5	6	36,331	-29.2			

WINNEMUCCA, NEV.
868 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,310	10.3	47	152	.8
1000	30	110				
950	30	545				
900	30	1,013				
850	30	1,489	14.1	40	6	2.1
800	30	1,999	12.1	37	318	2.9
750	30	2,534	8.1	41	279	5.2
700	30	3,102	4.2	41	256	10.3
650	30	3,697	.2	41	243	17.3
600	30	4,338	- 4.1	41	237	20.6
550	30	5,012	- 8.6	40	238	24.5
500	30	5,752	-13.7	39	245	26.6
450	30	6,541	-18.9	37	250	29.1
400	30	7,413	-25.0	36	254	30.7
350	30	8,369	-32.4	37	257	34.0
300	30	9,437	-40.6	32	255	35.9
250	30	10,654	-49.6		256	37.7
200	30	12,089	-56.5		257	40.9
175	30	12,933	-57.6		253	38.3
150	30	13,905	-57.5		249	36.1
125	30	15,055	-57.9		255	29.9
100	30	16,459	-58.5		253	18.3
80	30	17,864	-57.8		239	8.7
70	28	18,704	-57.1		226	4.1
60	28	19,680	-56.3		145	1.6
50	27	20,839	-54.6		91	4.9
40	27	22,272	-53.0		86	8.7
30	27	24,137	-50.3		88	11.7
25	26	25,339	-47.8		83	12.2
20	26	26,820	-45.5		85	13.0
15	19	28,757	-41.7		83	13.4
10	6	31,594	-35.8			
7						
5						

WINSLOW, ARIZ.
850 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,492	13.8	36	172	3.5
1000	30	97				
950	30	539				
900	30	1,005				
850	30	1,497			173	3.1
800	30	2,015	18.1	30	240	8.9
750	30	2,562	14.2	32	241	10.3
700	30	3,141	9.8	36	234	12.0
650	30	3,750	5.2	39	228	10.9
600	30	4,400	.2	46	225	11.5
550	30	5,080	- 4.8	45	229	14.2
500	30	5,834	-10.0	42	236	15.3
450	30	6,633	-15.6	36	246	18.8
400	30	7,517	-21.7	32	251	21.8
350	30	8,486	-29.1	32	251	26.6
300	29	9,567	-37.4	29	251	34.8
250	28	10,796	-47.0		252	41.2
200	28	12,241	-56.0		254	48.6
175	28	13,084	-59.4		255	48.6
150	28	14,042	-62.3		254	46.0
125	28	15,162	-64.8		256	33.2
100	28	16,520	-65.7		250	16.3
80	28	17,881	-64.1		232	5.1
70	28	18,701	-62.2		137	2.5
60	28	19,659	-59.2		102	6.8
50	28	20,807	-57.2		85	11.5
40	28	22,225	-55.1		79	15.0
30	26	24,075	-51.6		84	19.6
25	26	25,265	-49.2		87	20.6
20	25	26,740	-46.6		92	20.8
15	21	28,666	-43.5		88	18.8
10	10	31,439	-38.7			

YAKUTAT, ALASKA
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	12	6.3	97	112	2.1
1000	30	118	7.6	91	86	1.2
950	30	539	6.5	83	139	.4
900	30	984	4.8	78	144	1.4
850	30	1,449	2.4	76	141	2.5
800	30	1,937	.3	64	155	4.1
750	30	2,454	- 2.1	66	154	5.2
700	30	2,999	- 5.2	63	135	6.6
650	30	3,575	- 8.8	63	117	7.4
600	30	4,195	-12.4	58	116	7.6
550	30	4,853	-16.6	55	118	9.3
500	30	5,564	-21.6	50	118	11.3
450	30	6,330	-27.3	45	119	11.3
400	30	7,170	-33.6	42	120	10.7
350	30	8,093	-40.8	50	127	10.3
300	30	9,124	-48.8		136	10.5
250	30	10,304	-54.5		144	8.7
200	30	11,745	-50.2		138	5.8
175	30	12,622	-48.4		128	4.5
150	30	13,638	-47.8		130	4.9
125	30	14,841	-47.8		130	3.5
100	30	16,312	-48.4		118	4.5
80	30	17,790	-48.7		117	3.1
70	30	18,657	-48.6		101	4.1
60	30	19,671	-48.6		105	4.9
50	30	20,871	-48.2		108	6.0
40	30	22,343	-47.6		89	8.9
30	30	24,249	-46.4		88	13.4
25	30	25,463	-45.1		89	14.6
20	29	26,960	-43.3		87	16.9
15	28	28,911	-40.4		88	20.2
10	17	31,696	-36.2		88	23.5

YAP, CAROLINE IS.
+ 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	17	28.4	81	64	3.9
1000	30	99	27.3	78	81	4.7
950	30	544	23.5	75	93	8.4
900	30	1,024	20.7	71	99	9.5
850	30	1,518	18.1	66	98	10.1
800	30	2,036	15.4	61	101	9.7
750	30	2,574	12.6	56	100	10.5
700	30	3,158	9.5	52	102	11.8
650	30	3,767	6.0	51	100	12.2
600	30	4,422	2.2	51	98	11.5
550	30	5,113	- 1.8	52	99	11.1
500	30	5,874	- 5.7	44	94	11.7
450	30	6,687	-10.4	41	91	11.1
400	30	7,592	-16.0	36	100	10.9
350	30	8,585	-22.7	30	99	10.0
300	30	9,697	-31.1	27	102	9.5
250	30	10,963	-41.3		102	10.3
200	30	12,437	-53.9		91	8.9
175	30	13,280	-61.2		87	8.4
150	30	14,220	-68.8		49	6.6
125	30	15,290	-76.0		55	9.1
100	30	16,567	-78.2		72	15.7
80	29	17,851	-74.6		83	24.5
70	29	18,632	-71.4		85	28.7
60	29	19,554	-66.1		92	31.1
50	29	20,672	-61.8		93	30.5
40	28	22,068	-57.7		90	28.4
30	28	23,907	-52.2		90	22.5
25	27	25,096	-49.2		96	21.0
20	21	26,563	-47.4		98	18.3
15	13	28,489	-43.7			
10						

YUCCA FLAT, NEV.
879 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	1,196	14.4	25	239	3.1
1000	29	78				
950	29	519				
900	29	988				
850	29	1,479	20.4	20	279	4.1
800	29	1,998	17.3	21	235	6.2
750	29	2,542	13.2	24	223	7.8
700	29	3,119	8.7	30	210	8.4
650	29	3,724	3.9	36	195	9.5
600	29	4,371	- 1.3	36	208	9.9
550	29	5,054	- 6.0	R33	232	13.4
500	28	5,800	-11.3	R30	238	17.5
450	28	6,596	-16.9	R32	245	22.0
400	28	7,474	-23.5	R30	253	24.3
350	28	8,435	-31.3	R29	254	27.6
300	28	9,508	-39.7	R27	255	32.4
250	28	10,731	-48.6		256	38.1
200	28	12,169	-56.6		252	42.0
175	28	13,010	-59.0		252	44.1
150	28	13,974	-60.4		248	41.8
125	28	15,104	-62.1		251	35.7
100	28	16,479	-62.8		252	23.9
80	28	17,857	-61.5		195	4.7
70	28	18,687	-60.0		116	2.5
60	28	19,654	-57.9		107	6.4
50	28	20,809	-56.3		95	12.0
40	28	22,232	-54.4		81	15.5
30	28	24,090	-50.9		87	17.1
25	28	25,283	-48.7		85	20.4
20	27	26,752	-46.3		87	17.7
15	21	28,665	-43.5		83	17.1
10	9	31,347	-39.7			

YUMA, ARIZ.
993 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	22	131	24.1	33	176	.4
1000	22	67				
950	22	514	26.9	29	261	6.2
900	22	994	25.3	26	258	9.2
850	22	1,493	22.2	26	229	6.6
800	22	2,015	18.5	27	201	6.6
750	22	2,559	14.3	28	202	7.2
700	22	3,141	10.2	27	200	9.5
650	22	3,745	5.8	27	205	9.1
600	22	4,401	1.1	31	202	10.9
550	22	5,081	- 4.0	34	216	12.2
500	22	5,838	- 9.1	31	232	14.2
450	22	6,636	-15.0	29	239	18.1
400	22	7,524	-21.3	30	238	22.3
350	22	8,495	-28.3	28	241	29.3
300	22	9,580	-36.8	29	241	33.6
250	22	10,817	-45.5		242	41.2
200	20	12,275	-54.8		248	41.0
175	19	13,121	-59.1		244	44.7
150	17	14,082	-63.0		238	43.3
125	15	15,200	-66.9		241	33.4
100	13	16,554	-66.6			

See reference note on page 309.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

ALBUQUERQUE, N. MEX.

Date	Sun's zenith distance A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Jun.									
1-----	0.78	0.87	0.99	1.13	1.41	----	----	----	----
2-----	.92	1.00	1.11	1.25	1.44	----	----	----	----
3-----	.96	1.05	1.19	1.31	1.51	1.30	1.14	1.00	0.92
4-----	.98	1.06	1.18	1.32	1.49	1.28	1.13	1.03	.93
5-----	.89	.98	1.10	1.25	1.46	----	----	----	----
6-----	.75	.83	.97	1.13	----	----	----	----	----
7-----	.95	1.04	1.17	1.30	1.47	----	----	----	----
8-----	.95	1.02	1.16	1.28	1.47	1.26	1.10	.96	.88
9-----	.78	.85	1.01	1.17	----	----	----	----	----
11----	.76	.83	.97	1.14	----	----	----	----	----
12----	.77	.85	.99	1.14	----	----	----	----	----
13----	.95	1.02	1.13	1.26	1.44	----	----	----	----
14----	----	----	----	----	1.44	----	----	----	----
15----	.84	.93	1.05	1.21	1.40	----	----	----	----
16----	.63	----	.89	1.04	----	----	----	----	----
17----	.59	.67	.72	.99	1.32	----	----	----	----
18----	.81	.89	1.02	1.18	1.40	----	----	----	----
19----	.72	.79	.95	1.10	1.34	1.13	.90	.71	----
20----	.66	.73	----	----	----	----	----	----	----
21----	.70	.80	.96	1.15	1.40	----	----	.82	----
22----	.67	.76	.91	1.12	1.40	----	----	----	----
23----	.89	.97	1.10	1.25	1.43	1.18	1.04	.90	.82
24----	.92	.99	1.00	1.22	1.43	----	----	----	----
25----	.75	.81	.97	1.16	1.39	----	----	----	----
26----	----	.75	.92	----	----	1.18	1.03	.86	----
27----	----	.92	1.05	----	----	1.14	.96	----	----
28----	----	----	----	1.22	1.40	----	----	----	----
30----	----	----	----	----	1.25	----	----	----	----
Averages	0.81	0.89	1.03	1.19	1.41	1.21	1.04	0.90	0.89

OMAHA, NEBR.

Date	Sun's zenith distance A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Jun. 1-24	Instrument malfunction								
25----	HM0.60	HM0.70	HM0.88	HM0.96	----	----	----	----	----
28----	----	----	----	HM .96	----	----	----	----	----
30----	----	----	----	HI .83	HM1.08	HM0.73	HM0.70	HM0.63	HI0.50
Averages	0.60	0.70	0.88	0.92	1.08	0.73	0.70	0.63	0.50

GUAM, M. I.

Date	Sun's zenith distance A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Jun. 17----	----	M 0.81	M 0.92	----	----	----	----	----	----

MADISON, WIS.

Date	Sun's zenith distance A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Jun.									
1-----	M 0.79	M 0.88	M 1.01	M 1.16	S 1.36	----	----	----	----
5-----	I .39	M .48	----	----	----	----	----	----	----
18----	----	----	S .91	S .42	----	----	----	----	----
19----	----	S .82	S .93	----	----	----	----	----	----
29----	----	----	----	S .98	----	----	----	----	----
Averages	0.59	0.73	0.95	0.85	1.36	----	----	----	----

BLUE HILL OBS., MASS.

Date	Sun's zenith distance A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Jun.									
3-----	0.75	0.83	0.96	1.13	1.33	1.00	0.81	----	----
12----	----	----	----	----	1.42	1.23	1.04	0.91	0.83
18----	.53	.65	.82	1.07	1.34	----	----	----	----
20----	.58	.69	.82	1.01	1.28	.87	.60	.48	.38
21----	.45	.55	.72	.96	1.21	.89	.71	.60	.50
22----	.77	.87	.98	1.12	1.35	1.06	.84	.72	.62
23----	.72	.82	.94	1.08	----	----	----	----	----
28----	.60	.72	.84	.99	----	----	----	----	----
30----	.58	.69	.84	1.05	1.30	1.04	.87	.75	.65
Averages	0.62	0.73	0.87	1.05	1.32	1.02	0.81	0.69	0.60

TUCSON, ARIZ.

Date	Sun's zenith distance A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Jun.									
1-----	----	----	----	----	----	----	1.03	0.94	0.84
2-----	----	----	----	----	----	----	----	.95	.84
3-----	0.84	0.94	1.06	----	----	----	1.26	----	.88
4-----	.89	.99	1.11	----	----	----	----	.95	.84
5-----	.82	.93	1.04	----	----	----	----	----	.80
7-----	.71	.84	.96	----	----	----	----	----	.76
8-----	.93	1.00	----	----	----	----	----	.92	.83
11----	.79	.83	.99	----	----	----	----	----	----
12----	.73	.84	.96	----	----	----	.96	.84	.73
13----	.63	.74	.89	----	----	----	----	----	----
15----	.58	.60	.80	----	----	----	----	----	----
21----	----	----	----	----	----	----	----	.86	.76
22----	.84	.93	----	----	----	----	----	----	.76
23----	.86	.95	1.05	----	----	----	----	----	.89
24----	.84	.94	----	----	----	----	----	----	----
25----	.75	.83	.95	----	----	----	----	----	----
27----	.64	.73	----	----	----	----	----	----	----
28----	.60	----	----	----	----	----	----	----	----
29----	----	----	----	----	----	----	----	----	.63
30----	.67	.79	----	----	----	----	----	.83	----
Averages	0.76	0.86	0.98	----	----	----	1.08	0.89	0.79

S	Slight haze - indeterminable	HM	Moderate haze
M	Moderate haze - indeterminable	HI	Intense haze
I	Intense haze - indeterminable	*	Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
AMES IOWA	621	187	593	532	172	720	355	151	394	749	515	454	582	637	242	559	504	678	654	552	604	626	630	621	622	612	492	630	659	659		534
ALBUQUERQUE N.M.	592	684	747	773	747	709	623	638	684	477	655	711	750*	627	650	664	667	650	726	529	733	733	769	726	577	692	762	574	315	498		656*
ANNETTE ALASKA	---	451	174	271	314	638	720	538	228	300	304	425	459	731	244	289	200	512	391	449	515	362	631	520	445	255	518	551	380	371		420
APALACHICOLA FLORIDA	699	690	698	677	643	693	666	487	158	637	701	676	640	522	580	385	490	426	405	387	102	601	592	687	622	690	599	633	658	582		568
ARGONNE NAT. LAB.	660	603	336	595	540	441	565	265	74	678	654	340	306	660	293	570	625	558	622	548	417	592	561	603	529	431	523	250	624	640		503
ASTORIA OREGON	567	216	420	454	731	395	317	646	544	522	537	515	383	646	703	416	449	469	732	602	470	403	380	596	607	479	256	649	606	597		510
ATLANTA GEORGIA	769	756	692	620	534	518	646	635	267	678	466	755	667	386	472	403	558	324	669	726	671	686	645	632	631	552	556	456	519	536		581
BARROW ALASKA	819	836	736	692	755	503	553	701	436	451	431	653	778	789	487	697	799	395	769	807	804	446	426	383	589	489	744	241	603	298		604
BETHEL ALASKA	132	591	460	206	349	542	695	500	646	351	455	271	413	364	441	569	617	313	468	641	632	650	514	514	570	66	517	242	70	439		441
BISMARCK N.DAK.	504	673	632	329	564	591	664	715	723	518	224	561	500	540	567	627	685	629	679	550	541	538	680	253	529	718	546	703	674	475		571
BLUE HILL MASS.	384	485	737	636	566	590	549	591	710	107	477	788	220	465	562	377	495	687	353	718	679	751	614	460	105	234	651	697	467	718		529
BOISE IDAHO	597	747	670	688	766	439	687	684	480	652	725	777	653	741	753	492	697	719	693	579	347	651	454	719	783	724	740	713	731	740		661
BOSTON MASSACHUSETTS	340	498	709	583	525	493	485	538	701	61	463	792	140	420	544	302	505	683	363	690	626	728	580	438	90	234	629	670	474	674		499
BROWNSVILLE TEXAS	699	722	742	759	771	743	704	770	685	713	602	---	432	197	688	738	658	302	---	364	458	310	539	510	578	569	724	657	627	634		603
CANTON ISLAND P.I.	576	569*	588	550	482	372	598	602	595	587	450	565	572	553	360	516	595	497	578	556	605	602	496	536	610	601	537	477	205	537		532*
CAPE HATTERAS N.C.	675	633	729	682	685	700	676	676	586	311	25	63	510	687	583	549	393	227	110	457	671	673	629	650	567	621	633	662	591	612		542
CARIBOU MAINE	494	537	670	181	668	73	426	435	715	157	507	646	752	487	622	363	747	546	619	505	676	669	339	423	568	175	536	679	596	542		505
CHARLESTON S.C.	637	570	670	468	681	528	575	624	137	125	679	738	712	284	---	533	289	370	395	640	715	696	651	600	584	572	546	502	526	369		532
CLEVELAND OHIO	739	705	467	638	433	488	640	381	435	749	737	731	648	453	587	406	689	674	677	592	646	561	592	566	609	655	410	329	592	679		584
COLUMBIA MISSOURI	678	283	184	265	371	688	295	189	142	729	553	635	379	707	377	569	551	711	710	665	667	653	632	652	700	525	534	425	673	572		524
DODGE CITY KANSAS	492	685	666	710	687	591	598	686	693	626	594	582	587	611	673	566	338	561	699	666	460	673	636	698	548	590	649	666	671	690		620
E. LANSING MICHIGAN	714	697	472	631	609	413	688	504	29	722	724	662	381	515	386	583	605	575	683	643	498	638	634	604	647	662	589	208	653	702		569
EL CENTRO CALIF. NPF	618	622	615	601	597	588	600	604	558	578	592	594	579	558	554	602	622	549	317	595	589	625	628	627	594	595	584	570	333	555		575
EL PASO TEXAS	671	717	803	826	857	821	834	826	731	676	812	807	785	786	797	707	623	731	645	572	800	775	801	800	654	209	468	328	614	693		706
ELY NEVADA	746	750	758	782	663	381	---	629	483	763	790	790	768	604	493	477	463	711	748	632	542	738	768	781	770	763	741	678	668	646		673
EPPLEY NEWPORT R.I.	484	---	702	627	609	634	553	530	656	---	501	601	162	---	---	---	---	---	---	---	---	---	---	---	181	314	531	---	346	679		---
FAIRBANKS ALASKA	765	571	576	718	474	717	717	725	660	662	647	433	249	694	692	623	491	544	697	599	582	605	655	629	410	403	586	781	449	640		600
FORT WORTH TEXAS	729	693	716	552	656	730	722	717	692	735	758	601	573	719	668	576	182	206	529	676	710	692	646	617	705	694	624	660	696	665		638
FRESNO CALIFORNIA	736	754	746*	730	596	426	654	457	677	719	723	725	706	704	597	609	682	697	703	723	686	750	748	728	715	730	703	703	725	733		686*
GAINESVILLE FLORIDA	724	742	713	677	640	522	668	336	280	---	360	360	630	623	486	426	452	353	416	350	---	404	---	---	673	728	---	---	---	---		526
GLASGOW MONTANA	698	627	604	716	564	772	685	754	757	579	282	231	753	584	539	602	731	689	659	202	603	418	422	392	391	776	760	755	624	641		594
GRAND JUNCTION COLO.	789	811	792	739	859	---	---	---	480	661	811	856	844	828	798	557	688	720	800	444	694	574	743	801	799	554	735	615	479	472		702
GREAT FALLS MONTANA	426	114	204	221	337	686	637	628	552	442	509	464	482	657	620	680	500	584	481	533	532	488	551	233	646	668	598	565	---	501		501
GREENSBORO N.C.	572	707	673	621	637	609	---	483	496	372	745	746	685	457	656	556	380	195	599	692	638	642	626	610	583	579	489	535	580	446		573
INDIANAPOLIS INDIANA	762	---	---	---	464	208	---	---	---	---	---	---	---	---	---	---	---	---	690	651	512	661	646	650	713	702	288	543	476	506		---
ITHACA NEW YORK	486	681	580	571	462	409	299	359	226	229	704	698	660	339	354	145	628	683	655	615	653	676	546	556	599	524	545	581	617	657		525
LAKE CHARLES LA.	732	687	622	692	686	674	707	684	629	645	638	561	126	521	605	447	471	503	423	658	506	605	550	533	664	647	625	589	578	564		586
LAKELAND FLORIDA	525	717	742	648	676	514	635	189	524	524	594	673	584	590	374	541	586	549	403	479	535	659	486	805	790	826	751	670	214	279		569
LANDER WYOMING	728	719	755	527	735	592	72	269	629	653	777	780	742	613	361	652	557	597	442	598	453	563	638	675	789	697	726	665	679	492		606
LARAMIE WYOMING	637	634	618	498	646	484	399	265	622	576	613	663	680	666	558	434	372	661	426	442	451	519	537	707	692	420	685	454	555	452		546
LAS VEGAS NEVADA	795	818	823	774	715	517	730	489	760	788	768	794	780	581	517	443	784	803	584	747	782	796	808	800	792	785	788	774	678	439		715
LITTLE ROCK ARKANSAS	732	621	699	460	467	376	526	721	685	---	---	---	---	719	728	519	494	622	710	677	602	503	533	652	662	668	607	571	391	465		593
LOS ANGELES CALIF.	660	703	729	730	687	674	693	455	467	657	550	633	697	650	462	477	589	737	420	561	555	721	736	691	569	356	633	599	687	720		617
MADISON WISCONSIN	740	504	647	568	526	651	379	568	220	745	336	305	500	495	252	721	590	735	675	501	533	686	656	662	677	592	704	494	725	690		569
MANHATTAN KANSAS	362	464	604	530	329	689	414	100	579	651	507	446	537	378	312	527	258	577	581	587	561	715	310	607	639	422	273	594	639	638		473
MATANUSKA ALASKA	421	300	530	301	410	665	720	536	593	565	152	315	678	550	654	491	298	340	643	651	174	489	223	739	636	316	580	716	304	359		478
MEDFORD OREGON	687	404	712	784	597	636	365	625	732	620*	777*	793*	765*	762*	609	732*	701*	751	549	635	576	755	374	821*	785*	769*	752	659	705*	765		664*
MIAMI FLORIDA	395	363	128	165	461	431	372	72	582	651	560	383	358	680	623	639	381	539	229	495	614	---	412	456	506	372	366	273	248	156		425
MIDLAND TEXAS	635	715	668	692	734	723	676	744	392	581	578	701	706	721	757	738	633	720	652	729	424	585	698	721	438	555	570	631	701	653		649
NASHVILLE TENNESSEE	774	737	602	629	569	305	603	564	566	141	773	700	562	618	718	450	642	695	677	719	654	646	654	695	614	569	585	535	473	429		597
NEW YORK N.Y.U	574	644	659	630	607	527	381	535	557	200	755	682	134	552	568	358	404	563	211	667	656	704	640	585	606	333	544	337	325	675		520
NORTH OMAHA NEBRASKA	353	412	682	605	199	819	232	70	787	792	604	605	721	662	400	842	708	724	764	755	718	770	483	604	637	692	404	767	756	745		610
OAK RIDGE TENNESSEE	771	731	690	661	620	512	581	446	520	478	761	723	636	371	733	454	581	469	713	720	701	651	662	615	341	570	572	561	456	544		595
OKLAHOMA CITY OKLA.	313	577	557	542	601	508	---	---	467	497	595	439	611	591	502	487	238	554	562	573	603	598	541	576	609	532	589	542	585	568		534
PAGE ARIZONA	675	669	656	667	602	568	558	546	307	648	633	649	666	646	---	543	538	666	630	450	632	650	660	658	661	504	640	592	371	287		585

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

JUNE 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	676	683	671	675	662	646	656	634	624	644	648	656	638	568	618	600	638	646	562	622	647	661	665	666	646	615	629	625	301	531		625
PORTLAND MAINE	472	593	720	535	435	534	458	510	688	70	436	774	292	322	547	212	849	659	414	719	712	712	479	---	124	169	502	589	577	713		511
PROSSER WASHINGTON	494	698	183	778	797	629	410	645	616	658	716	770	547	641	764	720	624	745	692	778	457	698	651	522	769	721	673	604	776	734		650
RAPID CITY S.DAK.	414	569	349	312	399	557	136	410	664	458	521	446	645	426	632	558	655	617	610	405	357	455	571	455	690	655	640	645	580	286		504
RENO NEVADA	483	595	714	705	520	116	410	592	469	705	705	695	684	476	459	590	707	676	683	420	255	551	696	693	694	671	635	661	675	670		587
RICHLAND 25 NW WASH.	550	633	163	700	733	580	481	562	458	587	518	695	394	659	715	679	658	723	659	735	361	649	538	361	666	647	597	556	716	652		588
RIVERSIDE CALIFORNIA	725	693	714	712	724	713	704	227	282	661	672	681	712	692	670	517	686	737	295	687	678	672	720	717	567	606	692	675	664	709		640
RUSTON LOUISIANA	685	648	677	586	448	491	632	619	646	639	628	0	0	558	558	606	436	433	645	629	608	417	578	541	614	556	538	492	459	449		527
SAINT CLOUD MINN.	646	243	630	165	413	598	743	596	732	692	413	701	527	568	580	604	654	740	436	556	406	592	579	538	299	743	194	591	708	799		556
SALT LAKE CITY UTAH	793	782	798	731	837	635	491	770	468	511	846	845	832	824	814	606	679	735	832	742	625	699	677	828	838	798	800	778	696	375		723
SAN ANTONIO TEXAS	615	702	596	639	478	611	669	683	632	621	652	560	583	655	625	690	617	313	320	448	591	336	637	355	501	471	569	613	650	653		570
SANTA MARIA CALIF.	699	697	696	698	644	534	684	555	681	691	711	715	469	544	565	206	532	661	651	669*	692	720	598	690	689	685	698	664	683	643		635*
SAULT STE MARIE MICH	775	745	188	404	145	366	487	767	375	793	658	395	309	372	---	783	779	625	729	725	767	646	635	645	513	636	735	623	---	737		584
SEATTLE TACOMA WASH.	438	121	206	280	753	695	597	480	645	607	531	641	309	631	748	521	531	701	787	687	528	733	191	653	575	582	231	807	629	629		549
SEATTLE WASHINGTONUW	518	98	154	255	682	672	472	465	601	614	454	565	322	609	706	414	287	623	655	635	486	762	228	435	541	454	201	744	553	602		494
SPOKANE WASHINGTON	---	---	---	---	---	753	---	---	331	557	360	718	269	---	777	758	---	---	575	656	364	692	420	409	748	676	657	349	744	738		---
STATE COLLEGE PENN.	390	727	698	599	542	494	386	439	594	632	812	807	755	403	647	258	685	796	720	705	687	745	640	665	646	542	606	554	704	724		620
STERLING VIRGINA	624	765	720	704	630	559	309	513	650	438	771	---	610	426	713	431	383	409	635	715	685	---	698	636	673	507	543	507	652	708		593
SWAN ISLAND W.I.	115	48	233	---	---	---	---	---	---	---	669	709	342	70	591	692	685	688	656	575	208	470	589	375	365	138	236	528	545	644		442
TAMPA FLORIDA	614	707	719	608	591	401	531	165	466	494	651	681	682	637	518	381	640	437	397	454	509	481	477	685	719	748	653	655	220	355		543
TUCSON ARIZONA	747	699	725	757	753	692	673	793	422	664	312	740	706	446	565	664	477	682	586	522	719	749	756	760	649	696	709	597	482	626		646
WAKE ISLAND,PACIFIC	494	613	620	543	543	579	609	614	593	508	570	589	607	615	432	612	604	600	606	577	448	622	607	345	567	450	556	614	553	595		563

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont. JUNE 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	428	377	123	338	340	448	274	180	440	211	172	349	368	115	260	422	327	331	415	429	329	73	324	274	389	434	433	423	378	245		322

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

CONDENSED CLIMATOLOGICAL SUMMARY

DELAYED DATA

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
December 1965		°F			°F			In.		In.
Alaska	Ketchikan	50	3+	Fort Yukon	-62	11	Little Port Walter	29.48	2 Stations	0.03
Hawaii	Wailuku 392, Maui	87	6+	Mauna Loa Slope Obs.	26	12+	Puohokamoa 2 343, Maui	38.20	4 Stations	.00
January 1966										
Alaska	Ketchikan	51	20	2 Stations	-62	11+	Ketchikan	17.61	2 Stations	.00
Hawaii	Makahuena Point Kauai	87	1	Mauna Loa Slope Obs.	25	16	Paakea 350, Maui	31.18	4 Stations	.00
February 1966										
Alaska	Ketchikan	58	23+	Manley Hot Springs	-54	22	Little Port Walter	16.93	Barrow WBAP	.06
Hawaii	Opihihale 2 24.1	86	28	2 Stations	27	18+	Kahana 883, Oahu	24.98	Halepohaku 111, Hawaii	.40
March 1966										
Alaska	Sitka Magnetic	56	29	Hughes	-55	18	Ketchikan	21.71	2 Stations	T
Hawaii	Waikiki 717.2, Oahu	89	17	Mauna Loa Slope Obs.	29	28+	Pepeekeo A & F 140, Hawaii	14.00	3 Stations	.00
April 1966										
Alaska	Annette WBAP	65	6	Barter Island WBAP	-34	8	Point Retreat Light Sta.	8.70	McKinley Park	T
Hawaii	Upolu Point USCG 159.2	89	12	Mauna Loa Slope Obs.	30	17+	Kukaiau 222, Hawaii	13.97	9 Stations	.00
May 1966										
Alaska	Annette WBAP	74	31	Wainwright	-7	16	Little Port Walter	32.82	2 Stations	T
Hawaii	Hilo WBAP, Hawaii	94	20	Mauna Loa Slopes Obs.	29	3	Kahana 883, Oahu	15.06	Makahuena Point, Kauai	.06

CORRECTIONS

	Month: Annual 1964
page 31: Green Bay, Wis.	The reference letter Y should be deleted for fastest mile in wind speed column.
pages 32-41: Metric Table	In the Wind column, Average speed: multiply each value by 0.868, under Fastest mile multiply each value by 8.68. Slight differences from direct conversions derive from the arithmetic rounding of figures.
	Month: May 1965
page 266: Minnesota	Tornado damage should be 8.
	Month: December 1965
pages 623, 630: Green Bay, Wis.	The reference letter Y should be deleted for fastest mile in wind speed column.
	Month: April 1966
page 182: Georgia	In column "all others" damage should be 5 under both property and crops.

RAWINSONDE DATA REFERENCE NOTE:

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes, dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G.C.T.

R More than half of the observations are from statistical values. Equipped with lithium chloride hygristor.

‡ Upper air program transferred to Victoria, Texas

1/ October 1965
2/ November 1965
3/ December 1965
4/ January 1966
5/ March 1966
6/ May 1966

RAWINSONDE DATA

Average monthly values

DELAYED DATA

CHIHUAHUA, MEXICO 1/
860 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,428	8.5	59	219	1.0
1000	30	163				
950	30	593				
900	30	1,050				
850	30	1,528	10.2	48	256	.8
800	30	2,038	13.2	35	269	2.3
750	30	2,575	9.5	35	270	1.6
700	30	3,146	5.6	36	3	2.1
650	30	3,743	1.8	33	9	3.5
600	29	4,390	- 2.4	31	4	5.1
550	29	5,068	- 6.4	26	346	4.9
500	29	5,814	-11.3	23	327	6.8
450	29	6,610	-17.1	25	314	10.7
400	29	7,488	-23.5	24	310	11.3
350	29	8,449	-30.6	25	303	13.4
300	28	9,526	-39.0	25	304	16.7
250	28	10,754	-47.2		297	19.2
200	27	12,202	-55.9		284	24.9
175	27	13,044	-59.3		285	23.5
150	25	14,005	-63.2		279	23.7
125	25	15,114	-67.1		279	23.1
100	24	16,444	-69.9		297	14.0
80	23	17,781	-67.5		304	4.5
70	23	18,590	-64.4		356	2.3
60	22	19,542	-61.4		34	3.7
50	21	20,683	-58.4		81	3.7
40	21	22,094	-56.4		90	3.5
30	17	23,939	-52.7		60	4.3
25	15	25,132	-50.7		54	3.7
20	13	26,580	-49.5		333	2.3
15	13	28,474	-47.4		340	7.4
10	5	31,190	-45.4			

CHIHUAHUA, MEXICO 2/
859 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	26	1,428	8.0	65	228	1.0
1000	26	157				
950	26	585				
900	26	1,041				
850	26	1,517	10.1	56	245	1.7
800	26	2,026	12.9	45	233	4.9
750	25	2,563	9.8	46	240	8.7
700	26	3,135	6.3	44	238	12.4
650	26	3,735	2.4	41	245	15.7
600	26	4,381	- 1.6	36	251	18.1
550	26	5,059	- 5.9	33	254	20.4
500	26	5,809	-10.5	32	261	23.1
450	26	6,606	-15.9	33	259	26.6
400	26	7,488	-22.4	31	256	32.4
350	26	8,455	-29.6	33	258	35.7
300	26	9,536	-37.9	36	261	42.2
250	26	10,765	-47.8		262	42.9
200	24	12,207	-57.6		266	47.2
175	24	13,040	-62.3		268	47.2
150	22	13,981	-66.3		264	45.6
125	22	15,078	-69.2		262	44.9
100	22	16,403	-70.8		267	33.2
80	22	17,731	-69.3		272	27.0
70	21	18,525	-68.3		277	23.1
60	19	19,455	-65.2		282	21.0
50	18	20,576	-63.0		276	18.8
40	15	21,965	-59.0		274	22.0
30	15	23,788	-55.1		265	25.4
25	14	24,958	-53.6		267	30.7
20	11	26,418	-51.8		265	31.7
15	9	28,281	-50.4			

CHIHUAHUA, MEXICO 3/
857 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,428	4.4	56	217	2.1
1000	31	151				
950	31	579				
900	31	1,030				
850	31	1,500	6.0	60	211	1.4
800	31	2,000	7.7	46		
750	31	2,528	5.3	44		
700	31	3,091	2.7	40		
650	31	3,683	- .3	34		
600	31	4,323	- 4.2	36		
550	31	4,998	- 8.4	36		
500	30	5,739	-12.9	34		
450	30	6,521	-18.2	35		
400	30	7,404	-24.4	38		
350	30	8,363	-30.8	42		
300	30	9,439	-38.8	44		
250	30	10,666	-47.3			
200	27	12,108	-55.7			
175	27	12,943	-60.2			
150	27	13,961	-63.8			
125	27	15,068	-67.6			
100	27	16,340	-70.9			
80	24	17,659	-69.8			
70	23	18,460	-69.4			
60	23	19,385	-67.9			
50	22	20,491	-65.4			
40	22	21,861	-62.0			
30	19	23,649	-59.9			
25	17	24,795	-59.1			
20	13	26,193	-58.9			
15	5	28,034	-55.6			

* FAIRBANKS, ALASKA 3/
994 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	135	-26.3	87	255	.4
1000	30	85				
950	30	463	-18.1	83	165	1.0
900	30	868	-16.0	73	147	3.9
850	30	1,299	-16.0	75	213	6.4
800	30	1,755	-16.5	70	228	7.0
750	30	2,235	-18.6	67	234	8.2
700	30	2,749	-21.6	66	237	9.7
650	30	3,288	-24.8	56	246	12.0
600	30	3,870	-28.0	63	260	14.0
550	30	4,483	-31.4	61	255	15.7
500	30	5,157	-36.3	57	258	18.5
450	30	5,873	-41.2	59	269	19.6
400	30	6,671	-46.3	61	271	21.1
350	30	7,548	-51.2		266	21.2
300	30	8,544	-53.2		275	23.1
250	30	9,723	-51.4		277	23.1
200	30	11,178	-49.8		271	22.1
175	30	12,054	-48.6		264	21.6
150	30	13,069	-48.0		259	21.4
125	30	14,272	-47.3		260	21.0
100	30	15,749	-47.1		255	21.8
80	30	17,223	-47.6		255	22.0
70	30	18,107	-47.9		257	22.1
60	30	19,120	-47.9		243	17.4
50	30	20,320	-48.6		243	21.8
40	29	21,785	-48.7		251	17.5
30	26	23,691	-48.9		224	16.1
25	23	24,910	-49.3		267	14.6
20	17	26,343	-51.9		182	11.5
15	14	28,238	-54.1		160	19.2
10	7	30,950	-57.6			

HUNTINGTON, W. VA. 6/
988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	10.4	82	326	1.0
1000	31	147				
950	31	579	12.9	57	266	2.7
900	31	1,031	11.2	59	273	7.8
850	31	1,507	9.3	57	282	10.7
800	31	2,009	6.8	52	278	14.6
750	31	2,535	4.2	47	273	17.3
700	31	3,096	1.5	44	272	18.1
650	31	3,687	- 1.6	38	274	21.4
600	31	4,324	- 5.3	37	278	24.7
550	31	4,996	- 9.7	36	277	27.6
500	31	5,731	-14.4	35	273	30.5
450	31	6,515	-19.6	34	272	32.2
400	31	7,387	-25.9	33	270	35.4
350	31	8,340	-32.1	32	272	40.4
300	31	9,406	-41.3	37	270	44.9
250	31	10,619	-50.5		269	51.7
200	31	12,044	-58.7		272	57.5
175	31	12,880	-59.4		271	53.9
150	31	13,846	-58.7		270	45.8
125	30	14,992	-59.3		269	38.5
100	30	16,387	-59.8		269	33.4
80	30	17,782	-59.5		274	24.3
70	30	18,517	-59.3		277	19.0
60	30	19,586	-58.7		280	9.9
50	30	20,740	-55.6		282	4.3
40	28	22,170	-53.1		275	3.3
30	27	24,036	-50.0		280	.8
25	25	25,233	-48.4		9	1.2
20	24	26,711	-46.4		1	1.2
15	22	28,636	-43.7		280	2.9
10	13	31,414	-40.3		271	5.4

KEY WEST, FLORIDA 6/
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	23	3	25.5	81	152	4.3
1000	23	128	24.4	82	137	5.4
950	23	574	20.7	83	158	5.6
900	23	1,042	17.7	72	166	7.2
850	23	1,529	15.2	61	190	6.0
800	23	2,041	12.4	55	214	4.7
750	23	2,579	9.6	42	236	4.7
700	23	3,150	6.6	40	246	4.7
650	23	3,748	3.2	36	253	7.2
600	23	4,400	.0	28	260	8.0
550	23	5,083	- 4.1	31	268	9.7
500	23	5,837	- 8.7	29	277	11.5
450	23	6,641	-14.1	27	289	12.8
400	23	7,530	-20.4	25	290	16.9
350	23	8,504	-27.7	25	288	17.3
300	23	9,594	-36.3	22	290	20.4
250	23	10,834	-46.1		291	28.2
200	23	12,282	-56.5		293	37.5
175	20	13,116	-60.6		282	35.5
150	16	14,056	-64.0		276	35.9
125	16	15,166	-66.8		280	26.6
100	16	16,505	-70.0		266	14.6
80	16	17,827	-71.5		332	3.5
70	16	18,623	-68.3		67	5.2
60	16	19,556	-64.6		97	9.5
50	16	20,680	-61.3		88	14.6
40	16	22,075	-58.5		88	20.6
30	16	23,905	-53.4		95	28.9
25	15	25,083	-50.2		95	27.2
20	14	26,555	-46.6		87	26.4
15	11	28,498	-43.3		96	27.2
10	11	31,254	-38.9		97	28.7
7	7	33,745	-34.4			

KWAJALEIN, MARSHALL IS. 1/
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	4	27.3	79	82	4.3
1000	29	89	26.9	79	85	5.1
950	29	542	23.9	84	88	6.8
900	29	1,015	21.1	82	90	7.2
850	29	1,510	18.6	79	89	6.8
800	29	2,029	16.1	74	83	6.2
750	29	2,576	13.2	72	84	6.2
700	29	3,155	10.1	68	89	7.6
650	29	3,768	6.4	70	96	7.8
600	29	4,421	2.4	70	98	8.2
550	29	5,120	- 1.6	62	102	8.7
500	29	5,874	- 5.9	60	101	9.7
450	29	6,692	-10.8	59	104	8.7
400	29	7,588	-16.3	59	100	8.9
350	29	8,583	-21.8	54	96	9.5
300	29	9,699	-30.5	46	97	[illegible]
250	29	10,966	-41.1	39	92	8.2
200	29	12,442	-53.4	34	108	8.0
175	29	13,287	-60.9	34	92	6.2
150	29	14,228	-68.8	34	89	7.8
125	28	15,298	-76.0		76	9.7
100	24	16,570	-79.4		81	8.9
80	20	17,848	-75.2		88	7.2
70	18	18,630	-72.2		90	10.3
60	17	19,543	-67.8		86	19.8
50	16	20,648	-64.1		89	35.5
40	14	22,026	-60.0		88	50.5
30	12	23,843	-55.6		91	58.3
25	12	25,013	-52.0		91	56.9
20	11	26,473	-48.5		86	65.1
15	9	28,375	-44.8			
10	7	31,125	-37.4			
7	5	33,591	-35.2			

MONTERREY, MEXICO 2/
967 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	423	16.0	88	303	3.3
1000	30	133				
950	30	575	17.2	83	310	3.3
900	30	1,034	16.7	68	306	.4
850	30	1,520	15.3	58	156	2.3
800	30	2,032	13.6	44	161	1.4
750	30	2,574	10.9	39	240	3.5
700	30	3,146	7.7	37	270	9.9
650	30	3,750	3.6	37	275	11.8
600	30	4,397	- .7	38	269	12.2
550	30	5,079	- 5.1	35	252	14.6
500	30	5,829	- 9.8	35	246	16.5
450	30	6,631	-15.2	27	251	18.6
400	30	7,515	-21.4	24	254	22.1
350	30	8,485	-28.6	24	253	25.6
300	30	9,568	-37.5	24	260	27.2
250	30	10,800	-47.2		261	35.5
200	30	12,241	-57.6		263	42.0
175	30	13,073	-63.1		263	43.5
150	29	14,008	-68.1		262	43.1
125	28	15,087	-72.3		263	35.0
100	28	16,395	-73.3		261	32.4
80	28	17,705	-71.4		272	20.2
70	27	18,491	-70.2		279	14.6
60	26	19,419	-66.6		263	10.9
50	25	20,532	-63.1		277	8.2
40	24	21,917	-59.5		262	11.7
30	23	23,740	-54.9		267	14.8
25	23	24,909	-53.6		268	11.7
20	20	26,342	-51.4		247	12.2
15	15	28,201	-50.8		255	24.9
10	5	30,799	-46.0			

MONTERREY, MEXICO 3/
967 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	423	13.1	90	341	3.9
1000	31	139				
950	31	572	13.5	82	7	2.9
900	31	1,028	12.1	74	82	1.2
850	31	1,506	11.0	65	155	2.9
800	31	2,010	9.5	54	211	3.5
750	31	2,545	8.1	44	239	8.4
700	31	3,112	5.2	43	252	10.1
650	31	3,709	1.5	41	250	15.5
600	31	4,354	- 2.3	38	248	18.1
550	31	5,039	- 6.2	35	246	25.3
500	31	5,781	-10.3	42	238	29.5
450	31	6,584	-15.9	46	240	33.4
400	30	7,462	-21.8	43	245	36.7
350	30	8,432	-29.1	41	245	44.5
300	30	9,515	-37.1	40	252	49.7
250	30	10,752	-46.1		251	60.4
200	30	12,200	-56.9		264	62.7
175	30	13,034	-62.3		262	60.8
150	30	13,976	-66.4		260	52.3
125	30	15,067	-71.1		262	40.4
100	29	16,379	-74.2		264	30.5
80	28	17,675	-75.0		266	22.9
70	28	18,453	-72.7		266	15.7
60	25	19,369	-69.1		263	12.8
50	25	20,470	-65.3		259	13.2
40	24	21,942	-61.4		256	15.0
30	24	23,640	-58.7		257	22.1
25	24	24,786	-58.3		258	24.3
20	18	26,207	-57.6		263	31.9
15	14	28,032	-55.0		262	29.9
10	6	30,731	-46.4			

MONTERREY, MEXICO 4/
967 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	423	7.1	89	338	4.1
1000	30	147				
950	30	569	7.9	86	345	4.7
900	30	1,017	6.9	78	330	2.5
850	30	1,488	7.5	63	208	2.1
800	30	1,987	6.9	52	229	3.5
750	30	2,516	4.8	53	241	7.2
700	30	3,075	1.4	51	252	13.9
650	30	3,665	- 1.9	42	249	18.1
600	30	4,301	- 5.9	39	248	23.1
550	30	4,969	- 9.9	38	245	30.9
500	30	5,707	-14.4	41	247	38.5
450	30	6,492	-19.9	43	252	45.8
400	30	7,363	-25.0	46	251	62.2
350	30	8,322	-31.2	47	247	66.8
300	30	9,399	-38.3	43	252	79.8
250	29	10,632	-46.8		258	82.9
200	29	12,080	-56.0		258	91.9
175	28	12,921	-60.3		259	85.3
150	28	13,874	-63.6		257	77.5
125	27	14,979	-67.3		261	61.0
100	27	16,311	-71.4		258	46.8
80	25	17,627	-71.4		260	35.7
70	23	18,419	-69.5		261	28.7
60	23	19,346	-66.6		262	16.0
50	22	20,456	-64.6		253	13.8
40	20	21,825	-61.2		259	16.9
30	19	23,623	-58.4		259	14.8
25	19	24,774	-57.0		259	20.6
20	18	26,202	-53.8		259	24.5
15	9	28,101	-46.4			

MONTERREY, MEXICO 5/
967 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	423	13.7	80	328	1.9
1000	31	135				
950	31	569	14.0	77	58	2.5
900	31	1,025	12.4	75	99	2.3
850	31	1,504	11.7	62	155	5.2
800	31	2,009	9.8	48	189	6.2
750	31	2,542	8.1	40	227	6.6
700	31	3,110	4.8	37	253	9.7
650	31	3,705	.7	38	265	13.6
600	31	4,348	- 4.0	39	263	18.1
550	31	5,019	- 9.0	36	262	23.1
500	31	5,759	-14.1	34	261	25.8
450	31	6,547	-19.7	26	263	32.1
400	31	7,415	-26.0	26	261	38.3
350	31	8,368	-33.1	31	258	46.4
300	31	9,434	-41.2	32	257	53.8
250	31	10,648	-50.2		259	67.8
200	31	12,082	-56.8		259	79.8
175	31	12,922	-60.1		261	74.6
150	31	13,877	-63.2		261	66.4
125	30	14,987	-66.6		259	53.4
100	29	16,324	-69.8		261	42.0
80	29	17,649	-70.0		258	33.0
70	29	18,446	-68.7		258	22.1
60	28	19,373	-66.0		260	13.0
50	27	20,488	-62.6		256	8.2
40	26	21,876	-59.3		254	2.9
30	26	23,687	-56.7		245	.8
25	25	24,850	-54.8		50	3.3
20	23	26,278	-52.1		63	6.6
15	16	28,183	-47.2		114	2.1
10	8	30,884	-42.0			
7						

SAN NICOLAS, CALIF. 3/
995 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	174	10.9	73	315	5.8
1000	30	129				
950	30	557	11.7	54	330	7.9
900	30	1,009	9.5	50	323	5.6
850	30	1,482	7.7	41	290	4.3
800	30	1,979	5.2	39	261	4.7
750	30	2,503	2.6	35	262	6.0
700	30	3,058	- .5	32	269	[illegible]
650	30	3,644	- 4.0	31	280	10.9
600	30	4,274	- 8.3	29	281	15.0
550	30	4,938	-12.9	29	276	17.3
500	30	5,664	-18.1	33	276	20.4
450	30	6,439	-23.6	32	272	23.5
400	30	7,294	-30.1	35	270	25.3
350	30	8,231	-37.1	36	267	30.5
300	30	9,280	-44.4	40	267	37.5
250	30	10,482	-51.4		264	46.2
200	30	11,916	-55.6		260	51.5
175	30	12,763	-57.4		259	51.9
150	30	13,734	-58.9		258	49.9
125	30	14,872	-61.2		260	42.2
100	30	16,249	-63.7		259	36.1
80	30	17,615	-64.5		264	25.1
70	30	18,430	-64.4		266	20.2
60	30	19,375	-64.0		275	12.4
50	28	20,494	-63.1		281	6.8
40	28	21,871	-61.8		305	4.7
30	26	23,659	-60.8		297	3.3
25	25	24,794	-60.3		329	1.7
20	24	26,189	-59.4		308	3.7
15	18	28,005	-57.3		306	7.8
10	13	30,588	-52.0		297	21.6
7	8	32,932	-45.4			

* VANDENBERG AFB, CALIF. 2/
1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	100	10.8	91	125	3.9
1000	30	132			93	2.3
950	30	564	12.8	70	98	2.5
900	30	1,017	11.5	58	173	4.7
850	30	1,493	9.2	54	198	6.0
800	30	1,994	7.0	48	218	9.3
750	30	2,520	4.4	44	228	11.3
700	30	3,081	1.2	43	230	14.6
650	30	3,669	- 2.3	45	236	18.3
600	30	4,305	- 6.6	44	237	21.2
550	30	4,972	-11.2	40	243	25.1
500	30	5,705	-16.0	40	242	30.5
450	30	6,485	-20.9	41	245	34.8
400	30	7,351	-27.0	43	247	41.6
350	30	8,300	-34.1	43	246	48.6
300	30	9,362	-42.0	48	245	55.2
250	30	10,572	-51.1		245	64.3
200	30	11,995	-59.1		246	65.5
175	29	12,827	-60.6		251	63.7
150	27	13,788	-62.1		254	56.3
125	26	14,915	-63.3		259	41.2
100	26	16,282	-64.3		256	36.9
80	26	17,648	-63.5		261	28.4
70	26	18,468	-63.1		267	25.4
60	26	19,417	-62.3		277	22.3
50	26	20,542	-61.9		275	20.2
40	26	21,925	-61.3		252	18.5
30	22	23,718	-59.5		262	24.7
25	22	24,861	-58.4		264	30.3
20	21	26,275	-56.6		260	31.3
15	18	28,117	-54.6		270	44.5
10	15	30,735	-50.5		268	54.0
7	13	33,086	-46.3		264	69.0

* VANDENBERG AFB, CALIF. 3/
1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	100	7.4	73	89	2.7
1000	31	130			65	3.3
950	31	557	11.2	55	326	1.9
900	31	1,008	8.5	53	263	2.7
850	31	1,478	6.2	51	242	4.1
800	31	1,974	4.0	45	254	6.6
750	31	2,492	1.6	37	254	10.1
700	31	3,049	- 1.2	33	253	11.7
650	31	3,633	- 4.6	33	261	14.0
600	31	4,262	- 8.7	31	260	18.5
550	31	4,923	-13.4	35	262	20.0
500	31	5,649	-18.7	36	265	22.1
450	31	6,418	-24.4	38	267	24.9
400	31	7,273	-30.7	41	266	27.0
350	31	8,207	-37.6	35	268	31.3
300	31	9,254	-44.9	45	270	35.9
250	31	10,453	-52.1		267	40.8
200	31	11,881	-56.4		263	45.5
175	31	12,727	-56.6		262	47.2
150	31	13,702	-58.0		262	43.1
125	31	14,843	-60.7		261	37.9
100	30	16,228	-62.2		261	30.7
80	30	17,601	-63.5		262	22.3
70	29	18,424	-63.2		267	17.7
60	28	19,374	-62.7		268	11.7
50	27	20,499	-62.8		302	6.8
40	26	21,877	-62.0		359	1.6
30	24	23,659	-60.6		26	4.9
25	24	24,795	-60.2		32	5.1
20	23	26,187	-59.6		23	6.8
15	22	27,991	-57.4		354	6.4
10	17	30,601	-51.7		302	19.4
7	12	32,942	-46.1		291	33.2

See reference note on page 309.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
DECEMBER 1965																																
PAGE ARIZONA	---	---	---	---	---	---	---	149	34	99	264	123	176	117	152	136*	128	248	252	253	187	66	175	251	273	264	237	189	196	248	257	186*
JANUARY 1966																																
ITHACA NEW YORK	65	20	129	175	164	10	22	152	182	100	96	129	50	106	138	122	37	56	73	39	143	143	42	181	163	183	188	254	189	151	62	115
INYOKERN CALIFORNIA	338	337	328	337	320	327	304	273	311	316	323	344	348	354	276	367	276	377	316	375	377	377	375	386	405	303	370	391	238	320	410	339
PAGE ARIZONA	254	259	251	269	262	228	263	129	255	223	244	264	267	253	214	260	---	---	---	---	---	---	---	---	---	264	295	315	216	227	---	---
PULLMAN WASHINGTON	106	58	24	90	57	80	105	106	104	73	62	126	73	118	144	199	224	42	125	151	145	111	80	229	159	161	97	154	119	115	225	118
RICHLAND 25 NW WASH.	79	64	29	108	44	88	109	160	92	49	45	80	62	126	165	192	42	125	80	151	109	131	137	160	97	112	182	135	60	80	227	107
SEATTLE WASHINGTON UN	18	68	20	34	11	19	61	54	37	27	32	17	27	42	152	112	35	123	73	67	52	68	64	96	107	88	78	104	73	62	94	62
STILLWATER OKLAHOMA	527	455	507	561	479	542	580	579	547	449	340	40	204	577	598	584	564	192	549	441	637	24	113	399	153	342	602	143	296	45		402
FEBRUARY 1966																																
GAINESVILLE FLORIDA	228	421	432	516	522	511	240	425	492	357	332	209	480	474	200	420	240	76	432	528	488	244	140	248	498	539	63	148				354
INYOKERN CALIFORNIA	378	404	361	322	292	160	211	442	429	336	478	455	495	479	487	493	503	421	487	510	520	406	385	346	475	503	501	547				422
MANHATTAN KANSAS	234	355	291	332	318	313	105	75	174	333	366	362	151	368	377	398	386	381	381	76	228	423	414	403	419	336	69	343				300
PULLMAN WASHINGTON	247	225	140	150	146	52	110	128	218	191	105	237	234	249	308	229	99	314	182	143	318	291	93	296	230	196	240	199				199
SEATTLE WASHINGTON UN	199	185	75	25	67	47	70	191	151	129	26	199	129	208	239	77	68	251	140	204	217	119	185	306	122	158	32	111				140
MARCH 1966																																
INYOKERN CALIFORNIA	523	506	580	568	502	652	593	462	592	555	574	454	629	547	589	612	628	610	546	637	660	671	---	460	556	693	669	706	724	733	745	599
MATANUSKA ALASKA	235	116	188	226	207	130	222	261	205	274	287	208	281	319	323	144	291	313	316	225	190	264	310	240	262	136	132	185	121	249	309	231
PULLMAN WASHINGTON	278	345	290	346	122	111	342	74	82	362	416	307	187	192	100	162	360	142	175	433	327	508	468	533	484	482	491	491	500	257	492	318
SWAN ISLAND W.I.	546	600	537	595	252	469	447	576	594	426	205	474	453	---	598	651	649	639	591	527	350	603	561	559	654	668	653	644	650	597	417	578
APRIL 1966																																
GAINESVILLE FLORIDA	641	622	580	163	---	---	479	648	625	645	630	610	565	440	183	586	613	596	532	542	481	563	616	649	573	521	495	526	469	511		539
INYOKERN CALIFORNIA	745	739	760	695	733	786	713	746	662	815	812	726	804	810	818	821	785	815	821	809	823	838	846	827	820	826	810	839	838	858		791
MATANUSKA ALASKA	416	157	67	316	415	431	447	439	455	433	189	447	502	347	374	132	167	101	400	406	371	556	557	559	507	335	333	527	572	588		385
MAY 1966																																
INYOKERN CALIFORNIA	853	853	795	738	849	863	671	646	721	708	865	886	863	905	900	891	888	870	874	830	818	903	918	914	903	866	862	907	931	940	918	850
PULLMAN WASHINGTON	548	640	630	625	577	257	674	653	522	409	623	363	594	487	395	557	730	614	614	679	251	669	656	642	721	605	625	619	401	524	218	552
SEATTLE WASHINGTON UN	602	621	631	631	593	144	616	638	159	416	644	187	212	335	118	536	658	674	579	194	211	524	665	683	659	146	713	---	---	---	---	474

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λsΩΩΩ defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Mex.																																
Jan. 1964	00311	00301	05299	00290	02318	00321	06356	00388	00323	00329	00341	00309	00337	00328	00381	00327	00291	05300	02326	00298	00288	00323	00356	00349	00327	00312	00299	06286	00328	00307	00301	321
Feb.	00283	00328	-----	-----	-----	-----	-----	-----	-----	-----	03276	-----	00279	02371	00295	06344	00231	00360	00329	05372	00369	00326	05355	00325	06315	05347	00342	00336	06375			330
Mar.	00348	05334	06427	00388	00331	00353	00324	-----	00338	05379	00360	06334	06329	00316	00308	05304	06310	05324	00363	00346	05306	06321	02323	06339	06364	00342	00360	00344	00325	00324	05281	338
Apr.	00314	-----	-----	-----	-----	-----	00305	00308	00318	00349	00340	00343	00326	00334	00307	00311	-----	-----	00304	00328	00355	00358	00339	00325	00363	00387	-----	00333	-----	00316		332
May	05333	00331	00311	06270	06264	00299	06260	00295	00308	00313	00316	00300	00301	06260	00288	00289	00303	00305	00314	00307	00289	00281	00275	00277	00283	05257	00306	06260	06328	00332	06340	297
June	00310	00313	-----	00314	-----	32308	32300	32352	32286	32345	32339	32356	32375	32327	00294	00302	00296	00305	00296	00288	00298	00306	00304	00308	00302	05321	05327	00287	00283	00281		312
July	00276	00276	00282	00280	00280	00284	00292	00284	06264	00286	06305	06309	00289	00281	05276	00285	00292	00292	00285	00281	00278	00280	00280	00292	00288	06268	00291	00290	00287	00286	00292	285
Aug.	00282	00282	00286	00292	00290	00296	00292	00291	00297	00296	00299	00296	00301	00295	00277	00281	00279	00287	00293	00289	00284	00291	00283	00280	05272	04287	00291	00275	00263	00279	00269	286
Sep.	00275	00280	00282	06270	-----	00268	00272	00266	00261	00266	00263	05261	00262	00273	00287	00277	00275	00275	--278	00269	00276	00272	00266	00271	00277	00284	00281	00271	00276	00289		273
Oct.	00268	00264	00267	00266	00259	06262	00274	00228	00224	00224	00254	00278	00250	00218	00211	00211	00237	06268	00272	00267	00273	00273	00260	00252	00252	00251	00244	00232	05227	00247	00254	251
Nov.	00238	00256	00256	00269	00248	00251	00252	-----	02233	06252	00267	00257	00246	00251	-----	-----	00238	-----	05287	00276	00262	00267	00275	00260	00269	03256	00289	00283	00268	00278		261
Dec.	00275	06289	00328	06319	05321	00326	00343	00355	00317	00303	00280	05275	00278	00279	00291	06283	00296	03275	07302	07298	05280	00268	06245	03250	06291	00288	05281	00276	05280	04273	06259	291
Jan. 1965	06270	00258	02246	00238	04237	05247	06254	05306	00288	00289	00281	00296	00306	00293	00315	00323	00310	00292	00281	07272	06322	06336	00311	00282	00332	00343	00327	00336	00320	06299	00302	294
Feb.	00310	06298	00302	00304	02307	05319	05341	05363	05352	00372	03408	00366	00354	05316	00360	00375	00348	00335	00281	00253	02280	00304	04372	00304	00312	00305	00293	00336				328
Mar.	00382	00403	00390	00300	00286	00311	00339	05309	06308	06287	05327	06363	00308	00297	06293	06365	00310	00338	00345	00310	00299	04331	00328	00350	02411	00335	00322	06307	00317	00314	00310	328
Apr.	04307	00314	00292	06296	06310	00307	00281	00289	06284	00307	00287	00298	05280	00288	00311	00302	00316	-----	00306	05300	00304	00314	05302	00334	-----	05346	06344	00333	00307	00305		306
May	00291	00304	00304	04305	00312	00310	00309	00313	00317	00304	00331	06313	00352	06317	00351	00351	00308	00310	00306	00299	00286	05288	00300	00344	00379	00326	00315	00314	00320	00304	00310	316
June	00303	05306	05323	00379	00340	00323	00317	05278	04310	06349	06334	00293	00299	00304	00293	00297	00292	00280	00278	00288	00303	00291	00290	00298	00296	00293	00279	00276	00280	00281		302
July	05325	00289	00291	00295	00295	00295	06282	00285	00280	00280	00298	00300	00291	00289	00293	00298	00300	00291	00292	00261	00290	00284	00284	00290	00288	00304	05295	00302	00290	00285	00279	292
Aug.	00280	00280	00282	00283	00277	00275	00271	00276	00272	00270	00275	00272	00275	04314	00289	00289	00283	00277	00273	00275	00271	00275	00273	00271	00272	00270	00267	00271	00269	00276	00271	277
Sep.	00270	00276	00278	00264	00254	00262	00273	05262	00258	00258	06252	00259	00260	00255	00276	00276	00279	00268	00267	00287	00308	00276	00276	00280	00273	00263	00251	00248	00265	00302		269
Oct.	00272	00260	00260	00258	00248	00249	00257	00250	-----	-----	00257	00267	00272	00279	00265	-----	-----	06287	00275	00273	00266	00272	-----	-----	00253	00264	00248	00255	00260	00252	00258	262
Nov.	00362	00252	00251	00234	00242	00250	00254	00253	00261	00276	00279	00290	00252	04266	06258	05236	04236	00236	00238	00251	04248	06250	05250	06235	06236	00275	03270	00279	00297	03267		256
Dec.	05275	00262	00259	-----	-----	00256	00259	06248	05265	05288	00335	00301	00294	00312	04340	07336	05338	00325	00308	00312	00305	05299	00286	00268	00273	00303	03278	00237	00243	05261	00263	287
Amundsen-Scott, Antarctic																																
Jan. 1964	00318	33312	35322	35323	35322	33311	33322	33317	-----	33301	00299	00301	00315	35316	33310	33314	33310	35318	33319	33318	33308	32305	00306	32310	00308	32305	34297	00303	35286	34284	34288	309
Feb.	00283	34283	34276	32281	32269	33265	20280	32268	32266	20280	20276	32267	20271	33254	34240	32240	32254	-----	-----	60324	-----	60322	60317	60319	60312	-----	-----	-----	-----			279
Mar.	60292	60282	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	287
Apr.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61267	61290	61298		285
May	61290	61281	61281	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61266	61276	61277	-----	-----	-----	61221	270
June	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61245	61253	61231	-----	61259	61257	-----	-----	249
July	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61284	61270	-----	61271	61271	-----	-----	-----	-----	-----	-----	-----	274
Aug.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61286	61271	-----	61254	61243	61244	-----	-----	-----	-----	-----	-----	-----	-----	260
Sep.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		---
Oct.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	60323	60339	60354	60354	60340	-----	34352	34360	33373	32385	32384	33440	364
Nov.	33437	34416	34412	32440	60450	32430	33408	32415	20455	20455	20453	20435	20420	20435	20410	20430	37415	34407	00402	00378	33381	00385	37389	34388	37395	00388	00386	00403	00388	00387		413
Dec.	00374	00373	35385	34388	00386	34395	00376	00378	33378	00374	-----	00368	00350	00346	00342	00357	00350	00355	00356	00356	34350	34351	00353	34347	00342	00342	00338	37336	00335	00333	37331	358
Jan. 1965	36336	36330	00326	00316	00317	00318	36314	35305	36307	35314	35306	00300	00300	00304	35315	37315	36317	00311	00305	32308	00305	35289	00274	32303	36294	20300	36292	20301	20304	20309	35300	308
Feb.	20294	20303	20300	36285	35276	38268	38260	32271	60264	35261	36268	38276	36272	38268	60286	60293	-----	60284	60272	60288	60288	-----	-----	-----	60270	60265	60264	60248				276
Mar.	60248	60250	60258	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	252
Apr.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61304	-----	41332	61337	61318	61311	61303	-----	-----	-----	-----	-----	-----	-----		308
May	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61267	61322	61823	61306	-----	-----	-----	-----	61393	-----	-----	-----	-----	-----	-----	-----	-----	-----	322
June	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61280	61320	61306	61320	61320	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		309
July	-----	-----	-----	-----	-----	-----	-----	-----	61262	61264	61285	61331	61327	61302	61288	61278	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	292
Aug.	-----	-----	-----	-----	-----	-----	-----	61310	61281	61269	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	287
Sep.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		---
Oct.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	60244	60231	60230	60253	-----	60246	60249	-----	-----	32259	32259	32261	32270	32284	60291	256
Nov.	60301	60297	-----	60296	60285	20289	33288	32285	33286	33299	33316	35300	35307	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		296
Dec.	-----	-----	-----	-----	-----	-----	00360	00361	00356	-----	00343	00343	00339	00340	00351	00348	00349	00355	00346	00355	00354	00366	00368	00350	00340	00338	00348	00346	00344	00332	00329	348
Bedford, Mass.																																
Jan. 1964	-----	00344	00304	-----	-----	05325	35349	00336	05332	00325	-----	-----	-----	-----	00341	00352	00367	-----	-----	35360	-----	00328	00320	00349	-----	-----	00382	-----	00362	00386	00329	344
Feb.	-----	-----	00428	00360	00378	05341	00383	-----	-----	00452	00412	00361	00322	00367	00335	-----	00360	00365	-----	00369	-----	-----	-----	00433	00396	00406	00424	00371	-----			382
Mar.	-----	00378	00358	00350	-----	00329	-----	-----	05384	-----	00412	00452	00409	-----	-----	00413	35395	00448	00435	00365	-----	-----	00410	00390	00401	05452	00418	-----	-----	00455	00486	407
Apr.	00486	00417	05410	-----	-----	00351	07369	05375	00402	00387	-----	-----	00360	05361	05436	00416	00386	-----	-----	05404	00378	05410	00390	05427	-----	-----	00392	00373	00376	00393		395
May	00381	-----	-----	00390	00414	00399	00362	00364	-----	-----	00379	00340	00334	-----	00397	-----	-----	00408	00367	00414	00398	00368	-----	-----	00371	00362	00344	00370	-----	-----	-----	377
June	00334	00373	00400	00390	00396	-----	-----	-----	00350	00330	00383	00388	-----	-----	35343	00361	00412	00360	00334	-----	-----	00330	00336	00336	00334	00336	-----	-----	00352	00340		358
July	00339	05357	-----	-----	-----	00384	00354	00347	-----	-----	-----	-----	05346	00336	00328	00332	00346	-----	-----	00315	00317	00325	05345	05352	-----	-----	00325	00328	00331	00319	00339	338
Aug.	-----	-----	00327	00328	05367	00370	00325	-----	-----	00343	06333	05354	00323	00383	-----	-----	00337	00341	00339	00341	00328	-----	-----	00312	00323	00316	00313	00317	-----	-----	00291	334
Sep.	00311	00312	00313	00306	-----	-----	-----	00301	05296	05349	00293	-----	-----	00309	00304	00320	00322	00311	-----	-----	00296	05287	05286	00293	00342	-----	-----	00303	05337	05306		309
Oct.	00332	00319	-----	-----	00292	00302	00300	00323	05316	-----	-----	00318	00322	00316	00299	00292	-----	-----	00304	05298	00327	00335	00330	-----	-----	00282	00298	00300	00301	00298	-----	309
Nov.	-----	00280	00318	00293	00296	00311	-----	-----	00304	05316	-----	00272	00272	-----	-----	05302	00295	00286	05290	05274	-----	-----	00321	02297	05297	-----	00310	-----	-----	05376		301
Dec.	-----	-----	-----	-----	-----	-----	00334	00350	00379	00326	35296	-----	-----	00260	00393	20319	35304	36335	-----	-----	02359	-----	36349	35334	-----	-----	-----	-----	00323	-----	00365	335
Jan. 1965	-----	-----	-----	00391	00369	00384	00354	-----	-----	-----	05338	00330	-----	00350	-----	-----	-----	04412	00469	35360	00368	00324	-----	-----	00303	06302	00348	00384	00423	-----	-----	365
Feb.	00393	00414	-----	00429	00404	-----	-----	00310	00329	-----	00330	-----	-----	-----	-----	00328	-----	-----	-----	-----	-----	-----	-----	00412	-----	-----	-----	-----				372
Mar.	-----	00404	-----	00354	05341	-----	-----	05390	05428	00446	00500	00433	00400	-----	05456	00394	00364	05367	00361	-----	-----	00508	05447	00399	00381	-----	-----	-----	-----	-----	-----	410

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded ΩΩΩ) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

DELAYED DATA

Station	Day of month																															Mean O_3
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Bedford, Mass.																																
Apr. 1965	00407	00420	-----	-----	00394	00383	00375	-----	00393	-----	-----	05400	-----	06324	03357	03408	-----	-----	02415	00384	00381	00393	05420	-----	-----	-----	05397	00383	00394	00416		392
May	-----	-----	02378	00348	00380	00391	00364	-----	-----	06374	05367	00394	00398	00397	-----	-----	04373	-----	05355	00361	00363	-----	-----	00391	00365	00355	00353	-----	-----	-----	-----	373
June	00373	-----	05411	00395	-----	-----	00339	00341	00347	00348	00359	-----	-----	05435	00380	00359	00349	00409	-----	-----	00361	00343	00337	05341	00349	-----	-----	00337	00325	05375		363
July	00374	00362	-----	-----	-----	00350	00341	00334	00329	-----	-----	00327	00334	00334	00338	00348	-----	-----	00343	00363	00355	00338	04325	-----	-----	00325	00324	00329	00362	00363	-----	343
Aug.	-----	-----	00339	00340	00330	00337	-----	-----	00305	00324	-----	00331	00333	-----	-----	00318	00339	--325	00326	00328	-----	-----	00320	00323	00321	05365	00318	-----	-----	00353	00310	329
Sep.	05324	00322	00321	-----	-----	-----	00303	04295	00290	00292	-----	-----	05276	05274	05311	00293	05298	-----	-----	00290	00299	00298	00307	05324	-----	-----	00302	00297	05310	00278		300
Oct.	05273	-----	-----	00330	00335	00356	00318	00317	-----	-----	00302	00323	00307	00327	05304	-----	-----	00292	00278	00263	00265	-----	-----	-----	00329	02307	00335	00328	00350	-----	-----	312
Nov.	00343	00345	06313	00338	00336	-----	-----	05304	00334	00331	-----	05339	-----	-----	00339	-----	05321	00366	00312	-----	-----	-----	00348	00340	-----	00325	-----	-----	00345	00330		334
Dec.	00322	00317	00325	-----	-----	02347	00339	04355	00335	00323	-----	-----	-----	-----	-----	06331	-----	-----	-----	00379	00388	00398	35331	-----	-----	-----	-----	00406	02345	00315	-----	343
Bismarck, N. Dak.																																
Jan. 1964	00302	36313	00371	34355	35373	20390	35388	00440	36404	35354	00420	00363	33361	00349	00376	35333	38405	35372	00421	00348	00330	00380	35435	00400	00447	00342	00364	05342	00333	34321	00355	371
Feb.	00383	00423	00343	00339	04378	00479	35355	35371	00450	00348	00346	36420	00389	00448	00381	00399	04389	06428	00392	04389	00366	-----	00412	00416	00462	00411	00395	00393	04436			398
Mar.	04375	00419	00463	05443	00425	00424	00406	35447	35417	00436	00446	00406	00430	00445	05396	00417	00380	05403	05396	00381	00402	04417	-----	00441	00448	06472	00491	00430	00403	00371	00352	419
Apr.	00353	00345	00370	00365	-----	36426	05408	00394	00385	00360	00361	-----	05407	00419	00353	00345	00385	05405	00396	00379	05389	05398	03373	00366	06371	00383	36422	00422	00346	05376		382
May	35416	36437	06435	00416	00376	06465	00400	04394	00366	06336	05406	00373	00338	00337	00379	00348	06333	00348	00338	05327	00338	00331	00344	00349	00305	00321	00320	04322	06336	00386	00399	365
June	00407	00361	00340	00372	00342	00356	05338	00334	00317	05353	-----	35359	00361	03352	05374	04376	04314	06331	06360	06378	00347	-----	00351	00316	00303	00323	00307	05319	00315	00318		345
July	00328	00330	05339	05367	00317	00344	00348	00333	00318	-----	00354	00311	00318	00316	00324	-----	00303	00298	00326	00317	00299	00309	05316	00315	00327	00316	00322	00307	05321	35328	05310	323
Aug.	05304	00310	06298	00302	00301	00317	00310	00302	00316	00309	00325	00325	00323	05336	00339	00329	00322	00309	00300	04302	05364	05356	05324	00348	00330	05295	04323	00339	-----	00314	00312	319
Sep.	00294	00301	00308	35304	00285	00302	00281	05313	-----	-----	-----	-----	-----	00309	05329	00293	00289	06304	00312	00299	00322	06330	05343	00315	05306	05354	00310	00318	00289	04292		308
Oct.	06331	00290	35320	35358	05343	00322	05312	00288	00287	03293	00321	03265	00257	00267	00259	05274	00339	00337	00298	05266	00300	00275	00242	00281	00287	00289	00317	34328	04308	35307	05306	299
Nov.	00302	05299	03323	00275	00265	00310	00301	35312	00287	35299	35317	00310	36289	35342	35329	00293	00287	34317	00365	00369	00276	00263	06292	05310	35301	03306	00355	00363	00350	35301		310
Dec.	34378	36338	-----	00330	33349	34355	36339	20324	00329	00329	20331	36361	20390	20386	36387	35420	02370	00315	00312	32300	32355	35326	36321	00331	00366	20303	00347	35381	35392	00383	00366	350
Jan. 1965	00396	00373	34357	34360	00358	00303	33318	33374	35330	00323	00362	32360	00355	36408	36392	20390	-----	20327	00350	00332	35367	34368	33405	35379	00348	-----	20432	05440	20410	00420	36380	370
Feb.	00432	00466	03374	-----	33365	-----	00388	00373	00391	00436	00428	00450	34395	35437	00500	00398	00375	05368	00307	00325	00385	36382	00413	00434	00385	03359	03364	00399				397
Mar.	00396	00401	06390	00380	00339	00429	00436	00428	00426	05454	00391	36412	34427	00380	05417	06406	00459	00510	00471	00457	04422	00429	00531	00526	00530	00534	00458	05405	00366	05338	00335	428
Apr.	00370	05376	05384	05379	05416	05396	00375	05414	04385	07419	06442	00397	00392	04462	05369	05422	05391	00386	00400	00404	00365	03358	05371	05391	00383	05380	00404	00386	00360	00365		391
May	00361	-----	00357	00380	00371	00367	06313	05356	06401	00329	00329	00368	35345	05366	00376	04393	00368	00423	00411	00346	00343	05349	35404	-----	04354	04369	05371	00376	00379	00365	00351	366
June	00388	00381	00354	05355	05352	00355	05346	00379	00349	00350	03298	05331	05330	05344	00327	05307	05309	00329	00365	00349	00344	00344	00333	00329	00326	00366	05390	00349	03356	00344		346
July	00335	00353	00347	00344	05338	00333	05320	05297	05321	05309	05314	00320	00345	00342	00336	00336	00327	00317	05321	05325	00327	05326	00321	00313	00322	00322	00330	00310	00299	05334	00319	326
Aug.	00304	00313	00311	00308	05334	-----	05324	00326	00308	00290	00289	00283	00296	00299	00300	00319	00324	00311	00302	00300	00312	00324	00310	00317	00314	00330	05302	05289	03298	05346	00368	312
Sep.	00330	05321	06313	05336	05323	05318	03305	05289	06311	00309	05313	05309	00314	04363	01361	04352	05306	05301	00307	00318	04322	05345	06367	00285	05312	00312	05318	05316	-----	00325		321
Oct.	00280	00273	00283	00284	04271	00301	00310	00303	00276	00292	00320	00301	04308	00287	00276	03279	05278	04279	06299	00309	00287	03277	00312	00280	00277	00288	00284	00311	06300	00294	00305	291
Nov.	00298	00296	00304	03284	00270	06271	04274	00270	04270	00284	00297	04340	00304	04283	00295	00293	00290	00282	05308	00321	00325	00286	00277	35278	35333	34371	00318	00299	00342	-----		299
Dec.	00314	34335	00334	00335	00320	00310	00313	00318	00313	35363	37382	35403	35369	36397	20373	35387	00393	00407	35416	20387	00367	37373	35355	02350	20350	36416	33330	34359	02307	34326	00346	356
Byrd, Antarctic																																
Jan. - Jul. 1962	Missing																															
Aug.	-----	-----	-----	-----	-----	-----	-----	-----	41245	-----	41313	41326	-----	-----	61253	61328	61298	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	294
Sep.	-----	-----	-----	-----	-----	-----	-----	61329	41347	41361	41330	41321	41324	-----	-----	-----	-----	-----	60329	60302	-----	-----	60307	60351	60310	60329	60322	60311	60309	-----		325
Oct.	60327	60326	-----	-----	-----	60287	60313	-----	60321	60317	60323	60320	60326	60338	60333	60334	60321	-----	60322	-----	60306	00322	-----	-----	-----	00310	00302	00315	00322	00321	00326	320
Nov.	00370	00401	00401	05399	00376	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		389
Dec.	-----	-----	-----	-----	-----	-----	-----	00380	00378	-----	00373	00365	-----	00395	04398	00387	05382	00377	00370	00372	00372	04384	00374	00333	04350	04368	04358	04350	-----	-----	-----	372
Jan. 1963	-----	04305	04329	00315	00321	04365	00330	00330	00318	00318	00330	00335	00332	04333	00331	04337	04325	00321	00327	00319	00335	00323	00321	00298	00297	04291	04301	04294	04300	04302	00293	319
Feb.	00298	00297	00303	00301	04287	-----	-----	00301	00289	00279	-----	00279	-----	-----	00309	-----	00284	-----	-----	00284	-----	00301	-----	20344	20342	-----	-----	-----				300
Mar.	-----	-----	-----	-----	00291	-----	-----	-----	00275	00281	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	282
Apr.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	41251	41270	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		260
May	-----	-----	-----	-----	-----	-----	-----	11307	41289	-----	41252	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	283
June	-----	-----	-----	-----	-----	-----	-----	41254	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		254
July	-----	-----	61272	41284	-----	-----	41288	41323	-----	41308	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	41299	-----	296
Aug.	61307	-----	41282	41304	-----	41310	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	301
Sep.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	60242	-----	-----		242
Oct.	-----	-----	-----	02287	-----	-----	-----	34281	34277	02279	34268	-----	20281	20278	34273	-----	00289	34272	00280	34274	34288	00313	00305	34287	00285	33268	-----	00293	34301	00310	34268	284
Nov.	34259	34289	04301	00306	00271	-----	-----	-----	-----	-----	-----	-----	00348	-----	00425	-----	-----	05448	00428	35425	00435	00436	00427	00413	00409	00382	00375	00415	00410	00372		379
Dec.	-----	-----	-----	35380	36390	00378	00376	-----	00381	35368	00378	00368	00361	00360	00365	00371	00372	00372	00364	00339	00305	00313	00314	-----	-----	00344	05342	00348	00343	00354	00339	357
Jan. 1964	-----	00330	-----	05330	00319	00327	06327	-----	00329	00325	00315	00337	05324	00303	05293	05321	00317	00309	00323	-----	05297	00292	00308	00285	00298	-----	00286	00279	00275	00284	00276	308
Feb.	00287	-----	-----	00290	-----	-----	-----	-----	00302	00295	00294	00289	00305	00287	00272	00280	36275	-----	36275	00291	00311	20301	-----	00332	-----	00342	36289	35294	35263			294
Mar.	-----	-----	-----	36281	02265	34286	60299	37279	60289	34277	34289	60299	60301	35284	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	286
Apr. - Aug.	Missing																															
Sep.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	60332	60339	60326	60312	60290		320
Oct.	60298	60296	35283	60283	-----	60296	60294	60284	35292	-----	60352	60354	60350	60340	60328	20321	20336	20347	00389	60380	-----	00448	00453	-----	00441	00451	-----	-----	36431	00481	20481	360
Nov.	-----	-----	-----	-----	00438	00429	-----	05442	00459	00457	00444	00427	00433	00429	00413	08398	00382	00393	05385	00368	05380	05384	04398	05400	00395	00389	00372	05368	08384	06364		405
Dec.	07356	04364	05364	05352	00337	05344	00361	05332	05329	00322	00345	00338	00322	00316	00316	00336	00317	00295	00300	05343	05335	05335	05329	00318	00302	05317	00303	00298	00304	00308	05320	328
Jan. 1965	06318	00306	00311	00308	00290	08318	05311	05305	00289	08297	00288	00280	06309	00290	06308	07318	06321	00299	00308	00294	00291	00294	05295	05294	00296	00291	00293	00277	00278	06280	05291	298
Feb.	07294	00266	00267	06290	05298	00286	00293	00288	00275	36289	00275	00267	38260	00259	35265	00275	34261	35250	35245	35261	37269	35272	35283	35286	36270	32277	32278	36279				274
Mar.	36276	35270	35268	35278	37293	32289	35280	35276	35275	32272	38288	38294	35260	35260	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		277
Apr.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	41323	-----	41270	61295	61310	61295	61325	-----	-----	-----	-----	-----	-----		303
May	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61275	61290	61260	41265	41295	41335	41320	41295	41290	-----	-----	-----	-----	-----	-----	-----	-----	-----		292
June	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	61330	-----	61315	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----		323

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

DELAYED DATA

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
Byrd, Antarctic																																
July 1965	-----	-----	-----	-----	-----	-----	-----	-----	-----	41290	-----	-----	41300	41295	41280	61290	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	291
Aug.	-----	-----	-----	-----	-----	-----	41310	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	310
Sep.	-----	-----	-----	-----	-----	41290	61315	61320	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	60297	60294	60295		302
Oct.	60314	60308	60277	-----	60262	05302	08315	60286	05297	08287	08313	05297	05309	60300	02292	60275	60274	00286	00283	00273	00268	00267	02276	05289	00285	05293	02277	06282	00283	00290	05296	289
Nov.	08333	08323	08325	00310	00320	00305	05308	05302	05347	00352	05372	05328	00336	00355	02394	00426	05423	02417	05410	02413	05438	05417	00402	06375	05365	03412	06373	05368	05399	02365		367
Dec.	05363	05372	00370	05363	05377	05372	04361	05354	05345	02354	00362	04341	04333	00316	00302	06318	05314	05340	00316	02300	05337	05330	05325	05339	06338	05339	05339	00328	05336	06338	05321	340
Canton Island																																
Jan. 1965	Missing																															
Feb.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00251	00247	00249	00247	00245	00246	00246	00249	00253	00246	06247	-----	-----				248
Mar.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00246	00248	00237	00250	00248	00251	00252	00243	00240	00243	00251	00253	00248	00243	00246	247
Apr.	00240	00242	00243	00243	00238	00235	00247	00244	00249	00252	00245	00261	00244	00240	00241	00239	00242	00254	00241	00245	00242	00242	00241	00243	00238	00244	00241	00240	-----	-----		243
May - Dec.	Missing																															
Caribou, Maine																																
Jan. 1964	34339	35363	35353	36352	36372	33378	37376	00392	02371	-----	00366	00417	00396	34414	35441	35396	00342	-----	00351	06357	-----	06361	06343	00374	-----	00394	05461	00495	00376	06445	00347	384
Feb.	35346	-----	-----	-----	-----	-----	-----	05440	00418	00410	00454	00371	00348	32385	00456	04412	00422	00425	00393	06424	06414	05448	00431	00433	00407	-----	00468	00427	00439			417
Mar.	00387	00403	00402	00378	-----	00414	00401	00435	-----	05387	00423	35458	00469	34450	35427	00464	00425	00473	05466	00427	00407	05453	00459	00407	00420	35415	38494	00434	-----	35490	00512	435
Apr.	00516	00446	-----	00486	00460	00365	04395	04439	-----	34414	-----	-----	-----	-----	-----	00427	00417	06383	00410	00441	00422	03388	-----	-----	05413	00401	00445	06436	00412	00402		425
May	00411	00392	00372	02391	00395	05394	05345	05364	-----	-----	04404	00385	06356	05351	00379	05388	00396	00428	35405	35422	32396	-----	35393	35373	-----	36423	00413	06407	05402	00376	00369	390
June	00358	05384	00398	-----	05420	00371	32386	00386	05348	05387	00403	00403	00365	06377	00365	00413	-----	00377	05358	05352	00370	00372	00339	06326	00373	00370	05406	00388	05346	05356		375
July	05344	00349	-----	05355	05360	05392	-----	-----	02348	00363	00358	00353	05364	04318	00332	00330	04346	00332	06345	00320	06307	05323	-----	00350	00332	00326	00328	05361	00325	00331	00398	344
Aug.	00371	-----	00383	00338	05344	05377	00321	-----	05356	02361	00329	05333	00317	00366	00368	06355	05352	06342	06340	00332	05333	00322	-----	05317	00312	05332	00319	00308	00288	00291	05284	335
Sep.	04319	00329	04340	04303	05315	05314	00303	-----	00302	00296	-----	00305	00313	05294	00310	06316	03339	06348	00327	00293	00283	00276	06294	00279	06335	00353	06312	00320	00318	05319	-----	313
Oct.	00325	00291	00314	00286	05304	00307	00302	00332	05323	05338	00334	05323	04352	-----	05311	00283	00286	-----	05290	00272	06345	05350	02349	00321	05318	00290	00291	05305	05342	-----	00289	313
Nov.	06285	00319	00338	00293	00309	05323	05333	00286	00332	05329	00312	-----	00302	00294	02329	35325	-----	-----	00318	-----	02326	35379	35330	00312	35299	-----	02332	00284	-----	35355		319
Dec.	-----	00437	02393	35323	-----	-----	35365	02368	36371	00339	35336	00291	35288	00297	00409	00365	34343	02364	00357	-----	00362	34407	-----	35384	-----	-----	00282	-----	-----	-----	-----	354
Jan. 1965	00382	00356	35393	00362	00363	35399	00379	02320	02302	35304	00334	00357	05389	00392	00419	35406	-----	02432	35482	-----	00395	-----	00349	34323	05373	00305	-----	00422	00465	02537	02501	387
Feb.	02452	00433	00455	00480	00415	00342	36382	-----	00353	05350	05382	04348	00393	00442	00411	05460	00417	-----	-----	00462	00342	-----	00432	00354	05349	05418	00470	00439				408
Mar.	05427	05412	06374	00348	00357	06377	-----	00422	00428	00461	00474	00450	00451	00449	00476	00390	00438	05360	-----	00383	05484	00556	00508	00543	00457	05419	05547	00490	00418	00479	00473	443
Apr.	00459	00505	00474	06456	05409	00428	00389	04431	05453	05422	00421	04412	04436	00412	00414	-----	05413	00444	00417	00386	00415	00426	04426	00463	00436	05393	05397	02419	05440	04442		429
May	05446	00461	04369	00363	00440	04401	00361	00387	-----	00380	05424	00378	-----	00434	00383	05376	-----	-----	04369	05367	00377	05393	00392	00408	04398	00370	-----	00343	05434	00385	05419	395
June	06384	00382	00401	05401	-----	00358	03323	05326	00337	00364	05373	00383	-----	05439	00384	00386	00385	00381	00379	00349	00363	00359	05336	00332	00392	00385	00334	00324	02340	05352		366
July	00403	00370	05368	00390	00356	00399	00343	-----	00331	05318	00325	05341	00328	05355	00345	00360	06365	05370	05359	00351	05363	00354	06365	00317	00325	05373	00345	00357	-----	00367	00364	355
Aug. 1965	00341	00342	05401	05360	00355	06326	04337	06348	05372	05315	00339	03316	00339	00323	00322	00317	05332	06309	05340	06325	00363	00334	05399	00338	00346	05346	05324	05328	05361	05355	00331	341
Sep.	-----	02352	00332	00310	00315	00303	00314	00315	00313	-----	00298	00291	04288	03305	05307	00314	00321	00312	00294	05293	05296	06280	00289	05293	05327	00299	05336	00343	02333	00294		310
Oct.	-----	06310	04323	-----	06380	05378	00335	-----	05348	05347	05332	-----	00331	00344	05358	05334	00286	04313	00267	00256	05258	05273	05270	05316	00352	05326	-----	00352	00383	04333	04294	323
Nov.	-----	05371	05342	35335	00338	02312	05324	00324	36345	00324	00321	00328	-----	-----	00354	-----	-----	35362	05336	00319	34330	37335	-----	33365	02370	-----	34320	02307	34338	00367		338
Dec.	34387	35360	34352	-----	35369	35385	34393	02385	35366	35404	02402	00410	-----	-----	-----	35383	35391	02445	35424	-----	-----	35415	-----	-----	35341	-----	00375	34436	00400	35328	34375	388
Fairbanks, Alaska																																
Jan. - Nov. 1964	Missing																															
Dec.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	21401	-----	-----	-----	-----	-----	-----	-----	-----	-----	401
Jan. 1965	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	41371	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	371
Feb.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	32435	32426	32441	60439	60469	02404	-----	-----	36418	36486	02446	20398				436
Mar.	36514	35494	-----	-----	35435	35410	35425	35386	36386	02394	35400	36458	34432	00439	00464	02405	34427	00425	35442	33402	35437	06438	05459	34427	06404	05429	05399	35364	05398	05363	05359	421
Apr.	05454	05416	05435	05413	06421	06429	00408	00409	06459	05452	06424	00425	-----	02345	05369	06402	05420	00403	05454	05458	00491	05493	03481	03506	05436	05404	03410	05438	05455	05422		432
May	04438	06402	04411	06441	05298	03413	00443	00438	05426	02404	05414	06404	06407	02407	02382	06435	00382	05365	05361	03362	06354	05389	06394	02385	06380	06391	03403	05366	05352	05337	05363	395
June	05375	02391	04303	05446	00382	05335	04318	03322	05345	03366	05412	04374	05365	05355	02380	04369	-----	06364	05354	06336	04351	05335	00349	00398	00339	05334	06361	03367	06343	02307		361
July	02345	05327	02345	05347	05346	00336	04339	04305	05349	06320	06320	03315	04301	04290	06333	05309	04329	05329	-----	05354	05347	00341	05348	-----	05346	00328	00324	03306	00304	00298	02262	326
Aug.	05279	06284	05300	05298	05283	02284	05276	05283	05276	05310	06307	00332	05326	05299	05350	05342	02313	02320	00302	05301	06315	02286	-----	-----	06329	05316	06331	05324	-----	-----	05320	307
Sep.	05303	06301	06278	05311	-----	-----	06318	05313	03277	00270	00275	-----	00277	00280	06276	05302	05282	-----	-----	05328	05290	06241	05237	-----	-----	-----	-----	05308	04319	-----		289
Oct.	02339	33323	-----	34339	36342	35323	35317	-----	35304	35314	35315	35291	-----	36363	02360	02376	36355	32320	35328	-----	32332	35317	32315	-----	-----	-----	-----	-----	-----	-----	-----	330
Nov. & Dec.	Missing																															
Green Bay, Wis.																																
Jan. 1964	00317	34321	00339	00349	33369	35383	00390	34402	36416	00365	34402	-----	00394	33384	00364	05409	05379	03402	34368	00418	00323	00329	03367	-----	-----	00392	00438	00370	06343	02344	02343	372
Feb.	04381	03400	06417	04364	00358	02407	06503	00399	00405	00440	00354	04358	00367	00398	06432	-----	00419	00406	05407	00412	00462	00431	-----	00398	00449	00434	00418	00435	00380			409
Mar.	00442	04377	04410	04466	00447	00433	00426	04413	00414	00413	04466	00430	04430	00449	00451	00441	-----	00399	05390	05419	00400	00446	00413	00394	04426	00457	00470	00491	00545	00489	00495	438
Apr.	00424	04400	00407	00402	04388	04389	04413	00413	00405	00386	04400	00380	05456	05461	00424	00366	00354	04351	00382	00386	00381	00414	00422	00393	00395	00402	-----	00448	05483	05487		408
May	05494	00397	00389	00372	00372	04368	00382	05358	05411	00405	00369	00383	00401	00381	00395	00406	00387	00384	00387	00388	00377	00363	00353	00392	00355	00346	00358	00369	00367	06366	00401	383
June	00442	00433	00425	00407	-----	00398	02405	00372	05404	00370	04352	00354	00364	00355	03373	00374	05417	04336	00348	00359	04352	00377	00372	00381	00358	00354	00349	00352	00348	00357		375
July	04388	00379	00379	00385	00364	00348	05366	00360	00376	00378	03354	00401	-----	00388	00377	00359	00352	00338	00336	-----	00330	00319	00322	00335	00326	00323	00332	00327	00326	06330	03328	352
Aug.	00322	00321	00309	00304	00315	00318	00330	04322	00331	00332	00350	00371	00369	00338	00341	00352	00344	00342	05338	05308	-----	04330	04363	00327	00332	00330	00317	00324	00294	00301	04297	329
Sep.	00294	03283	00293	00290	00306	05296	00303	05296	00291	00278	00294	00337	00327	04320	04318	03316	00305	-----	05333	04308	05292	05281	04322	06392	05331	05327	00325	00318	00326	00307		309
Oct.	00308	00391	00297	04363	00366	00393	05348	-----	00328	00324	00311	00303	00282	00276	00273	00273	00277	00330	00333	00337	00358	00329	00295	00278	00284	00301	00297	00298	00306	00277	06293	313
Nov.	03304	00323	06287	-----	00276	05294	00301	02302	00298	-----	-----	-----	00280	00277	05290	00279	00274	00294	05322	35421	00390	00276	00266	00293	00302	00297	05307	05344	00379	00363		309
Dec.	05351	06355	03347	00327	06335	00345	00350	00352	00335	35343	35336	35336	00374	00416	00329	00346	00326	00314	35329	35335	35384	35369	35326	35347	35347	00355	00352	36332	35360	35375	00367	348

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TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ʌ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
	Day of month																															
Green Bay, Wis.																																
Jan. 1965	35385	00382	33355	00350	00354	35352	35315	35328	00333	00316	00358	35404	00381	00399	00411	00412	00405	00429	35379	00370	00323	35347	05385	00355	04354	00359	00412	00432	00541	00490	00438	382
Feb.	00429	00444	00464	00418	00350	05348	05355	00367	05370	05403	06374	00434	00420	06422	00396	00441	00406	05457	00362	00312	00417	00386	00374	00386	00470	00408	00365	05370				398
Mar.	06429	00398	07410	06429	00361	05396	00427	00443	00472	00458	00433	00401	05428	05453	06428	00396	06473	00434	00475	00522	00515	00504	00479	00480	06480	00512	05467	04431	00382	00404	00407	443
Apr.	06452	00369	00360	04439	03385	-----	04397	04405	04384	00371	07383	06408	00398	-----	-----	05369	00431	05396	00396	00411	00386	05362	05368	05407	06428	00388	00416	00443	00415	00392		398
May	00381	03367	04372	00360	05366	00333	00332	00330	00335	05340	00383	00378	00381	00370	00393	00417	00381	00341	00363	00360	00354	00344	04367	00344	00352	00344	04415	04389	00403	00396	05384	367
June	05360	00361	00367	00350	04359	06325	00382	00351	00366	00357	00335	00343	00340	00350	00353	00371	00401	00358	00347	00338	00357	00361	00368	00341	00337	00335	00292	00346	04340	00362		352
July	00349	00341	00369	00357	00373	05376	00347	00330	00343	00331	00325	00331	00331	00333	00311	00366	05375	00359	00342	00336	00331	00322	00314	00318	00324	00336	00341	00369	00351	05407	05380	346
Aug.	06377	00362	05363	00370	00335	04381	00337	05364	00335	00338	00321	00318	00307	00315	00317	05325	00313	06378	00335	00318	04320	04315	00333	00318	04371	05318	05352	00346	00315	05358	00316	338
Sep.	05357	00339	00326	00309	00305	06349	05335	04291	05287	04274	00289	00285	00303	04325	00318	05326	05289	04294	00278	05313	05274	04304	05324	00364	00316	00339	04333	04334	04310	05269		312
Oct.	00313	00292	00282	00296	03315	03303	05323	04350	00336	00304	00326	00344	00329	05363	00296	00295	00291	00287	00281	05280	05315	00299	05363	00312	00303	00311	00308	00313	00304	03298	00332	312
Nov.	00330	00302	00296	00308	00295	00282	05266	00282	02291	05313	06339	05369	05372	00326	04337	05341	00306	05310	00304	05324	05345	04337	00298	03310	05332	06413	-----	04337	36360	36360		324
Dec.	00328	00323	35380	34350	00327	00345	00323	34329	02313	35351	36406	-----	35390	34386	35383	36383	36386	00381	00412	35445	33392	35376	-----	34355	00346	34353	00395	34355	35331	35299	00281	359
Huancayo, Peru																																
Jan. 1964	Missing																															
Feb.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00258	-----	-----	05254	05264	06261	05264	06261	00265	-----	04259	00260	00263	00264	00258	06260			261
Mar.	-----	00268	03266	35265	32281	00264	06269	05262	00265	34263	06252	34264	34263	-----	03257	00255	00253	00257	32250	32250	02250	00249	00252	00252	00250	06245	06242	04240	34250	04246	00250	256
Apr.	00254	00251	00251	00246	00252	00254	35250	34253	35248	02247	04246	00254	00256	00257	00259	00262	00261	05252	05249	00254	00256	32245	00252	00254	36251	05243	00253	32252	00257	00257		253
May	02253	02253	02251	02255	02259	32256	32258	02249	06243	02246	03246	02246	05254	06247	05251	-----	-----	04249	02252	06253	05257	02258	03263	02260	02255	05251	06248	05246	06249	02248	02254	252
June	02256	02254	02248	00245	00251	06247	02250	00251	00250	00250	02245	00245	06240	00242	00247	00249	06246	00247	00251	02246	00249	00242	00247	00246	00247	00243	02245	00255	00253	00258		248
July	00254	00254	00257	00242	-----	00244	00245	00245	00246	00248	00249	-----	00250	00250	00248	00249	00247	-----	-----	02242	00245	00248	00249	00255	-----	-----	-----	-----	-----	-----	-----	248
Aug.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00255	00256	00252	00251	00260	00256	255
Sep.	00267	00262	00261	00266	00265	00262	00258	00256	00258	00252	00257	03260	00265	00268	00262	-----	06273	-----	-----	00271	00269	00269	00260	06269	00261	00271	00273	00264	00256	00266		264
Oct.	05265	05255	00256	05257	00262	00260	00262	00258	05264	00265	00261	00256	00261	00254	00260	00257	00263	00270	00265	00260	00259	00258	00252	00265	00264	00260	00260	-----	00265	03273	-----	261
Nov.	00261	34270	00262	00259	00260	00262	00264	-----	00254	00259	05252	00258	00260	00256	00253	00260	00258	00264	02265	00256	00259	00258	00261	00260	05256	03262	00255	00258	00258	00257		259
Dec.	00256	00253	00255	00258	00259	04255	00257	04269	00261	00258	00256	00258	06268	00261	05257	-----	-----	-----	-----	00262	00259	00263	00262	00260	00254	-----	00257	00263	00266	00259	05256	259
Jan. 1965	00257	00259	33258	06256	00253	05253	00256	00258	04266	00266	06260	00266	05258	00252	00254	04258	00259	00262	00260	00260	-----	-----	-----	-----	-----	06256	06262	04262	00262	00260	05267	259
Feb.	-----	06257	00259	-----	05262	03264	06260	00260	05259	05259	00260	03258	05256	05258	05260	00263	04265	00272	05271	05261	-----	00258	06260	05253	35255	00261	00262	35253				260
Mar.	35257	00253	00254	00254	00254	04255	00255	00256	00262	04263	00258	00255	00251	-----	00250	00255	00251	03256	00258	05256	06255	00250	05260	00248	00248	00251	00252	00248	00251	05251	00254	254
Apr.	00256	00256	00250	00246	00249	00248	00250	00255	00252	00255	00256	00257	00258	00259	00252	00255	00264	04252	04250	00253	00254	00252	00247	00253	00250	06249	00254	00255	00258	06253		253
May	00258	00261	00251	00246	00256	-----	00248	00253	00259	00260	00260	00257	00254	00258	00254	00256	00258	05257	00256	00255	00258	00259	00253	00255	00260	00261	00261	00263	00265	00261	00253	257
June	04244	00256	00249	00255	00257	00266	00250	00249	00244	00249	00247	00258	00258	00261	00258	00246	00247	00254	00253	-----	00253	00252	00247	00254	00253	00253	00252	00262	00257	00266		253
July	00260	00259	00255	-----	00249	00248	00249	02255	00259	00261	00257	06247	00261	00253	00250	00257	00253	00255	00255	00262	00259	00254	00259	-----	00252	00264	00260	00261	00254	00254	00254	256
Aug.	00258	00256	00261	00256	00259	00257	-----	00258	00255	00257	00252	00256	00256	-----	00269	00266	00270	00270	00267	00266	-----	00268	00265	00263	00261	06256	00258	-----	-----	-----	06277	261
Sep.	00258	00260	00263	06252	00254	00267	00266	05269	05260	00267	00263	-----	00266	05264	00281	00270	00267	00270	05256	00267	00265	00266	00263	00264	00261	00263	05268	05263	00263	00267		264
Oct.	00266	-----	00287	00271	00275	00273	00264	00266	00296	00262	00260	-----	00267	00267	00262	-----	00265	00269	00269	00270	00262	00261	00262	00265	00271	00266	00267	00267	05284	-----	00272	269
Nov.	00270	00259	00269	00264	00280	-----	00258	05253	00257	00257	00260	00266	00264	00264	00264	00268	05267	00260	00272	00262	00261	04253	00250	00257	00262	00261	03263	00261	00263	00260		262
Dec.	00261	04259	00259	00263	00259	00259	00258	00260	00261	00257	-----	00254	00254	00255	00249	00252	05259	00254	00264	03261	05256	02254	00259	00262	00254	00254	00252	00252	03246	00259	05256	257
Mauna Loa, Hawaii																																
Jan. 1964	-----	00241	00246	00259	00259	00260	00256	05246	00243	00232	00233	00237	00237	00250	00250	00262	00267	00265	00269	00274	04280	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	253
Feb.	-----	-----	-----	-----	00274	00268	00264	00269	00266	00264	00255	00262	04256	00266	03275	00268	00264	05258	00270	00275	00273	00267	00270	00267	00285	00280	00280	00286	00289			270
Mar.	00298	00282	00277	00273	00282	00273	00271	00287	00274	00265	00260	04273	06280	00262	00265	00272	00258	02260	04281	04310	05280	05281	00275	00275	00286	00266	06249	00261	05258	06265	00279	273
Apr.	00279	00278	00277	00277	05273	00275	00278	00284	00275	00283	00294	00288	00273	00284	03282	04278	05285	00293	00292	00282	00308	00309	00305	00313	05310	05300	05313	05299	-----	-----		289
May	00307	00291	00297	00296	00297	00296	00292	00306	00311	00294	00300	00295	05290	00309	00300	00304	04292	05292	02297	00296	06282	00284	05285	05300	05295	06287	-----	00300	00296	02274	00281	295
June	04275	00280	00281	00281	00287	00284	00294	00288	00289	00288	00286	00284	00291	00300	00299	00294	00295	00286	00291	00294	00277	04267	05272	00292	00289	05274	03282	03280	00278	00279		285
July	00280	00283	00285	05270	00286	00281	00303	00300	00282	00282	00285	00282	05275	06275	00278	00284	00289	00284	00279	00285	00281	00284	00298	06291	00286	05279	05277	00279	05272	04274	00282	283
Aug.	00280	05269	03275	00278	00279	00279	00282	00282	02282	00278	00275	03283	03274	00273	00271	00271	00272	04273	00272	00267	00278	00271	00271	00277	00277	00274	05264	05267	00272	00268	00279	275
Sep.	00280	00285	00277	05268	07266	00266	00271	04270	00270	00269	00273	00272	00276	00277	00274	05271	00280	02280	00280	05272	00276	00276	06265	00263	00267	03265	00269	00271	00281	06270		273
Oct.	05260	00264	00265	00265	00262	00256	00271	00272	00264	00268	00266	00264	00263	00264	00271	00268	00268	00272	03268	06257	06250	00266	00267	00265	05259	06275	05266	05259	04262	34254	03249	264
Nov.	00253	00258	00254	00255	04261	00264	04271	04281	02277	04275	02276	05268	04267	00269	00274	00275	00263	00262	00256	00262	00287	00260	05253	00265	00257	00264	00264	00264	00267	00259		265
Dec.	00264	00255	00268	00278	00266	00252	00248	00251	06249	05254	00276	00283	00266	04262	04254	06256	03287	00277	00274	00259	00261	00263	00259	00260	00259	00259	00265	00265	00269	00277	00262	264
Jan. 1965	03262	00271	06270	00276	00276	05263	06269	04263	06268	06268	00267	00260	00264	00267	00264	00269	00273	00256	00260	00260	00264	00271	04268	05263	00288	00292	00294	00266	00275	00278	00292	270
Feb.	00301	00293	00283	05288	06275	00279	05271	05280	00291	00274	00284	00287	05278	05284	05287	04284	00301	00288	00295	00303	00292	00282	00278	00281	05291	00321	00321	05319				290
Mar.	00289	00282	35268	00287	00289	00284	00277	00264	00276	00281	00285	02293	00293	00293	00288	00285	00281	00293	00288	00292	00294	02304	00297	00303	00290	00279	03297	05287	05309	00313	05303	289
Apr.	05297	06290	07341	00292	35288	35285	04298	05304	00317	00306	00293	05282	04300	00307	00300	00306	03306	05294	00286	03282	00282	03289	00290	02274	02282	00302	00309	00314	00324	00321		299
May	05329	-----	-----	36311	05322	05308	06319	04311	-----	00310	00316	05299	02304	04276	05277	00281	00280	03259	00279	03277	06252	00286	00279	00287	04264	00289	05255	00311	00302	00304	00320	293
June	00307	00301	00311	00308	05274	00302	00297	00268	00285	00276	00274	00286	00285	00292	00278	00286	00293	00284	00298	00292	00286	00299	00316	00289	00297	00301	00292	00290	00288	00285		291
July	00290	00284	00291	00287	00281	00278	00278	00289	00299	00292	00286	00281	00284	00260	00291	00288	00296	00292	00278	00279	00274	06272	00280	00277	00281	00274	00280	00277	00281	00278	00277	282
Aug.	00273	00271	00274	00273	00275	00282	00282	00277	00277	00282	00287	00284	00280	00275	00280	06264	00283	00279	00296	00284	00283	00281	00275	00275	00276	00279	00282	00271	00272	00269	00273	278
Sep.	00269	00276	00274	00278	00284	00275	00274	00274	05277	05269	05262	05268	06264	00296	00279	00278	00280	00288	00276	00277	00276	00278	00324	00281	00270	00268	00281	00276	00274	00276		277
Oct.	00273	00267	00279	00268	00273	00277	00267	02268	00278	00278	00291	00279	00269	00266	00273	00276	00284	00280	-----	00280	00273	00266	00270	00277	00283	00280	00280	00270	00274	00281	00290	276
Nov.	00283	00280	05268	00269	00266	05255	05254	06265	05248	00254	05321	-----	05238	-----	05248	00255	00248	00253	00296	00216	00265	00256	00256	00258	00255	00260	00281	00266	00263	00257		257
Dec.	04247	00257	00260	00259	00256	05240	00251	05248	05264	00258	00262	00252	00254	-----	00256	00253	00251	05253	00258	04242	06246	00257	00250	00250	-----	00261	00254	00268	00275	00262	00250	255
Nashville, Tenn.																																
Jan. 1964	-----	00338	00308	00301	00313	05359	00306	04264	00260	00299	00325	-----	-----	00361	00362	04359	00330	00303	04333	00340	00303	00293	00305	-----	00381	00321	00310	00334	00308	00302	07369	322
Feb.	00317	00303	00322	00347	04358	04388	05408	00338	00395	04455	00357	04287	-----	00302	-----	05350	00325	06401	-----	-----	06407	00403	00402	00351	00349	05369	00359	00414	00339			362
Mar.	04347	05313	04311	06297	06386	00312	04316	05308	04318	05336	00333	00368	00345	-----	00327	00318	00315	00336	04316	00311	05385	00323	00357	00322	05349	00378	00365	05407	00405	00405	00395	343

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TOTAL OZONE DATA

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Units Milli-atmo-cms. DELAYED DATA

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
Nashville, Tenn.																																
Apr. 1964	00366	04323	05334	07399	04304	00343	04309	05313	00326	00345	00356	04354	00327	00341	00346	00318	00320	00318	00296	00317	04305	00306	34319	00344	00310	-----	00320	00360	00363	00361		333
May	00354	-----	00331	00333	00331	00321	00314	34322	35320	05305	35304	00322	00359	00342	00357	00353	00350	00353	00353	00352	00352	00356	00330	04319	00330	00314	00315	05306	00333	34347	35359	356
June	32359	00369	00358	00353	00364	00367	00372	00358	00322	00323	00320	00327	00309	00323	00309	00319	04310	00304	00302	00316	00312	00318	00323	00331	00327	00327	00327	00321	00315	04330		331
July	00329	00333	00340	00353	00342	00333	00322	00326	00320	00343	00343	05351	05358	00337	00343	00337	00351	00351	00324	00312	00329	00332	00326	00336	00323	03324	00329	00326	00319	00314	00313	333
Aug.	00313	00319	00316	00319	00321	00318	00311	00314	00305	00321	00322	00313	00314	04322	-----	05322	00308	05323	00332	00316	00318	04313	00303	00292	00301	04308	00306	00294	00292	00296	00298	312
Sep.	00298	00325	00305	00298	00292	00303	00304	00303	00313	00290	00284	00290	00305	00316	00304	00295	04300	04303	00291	00292	00282	05285	00282	00295	00308	04296	05312	-----	05303	05303		299
Oct.	02306	-----	-----	-----	-----	-----	00339	00306	-----	-----	-----	00302	00306	00310	04321	00298	00293	00279	00297	00338	00312	00311	00324	00305	00315	00304	00292	05361	05324	00280	00272	308
Nov.	00283	00289	00287	00282	00294	00284	05293	00309	00297	00276	00267	00266	00266	00261	00250	05252	05252	05269	-----	00297	00323	00335	00326	05331	-----	00304	00292	05330	00338	-----		291
Dec.	00314	05326	-----	05336	05346	00321	00343	04347	00333	05334	-----	00267	05274	00270	00320	00310	-----	-----	05311	05311	05349	05339	05323	05293	00301	05324	05337	00282	00274	04272	04264	312
Jan. 1965	05284	05297	00278	00287	00299	00312	04291	04275	-----	05320	00313	00316	-----	00369	00367	-----	-----	02393	00342	00314	00319	04304	-----	05395	00298	00287	00314	00348	05395	-----	-----	322
Feb.	-----	-----	00356	00345	00331	05320	05332	05313	-----	-----	00320	00320	00338	00363	00304	04296	04299	00351	00364	00324	04316	00320	00328	05381	-----	00375	00338	00322				333
Mar.	05345	04370	05346	05441	04443	05416	05408	04414	00399	00407	00347	05342	00375	05359	00334	00320	-----	00340	00350	00372	00419	00407	04395	05365	06336	05382	00344	05309	05394	04317	04333	370
Apr.	-----	00360	-----	00317	03277	06353	00295	04274	00301	00300	00304	-----	00314	04336	05334	00355	00348	00364	04348	00364	00348	00330	00324	00317	00320	00325	05372	00360	00387	00377		333
May	00368	00349	00345	00348	00332	00324	00339	00349	00344	05337	05348	00355	00354	00332	00328	05361	04322	00329	00328	04333	00337	00331	00330	00318	00321	00335	00338	00337	00368	00361	00346	340
June	00339	-----	-----	-----	-----	-----	-----	-----	-----	00337	36328	35334	00333	33355	-----	05344	00325	00385	00359	00346	00340	00336	00326	04342	00337	00330	00318	00308	00313	00323		336
July	00335	04319	04318	00331	00371	00334	00327	00320	00324	00323	00316	00314	00323	00323	00333	00338	00341	00339	00332	00327	00317	00312	00310	00321	05370	00342	00337	00323	00345	00328	00339	330
Aug.	00347	00329	00335	00341	00327	00321	00313	00320	00318	00328	00330	00314	00313	00311	00326	00325	00322	00321	00315	00327	00334	00333	00335	04304	00316	00311	00319	00317	00334	00308	00308	323
Sep.	00306	00321	00307	00295	05308	00296	00294	00307	00293	00287	05296	05292	00289	04283	00298	00307	00301	00293	00271	00284	00289	00303	06329	00310	00298	00277	00283	00268	00275	06268		294
Oct.	04276	00277	00285	00273	00281	00293	00306	00312	03321	00307	00289	00296	00308	00318	00313	00313	00306	00312	05295	04301	05306	05328	00307	00307	00287	00300	00294	00276	00280	00297	00282	298
Nov.	00284	00288	00276	04281	00300	00314	00307	05311	05314	05307	03326	04339	00317	00342	-----	-----	-----	04276	00280	00272	05312	00310	00303	06291	00275	00252	00276	00294	00314	05356		301
Dec.	00309	00295	05306	00298	00296	00300	00288	00281	00280	00292	00287	00312	05337	05296	05323	05314	05315	04312	00329	00335	00336	00337	00306	04287	35315	00318	00315	00319	00289	06293	04266	306
Puerto Montt, Chile																																
Jan. - Oct. 1964	Missing																															
Nov.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00343	00335	00298	00272	00291	00298	00290	05300	05317	00330	-----	00332	00325		311
Dec.	05321	00309	00303	00316	05316	-----	00330	05318	-----	05365	00373	-----	05309	05274	00301	00308	00283	00305	00318	00315	00315	05316	05321	00347	00351	00321	00312	00316	00315	05307	05320	318
Jan. 1965	-----	05333	05303	05278	00291	00335	00321	00284	05274	05296	00278	00280	00286	05308	00304	00304	00302	05280	-----	00323	00330	00311	04280	00285	00281	00282	00281	00287	00292	00300	-----	297
Feb.	05312	05310	05308	05270	05278	35300	00313	00290	00293	05289	00300	05328	-----	05290	05296	-----	05276	00272	04267	00276	04290	00294	05286	05284	05280	00319	04291	00283				292
Mar.	00276	00258	00273	00302	00269	05304	00288	00265	00256	00257	05282	00281	00282	00299	08296	00279	00285	04281	04308	00280	00284	00289	-----	00272	00274	00272	00265	00264	00276	00289	00276	279
Apr.	00274	04274	00265	04266	05266	05313	00305	-----	05314	04314	00289	00278	-----	05321	-----	-----	-----	05305	05296	04275	05268	05293	05334	00343	00316	00302	05292	05270	34251	00292		293
May	00282	05284	00281	05314	05348	00327	00320	35280	00271	35255	-----	-----	35333	00370	00369	00338	35318	00280	00300	00272	00275	35290	04304	35313	-----	00280	-----	00326	00326	00295	00300	306
June	00334	00283	00249	00250	04290	00244	00258	00322	00297	35304	00278	00307	00312	-----	-----	35341	00335	-----	00332	00320	00331	00315	35317	35311	-----	00347	00336	35296	-----	-----		305
Jul.	-----	-----	00415	00367	00349	-----	35336	00343	00313	35283	-----	00414	00343	00346	00337	00360	00361	35336	34345	-----	00349	-----	35355	35343	00379	35344	00382	-----	-----	00348	35339	352
Aug.	00370	-----	34310	35317	35293	-----	-----	00361	-----	00424	-----	35430	00385	-----	00417	-----	00388	00348	00332	-----	35363	00380	00377	00371	00404	04380	00334	00324	00325	00314	-----	361
Sep.	00345	05364	00420	00343	00341	00286	-----	00369	-----	00387	-----	-----	00386	00359	00340	00340	00335	00334	00317	05343	00346	00345	00317	00295	00313	05311	05324	00387	-----	05337		343
Oct.	00333	00353	05359	00383	05372	00367	00377	-----	00367	00343	35383	00345	00335	04314	00314	-----	-----	00377	04387	00395	00368	05364	00333	05340	00352	05336	05321	00317	00315	00350	00338	351
Nov.	05357	00339	00337	00378	00311	00331	04345	00345	00344	00340	00326	00290	00299	00297	00310	00284	00279	00284	04290	00309	05344	00353	05333	04310	-----	-----	00323	35321	05354	05313		323
Dec.	Missing																															
Sterling, Va.																																
Jan. 1964	06396	00375	00283	00311	00318	03313	00313	33286	06294	00304	00297	06369	06413	00392	00364	35384	00350	00335	00327	37370	00335	00299	00314	04331	00335	00401	00322	00348	00329	00321	34296	335
Feb.	05324	02335	00359	00408	03345	06492	03369	00386	00376	06433	-----	00327	05304	00310	05317	00357	00333	-----	06400	00383	00410	00409	00398	00402	04361	00339	00353	04355	00361			368
Mar.	05354	00346	04322	07327	05275	00302	05306	05313	06304	00330	00337	05436	00368	00339	06363	00330	00353	00391	00363	04362	-----	05383	00347	00352	06343	00328	00359	00364	00415	04483	00461	355
Apr.	02458	04401	06393	00359	00347	06359	05341	04356	00371	00358	00345	03342	05376	-----	00365	00347	00328	00321	05336	05431	05367	05365	05345	00361	00346	00346	05356	05357	06400	06398		365
May	05388	00373	35373	00353	00369	00361	05349	00313	00301	00335	00321	05332	35361	00364	35365	00340	00388	00361	00364	00366	00377	00359	00363	00350	00365	00331	00325	05330	00340	00340	00335	351
June	05365	05380	00376	00371	00366	05391	00362	05357	35346	00324	00337	00330	05322	00308	00321	00348	00340	00327	00308	00309	00302	-----	35355	05343	00331	00317	00316	00316	00326	00326		339
July	00324	00332	00326	00333	00370	00348	00334	35384	00329	-----	00344	05359	05322	35329	00313	00336	00337	05324	00308	00297	00308	00318	00316	05343	05357	05331	00316	00327	00313	00313	00320	330
Aug.	-----	00330	05406	00308	00317	00323	00314	00317	00322	34360	00313	00321	00314	00327	00323	00325	00330	04342	00334	00330	00319	00305	05311	-----	00301	00303	04307	05309	00290	06273	00281	319
Sep.	00301	00319	00301	00299	00296	00294	00301	00304	00281	00276	00276	05297	-----	00305	00304	00313	00303	05291	05330	05341	00285	05281	00280	00287	-----	00299	00303	05344	-----	05298		300
Oct.	-----	05291	00285	05300	06287	00300	00311	00322	00295	00302	00306	00302	00325	00306	04293	04290	05342	00290	06301	-----	06314	00316	05352	00307	00292	00303	00293	00288	-----	00283	00273	302
Nov.	00276	00277	06305	00297	00303	-----	00279	00287	00293	00288	00255	00249	00262	00255	00253	05275	00263	00263	-----	00265	00300	00351	00325	00318	-----	00289	00286	05301	00309	-----		286
Dec.	00355	05335	-----	-----	05310	00332	00330	00256	-----	00320	05296	-----	-----	00247	00333	00336	05302	00321	00306	06324	-----	00354	-----	-----	00300	-----	05298	00321	05303	-----	-----	314
Jan. 1965	-----	-----	00351	00335	00354	00354	03332	04310	05286	-----	00323	00322	04321	00350	03380	-----	-----	00428	00370	03338	00318	00315	04335	05328	00292	05289	00315	00355	00404	-----	00495	344
Feb.	05369	00413	00402	00442	00347	00323	-----	00303	04326	04338	05316	05347	00324	05325	00315	00311	00324	00361	00455	00344	00314	00320	00328	00345	06400	00433	00376	00360				354
Mar.	00365	00357	04348	-----	05440	00408	00407	05395	00456	05440	00450	00406	00409	00390	04391	00371	04361	04340	00333	-----	00450	04450	03397	05361	05382	04335	00358	00338	05327	00340	00361	385
Apr.	00369	05428	00381	00362	00374	04353	04392	00350	04397	00339	05430	00336	00419	00379	04417	00351	00367	00369	-----	00388	00361	00361	00346	05368	05396	00333	04390	04377	00379	00408		377
May	05387	00373	00353	00351	04375	00372	05395	05395	00376	00353	00347	05382	00389	00348	00344	00341	00330	00351	00337	03347	04376	00340	00338	05356	00334	00342	00339	00335	05355	00380	00366	358
June	00327	00351	04380	00360	00364	00341	00333	00328	06341	00330	00345	05339	00347	00356	06424	05393	06384	06411	00367	00343	00342	00333	00333	05352	00342	00348	00328	00314	00323	04343		351
July	00355	00344	-----	-----	-----	00342	04353	00326	00320	05306	-----	00324	04332	00318	04346	06353	00336	00337	00355	00335	00332	00311	05324	00318	00319	00326	06337	06343	00355	06365	00331	335
Aug.	00330	00324	06346	00332	00353	00336	00321	00311	04312	02308	05305	00313	00323	00339	00325	00318	00322	00312	00307	00309	00315	00316	04317	05303	05317	00306	00310	00308	00321	00306	05294	318
Sep.	00294	00302	00307	00299	00294	00295	00297	00291	00292	00282	04295	-----	04294	06284	03289	00308	05310	00284	00275	00282	00291	00294	00304	05325	00310	00300	00291	00297	00286	00270		295
Oct.	06269	00269	00296	00284	00302	00300	-----	00304	00344	02327	00290	00299	00315	00319	00319	00298	00314	00296	00288	00287	04279	-----	00297	00331	00300	00296	00309	06289	00289	00292	00289	300
Nov.	00331	00304	00294	04287	00296	00318	00328	04307	00324	05326	05332	05328	00318	00332	04320	05331	00309	00310	00300	00292	05310	00303	00316	05310	00324	00288	00287	00295	06306	00339		312
Dec.	00345	05308	04299	00356	04341	00335	00338	00302	06297	06300	05310	05314	-----	04349	04304	03302	06342	00339	00346	00374	05398	00341	00317	05295	00308	00347	00338	00351	04324	00293	00277	326
Tallahassee, Fla.																																
Jan. - Apr. 1964	Missing																															
May	05307	05310	-----	00318	00329	00315	00315	00303	-----	-----	00296	05319	06326	00341	00342	00345	00345	00338	00336	00335	00335	00335	00333	00328	00324	00328	00314	00314	00318	05327	05321	325

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

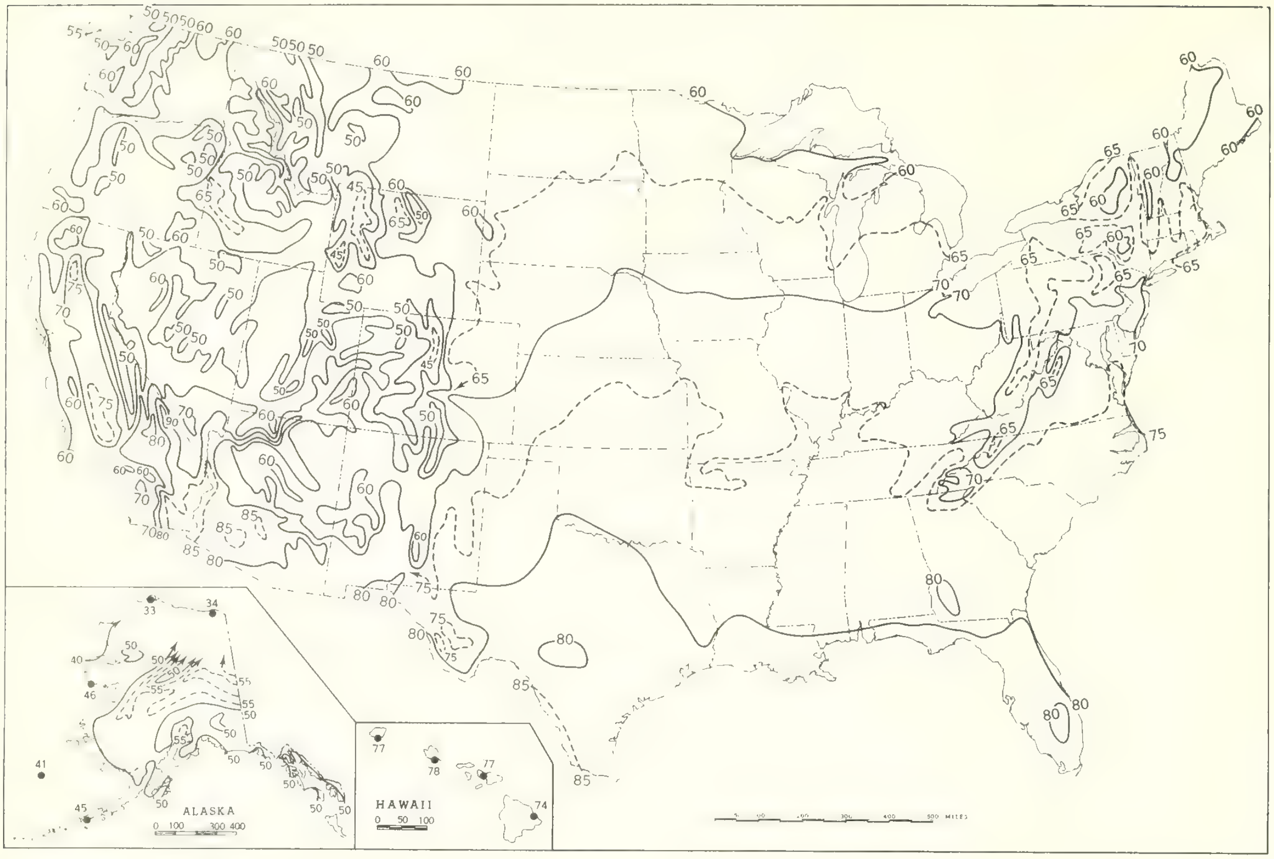
Units: Milli-atmo-cms.

DELAYED DATA

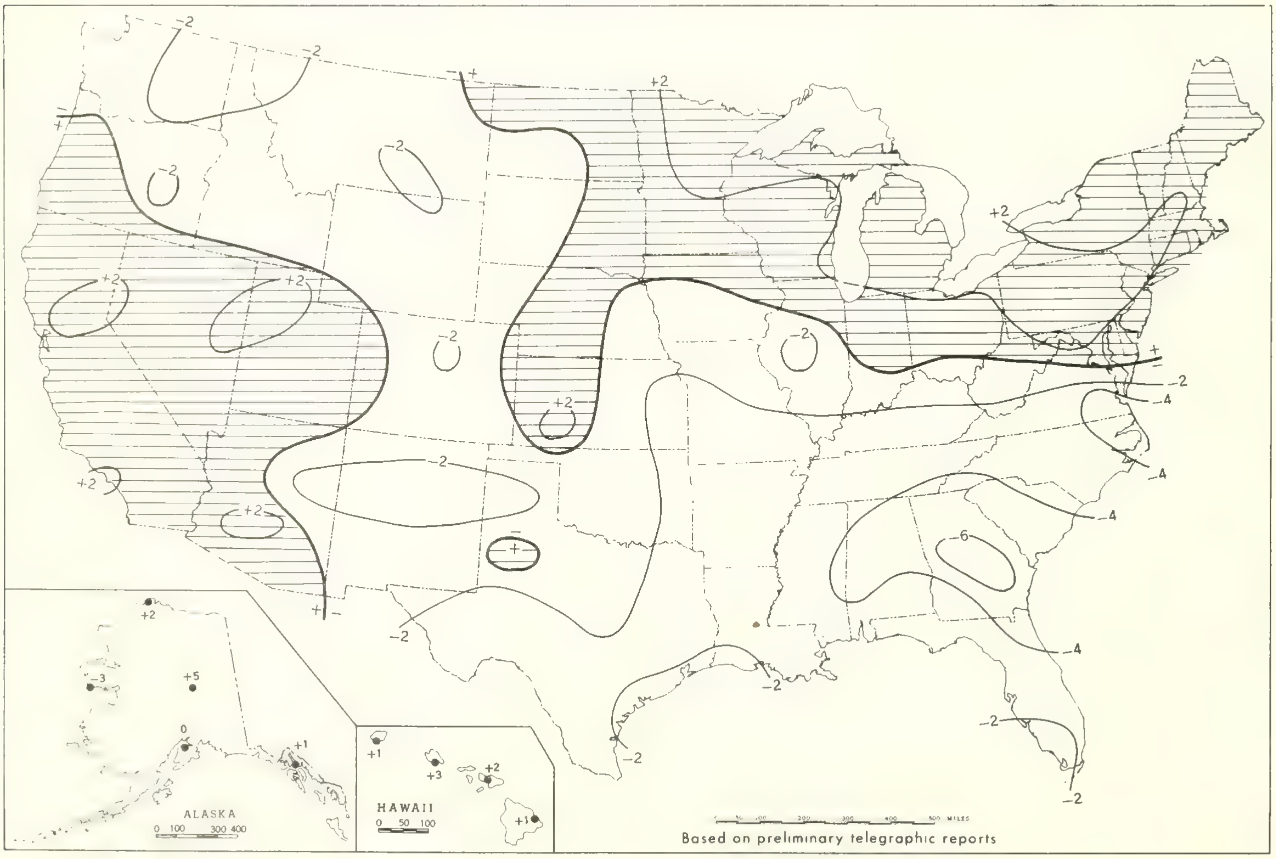
Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O3
Tallahassee, Fla.																																
June 1964	05299	00318	00328	00326	00312	00319	00326	00330	00319	00328	00319	00312	00310	00310	00314	00312	00316	00304	00305	00306	00300	00308	00314	00306	00312	00310	36302	32301	00318	05312		313
July	00312	00313	02317	00318	00324	00316	00316	00309	04322	00313	05314	05301	03293	00304	00301	00308	05360	05298	05285	03294	03321	00320	00321	00318	06330	05319	05317	05307	00298	00298	00306	312
Aug.	03309	05303	00312	03306	00312	03315	02312	-----	06305	05317	00309	00302	00306	00309	00309	00308	00298	04290	05304	06298	35300	36292	-----	00288	00293	00301	00292	00284	00300	00293	00298	302
Sep.	00299	00301	00300	00296	00291	00290	00287	00297	00282	05304	-----	-----	00287	00289	05284	00285	00285	00286	00289	-----	00283	00287	00288	00291	00291	00285	06282	00280	00283	00288		289
Oct.	00280	00269	04272	-----	05284	00288	00294	00276	00277	00276	00272	00261	04247	-----	-----	04294	00272	00266	00274	00295	00281	00284	00292	00290	00285	00281	00282	00277	00289	00309	00301	281
Nov.	00277	00278	05282	00275	00269	00283	00279	02279	00281	00270	00262	03261	04263	00256	04258	00252	00248	00252	00269	00277	00270	00275	05292	05294	00285	00289	00278	05286	00275	00311		274
Dec.	00298	00295	05307	-----	-----	04281	00268	02279	03276	04264	05266	05264	05265	00257	00261	00267	00246	00248	04261	04272	05292	05353	05314	05305	05283	05274	04278	00274	00269	00253	00247	276
Jan. 1965	00257	00245	00253	00258	00264	00270	00294	00276	00279	05280	00261	00263	00256	05281	04320	06333	00369	00345	00328	00260	00285	02286	05287	00293	00273	00264	00264	00278	00275	00330	00348	286
Feb.	00339	00332	06323	03322	05305	05324	00301	05285	00285	00290	00282	04295	05291	05309	00278	05273	05275	00273	00305	04325	00328	02318	05328	05304	00350	00349	00332	00329				309
Mar.	04352	05335	05310	02304	00328	05346	02335	00345	00326	05310	05314	05304	05334	05305	00305	00299	02280	05283	03273	00311	00320	00322	05319	00274	00261	05248	04242	00261	00261	00257	05268	301
Apr.	00289	00292	00290	00296	00290	00288	03282	00283	00287	00282	00285	00284	00294	00298	00304	00314	00320	00320	00319	00336	00334	00324	00353	02301	05352	00305	05309	00304	00322	00350		307
May	00350	00347	00342	00334	00327	00335	00338	00334	00324	00331	00327	00325	00338	00340	00333	00330	00328	00326	00333	00329	00330	00321	00328	00332	00311	00323	00322	00307	06303	00343	00328	330
June	00314	00312	00317	00334	00323	04310	00309	05319	00307	06474	05331	00326	00325	04308	05349	02331	03316	00320	00359	00318	00344	00329	00321	05354	00322	00324	00318	00318	00306	00307		328
July	00309	00305	00311	00313	00314	00311	00308	00310	00302	03331	00311	00307	03309	03313	00316	00327	00325	00322	00315	00318	00309	00309	00310	00319	34330	06307	00318	00309	06296	05317	00315	313
Aug.	35334	06317	00311	00306	00310	00302	00302	00302	00307	00302	04312	06326	00301	36313	00316	00308	00306	00303	00309	00313	00309	00305	00301	00310	00311	00308	00295	00298	00298	00292	00294	307
Sep.	04298	00302	05301	00291	00295	00293	00294	00290	05294	32276	00282	00284	00277	00283	00291	00303	00294	02286	00284	00292	00303	00297	00306	04266	00300	-----	06281	06294	05275	05271		290
Oct.	00262	00265	00284	00287	05293	-----	00317	00290	00296	05294	00288	00291	04272	05285	00291	00299	00318	00300	05291	02280	05273	05272	00307	00303	00305	00300	00305	00294	00299	05298	00299	292
Nov.	00301	00294	02293	00293	06290	06300	00300	00296	03292	04286	05296	05327	00282	05301	04286	05268	00267	00280	00290	05299	05295	05319	00309	00300	00287	00272	00260	00266	05286	00309		291
Dec.	00307	00301	06284	00293	00289	00294	00296	00282	00283	00289	05271	05279	00289	05266	05281	05266	05258	05260	-----	00316	00322	00298	00284	05286	00284	00269	00276	00298	00332	00292	00271	287

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), June.

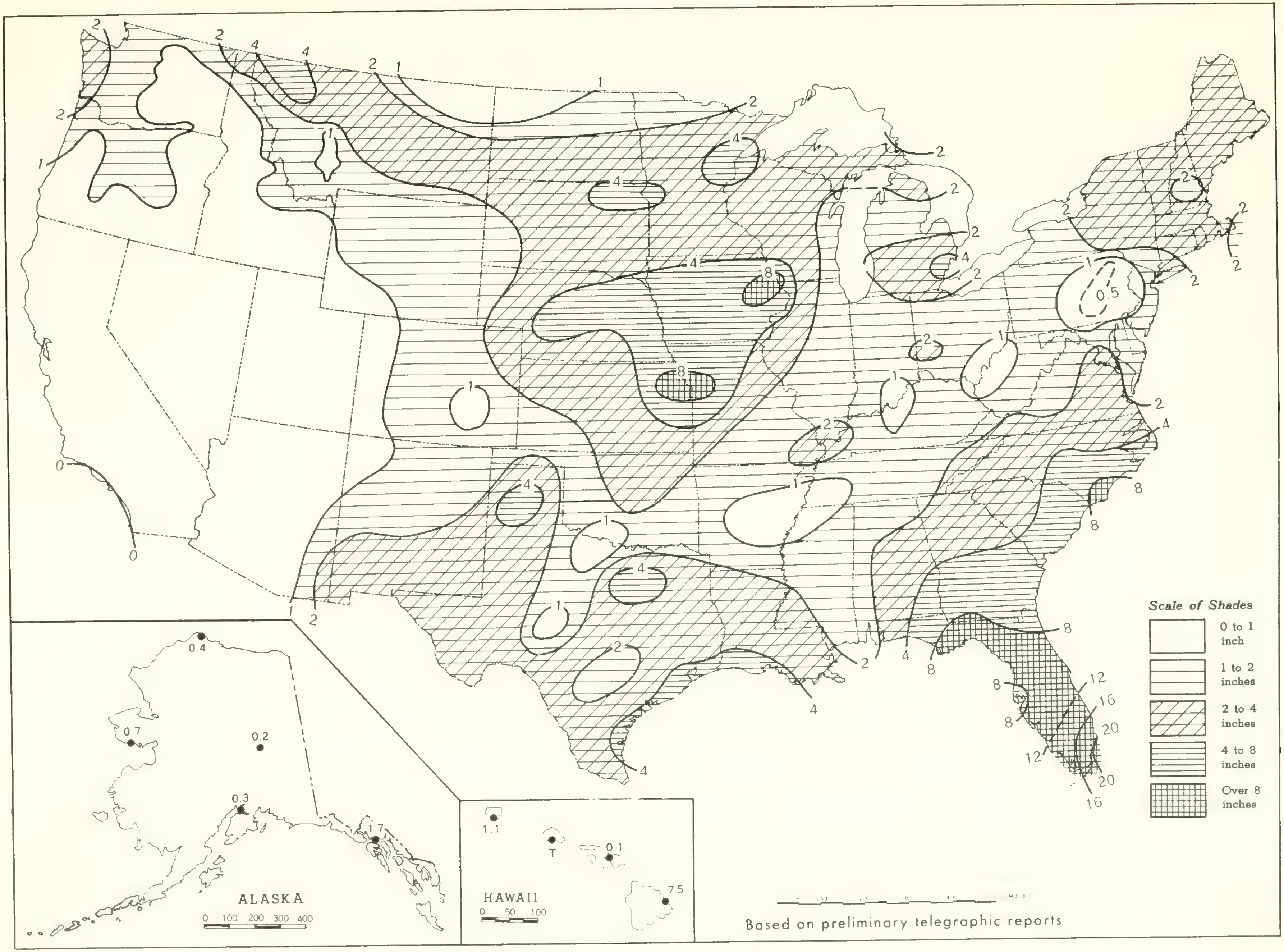


B. Temperature Departure from 30 - Year Mean (°F 1931-60), June 1966.



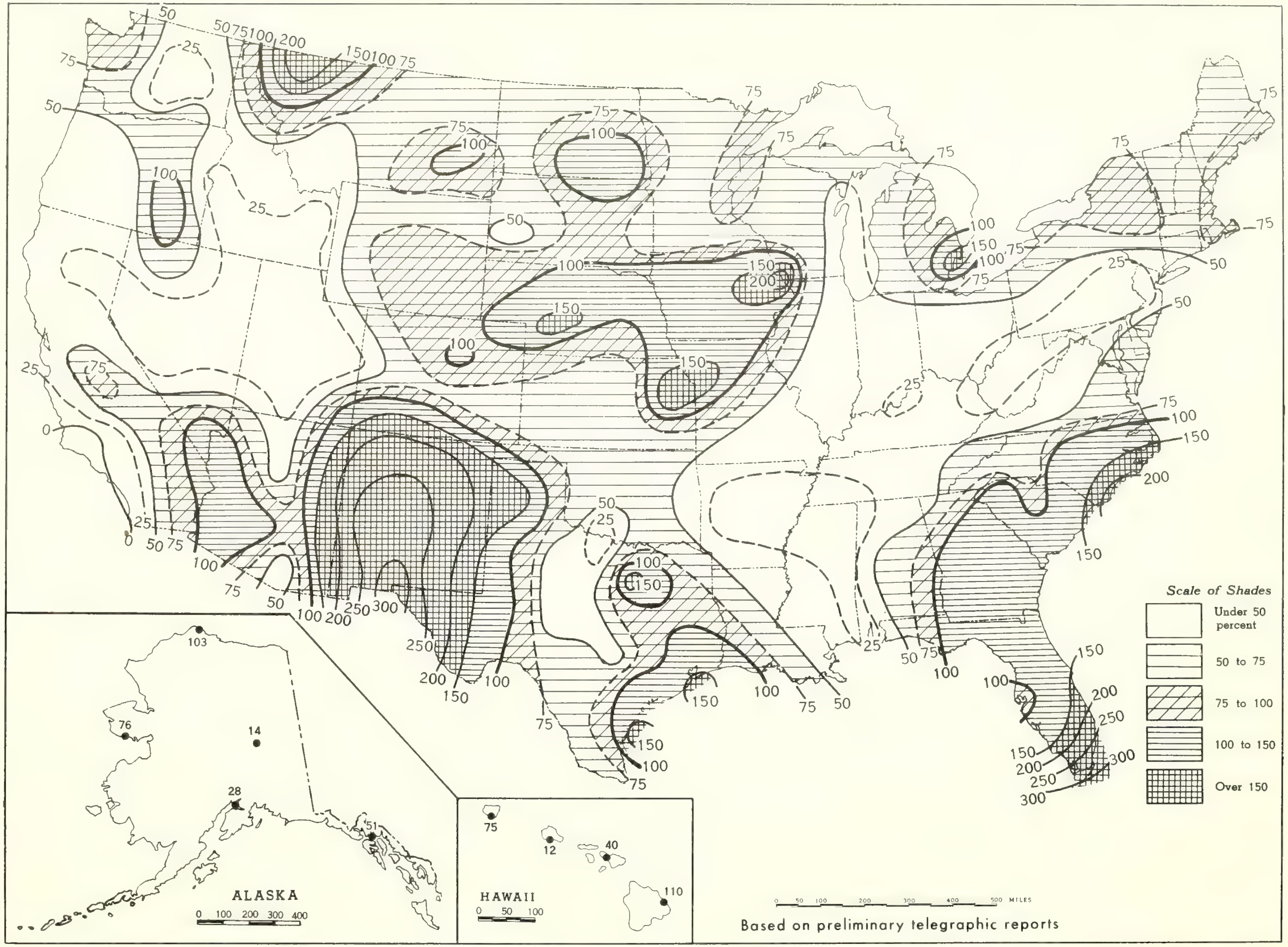
Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), June 1966.



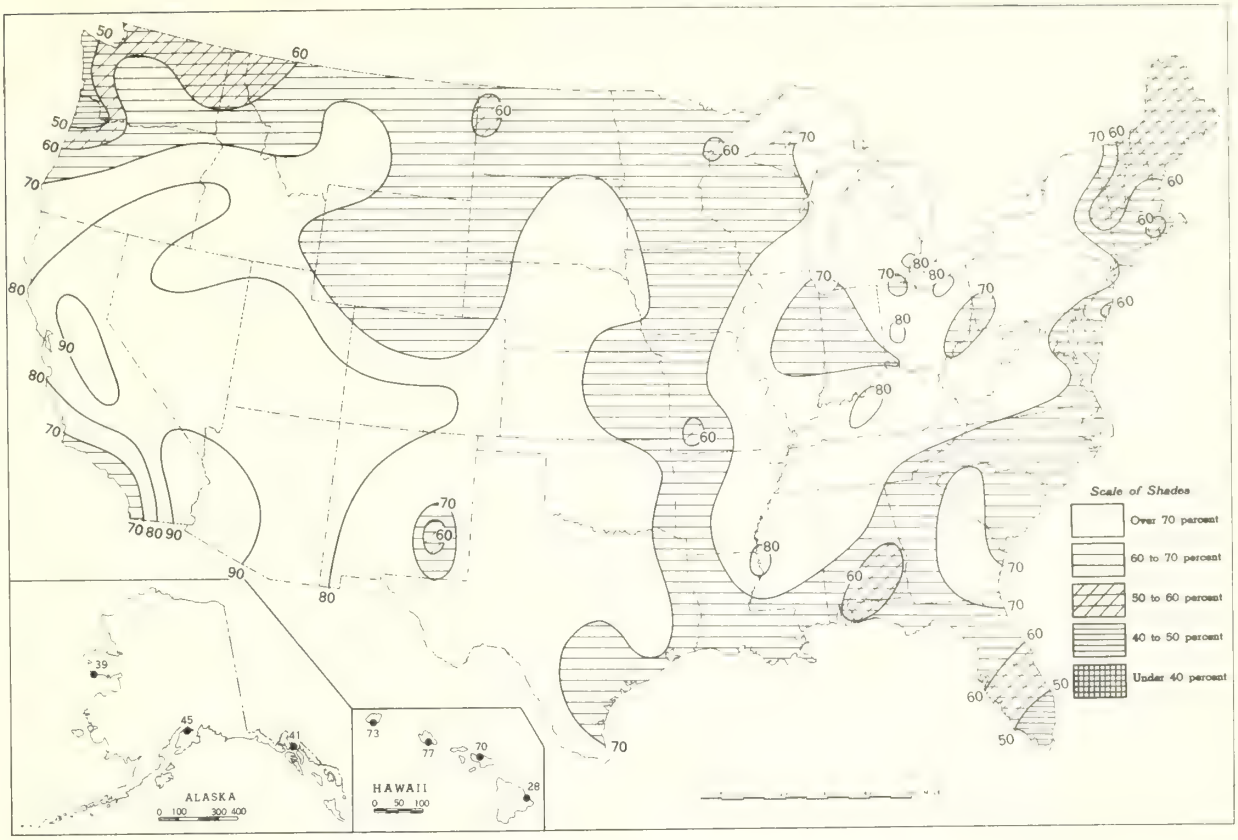
Based on preliminary telegraphic reports

Chart III. Percentage of Normal Precipitation, June 1966.

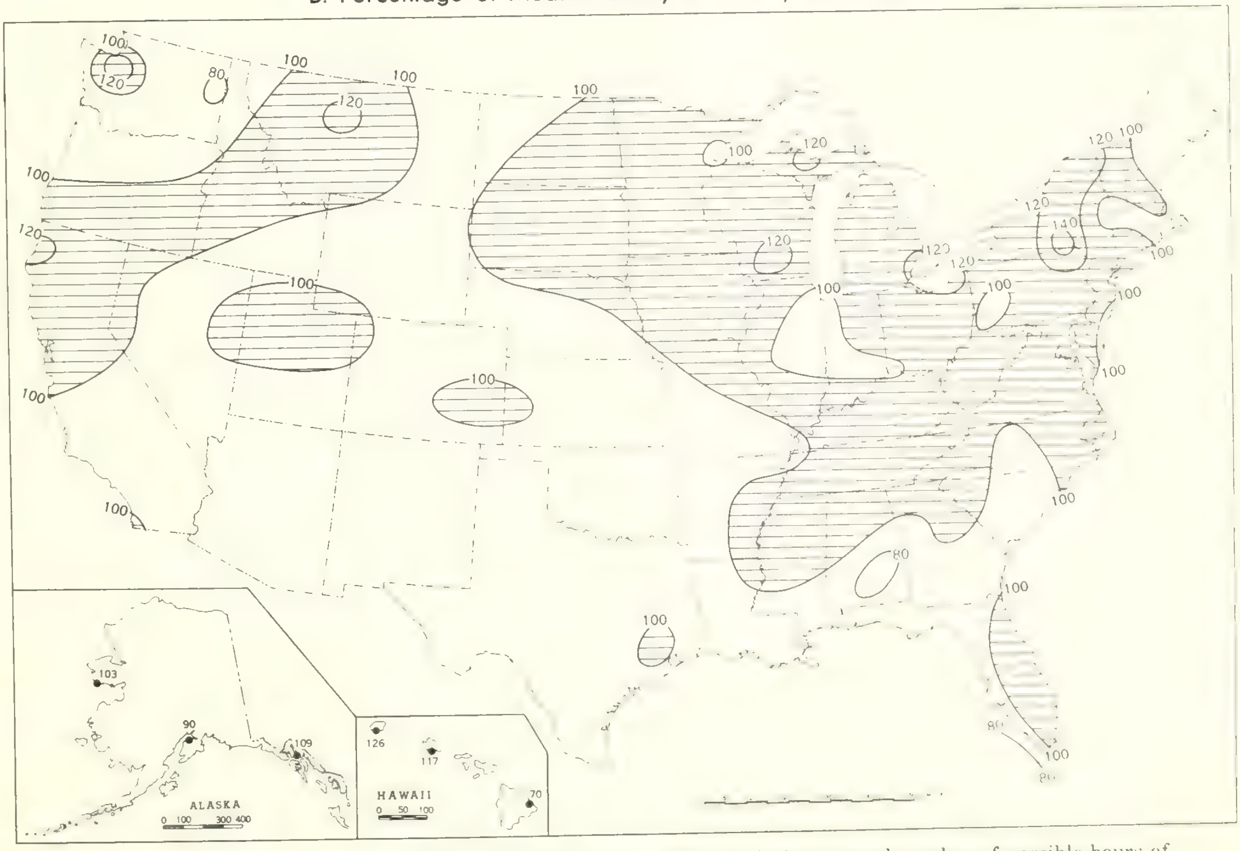


Normal monthly precipitation amounts are computed from 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart VI. A. Percentage of Possible Sunshine, June 1966.

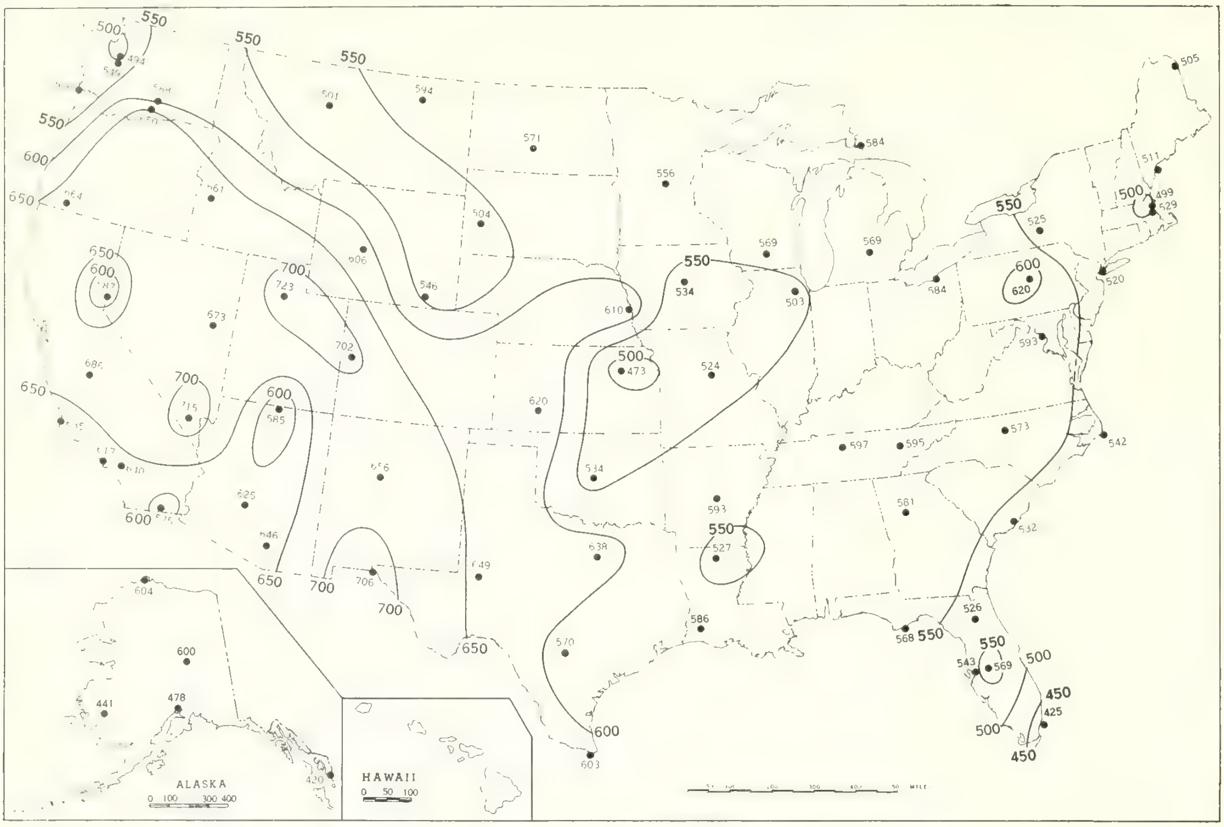


B. Percentage of Mean Monthly Sunshine, June 1966.

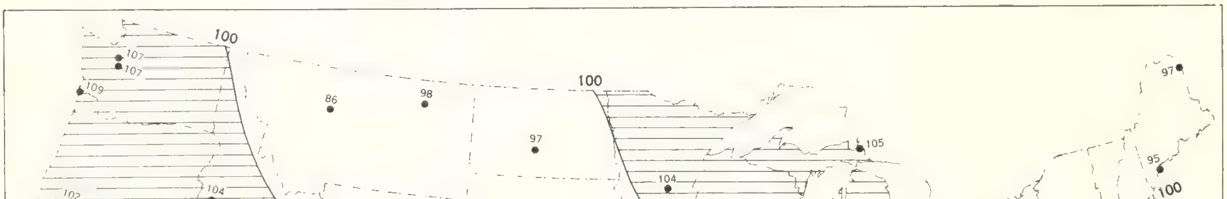


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, June 1966.

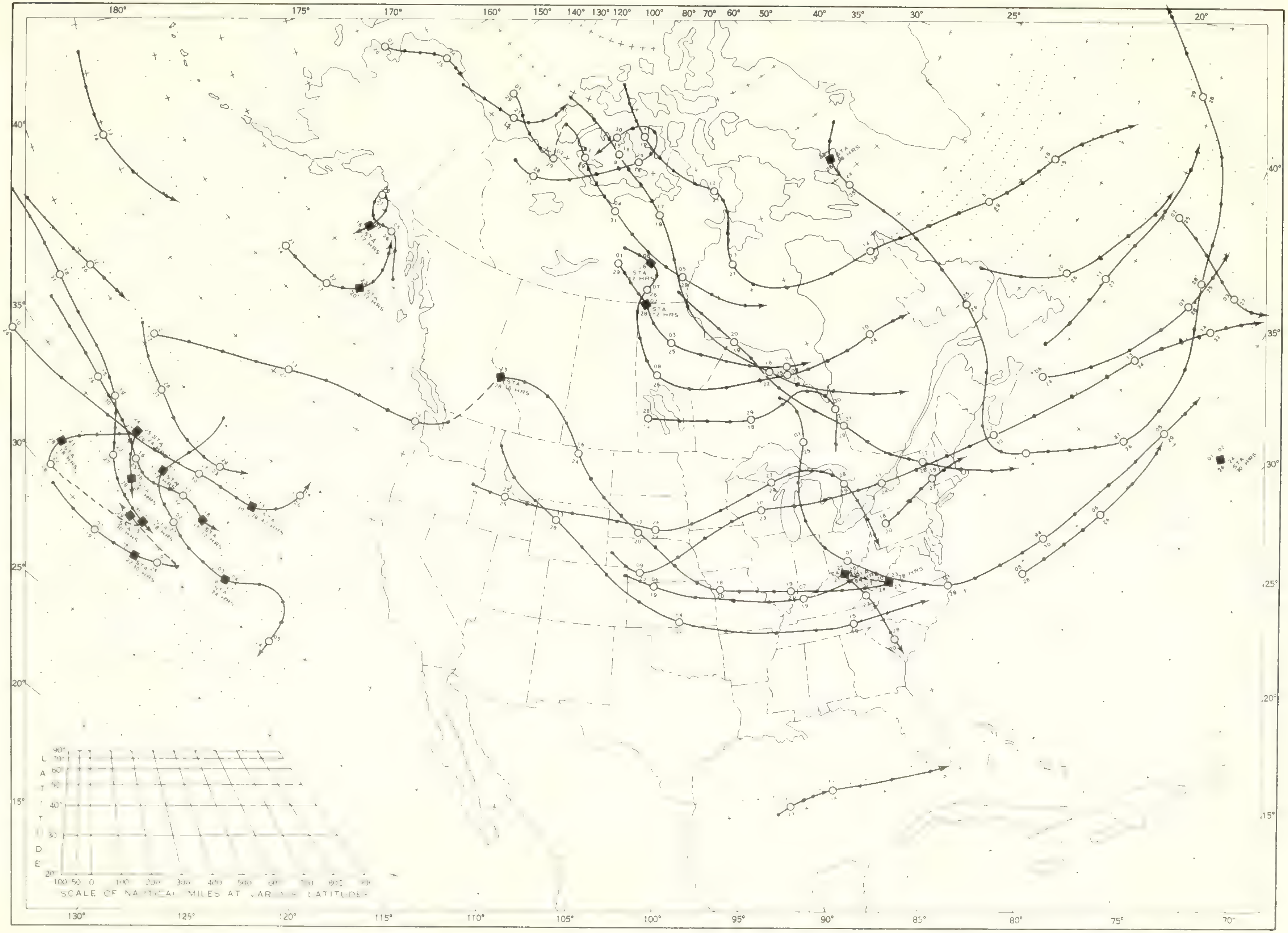


B. Percentage of Mean Daily Solar Radiation, June 1966.



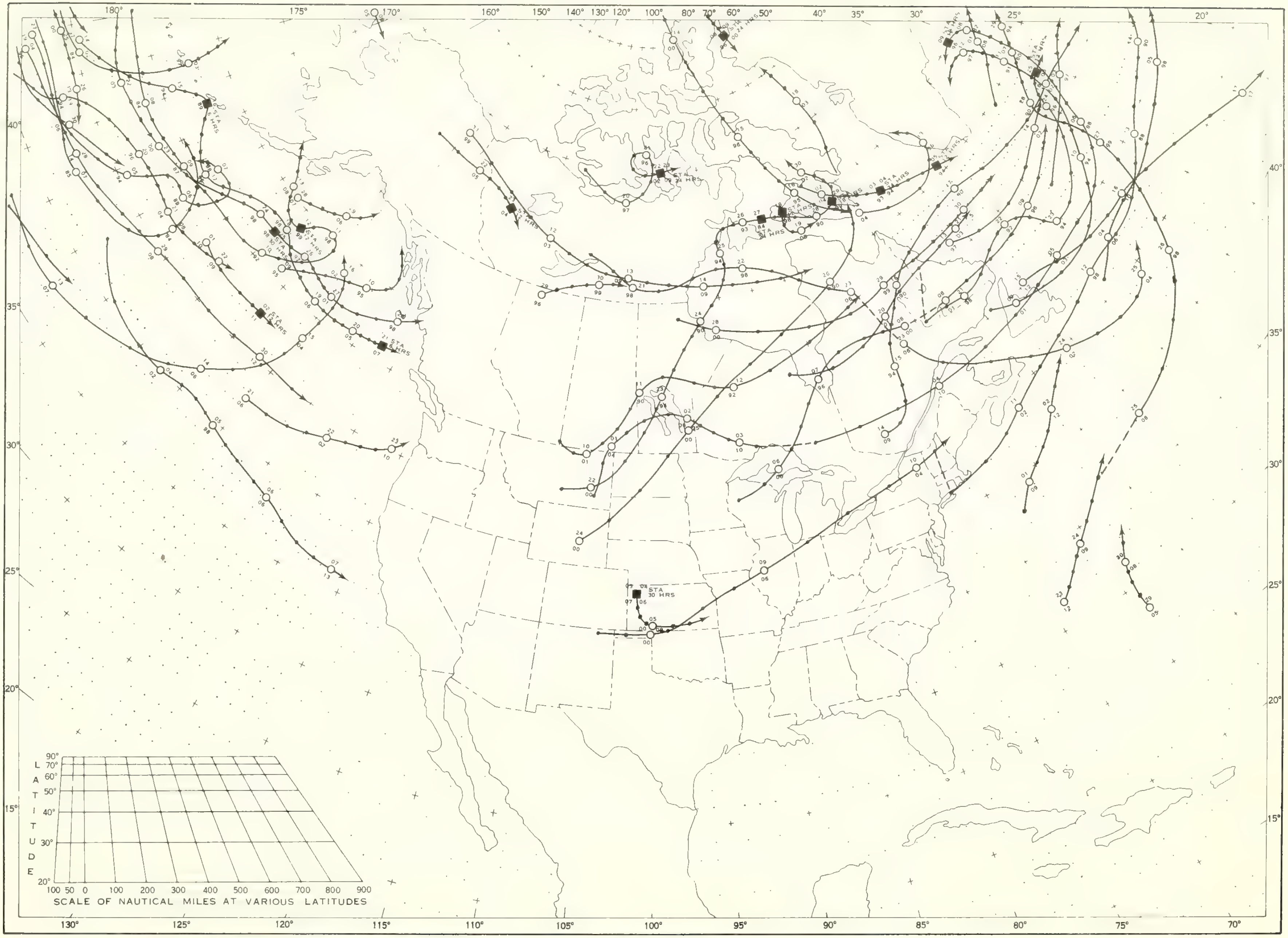
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, June 1966.



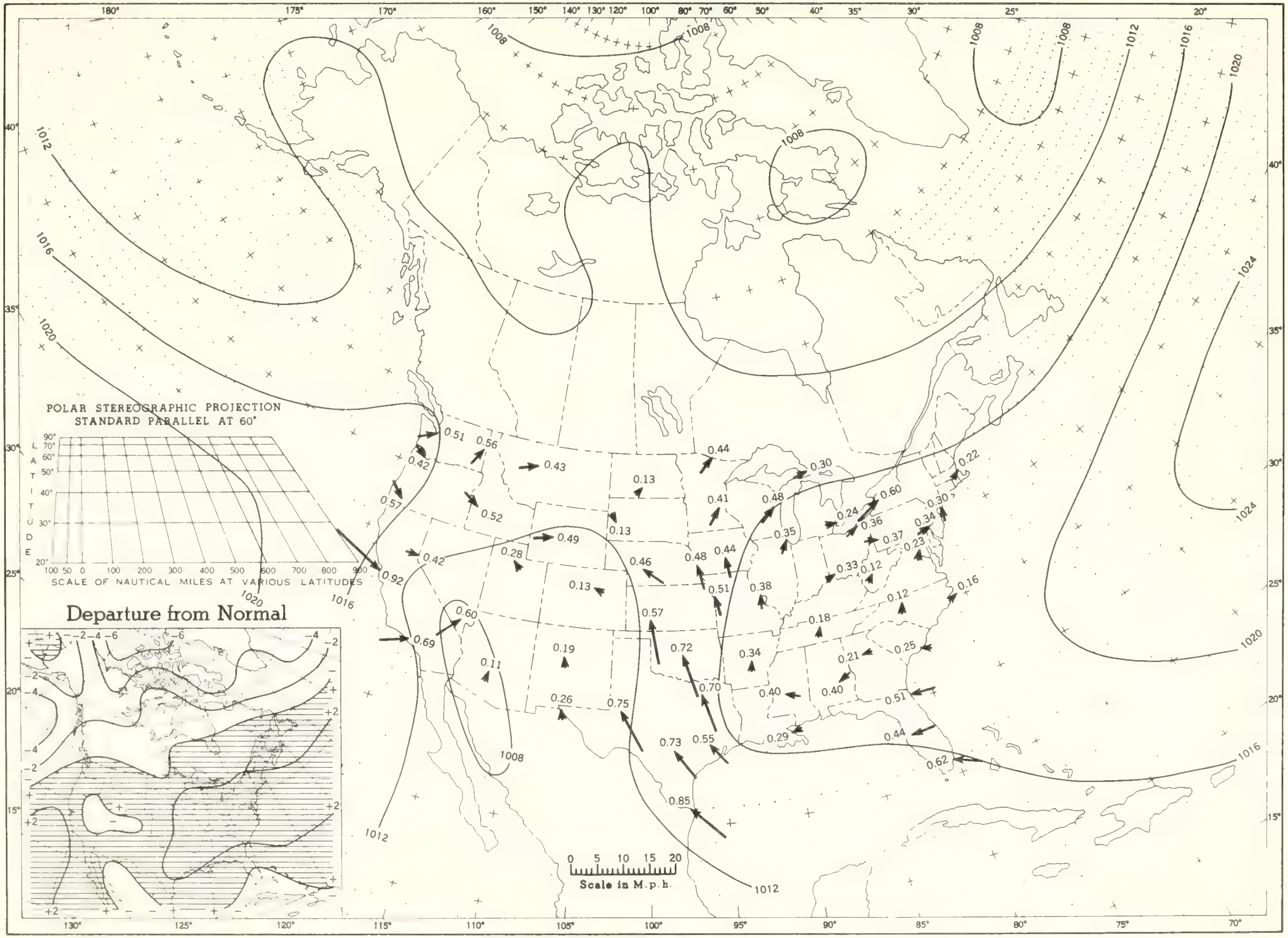
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, June 1966.



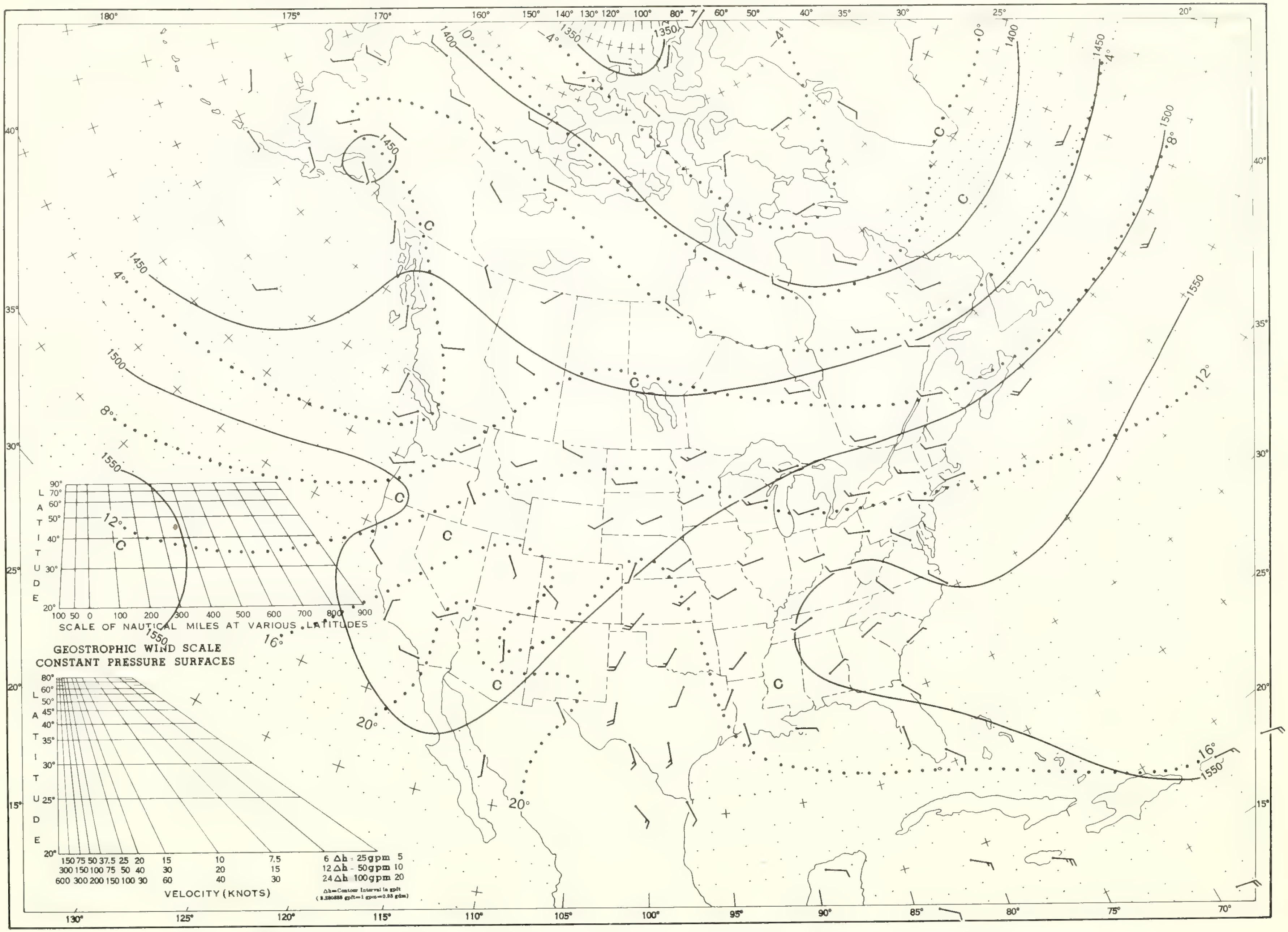
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, June 1966. Inset: Departure of Average Pressure (mb) from Normal, June 1966.



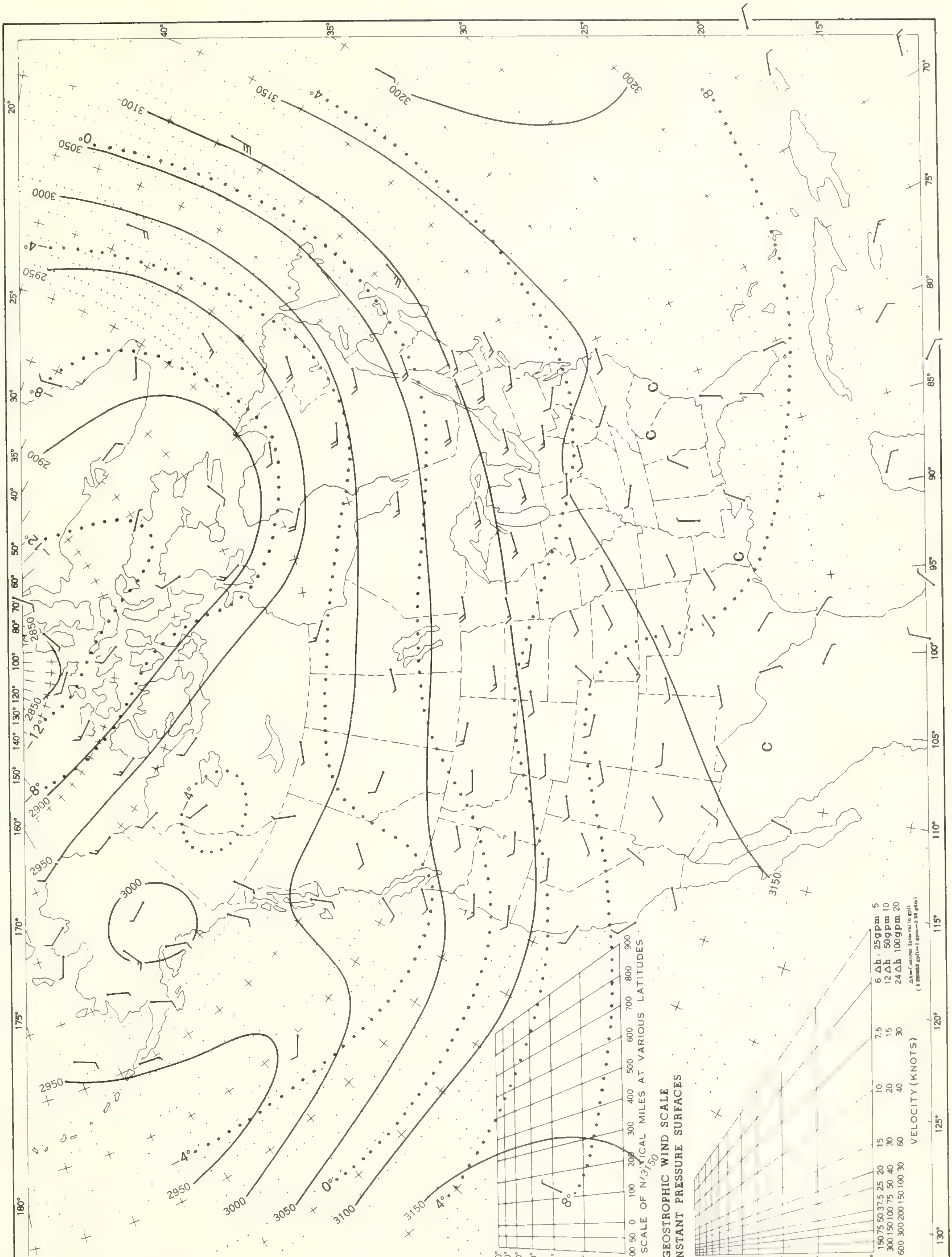
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, June 1966. Average Height and Temperature, and Resultant Winds.



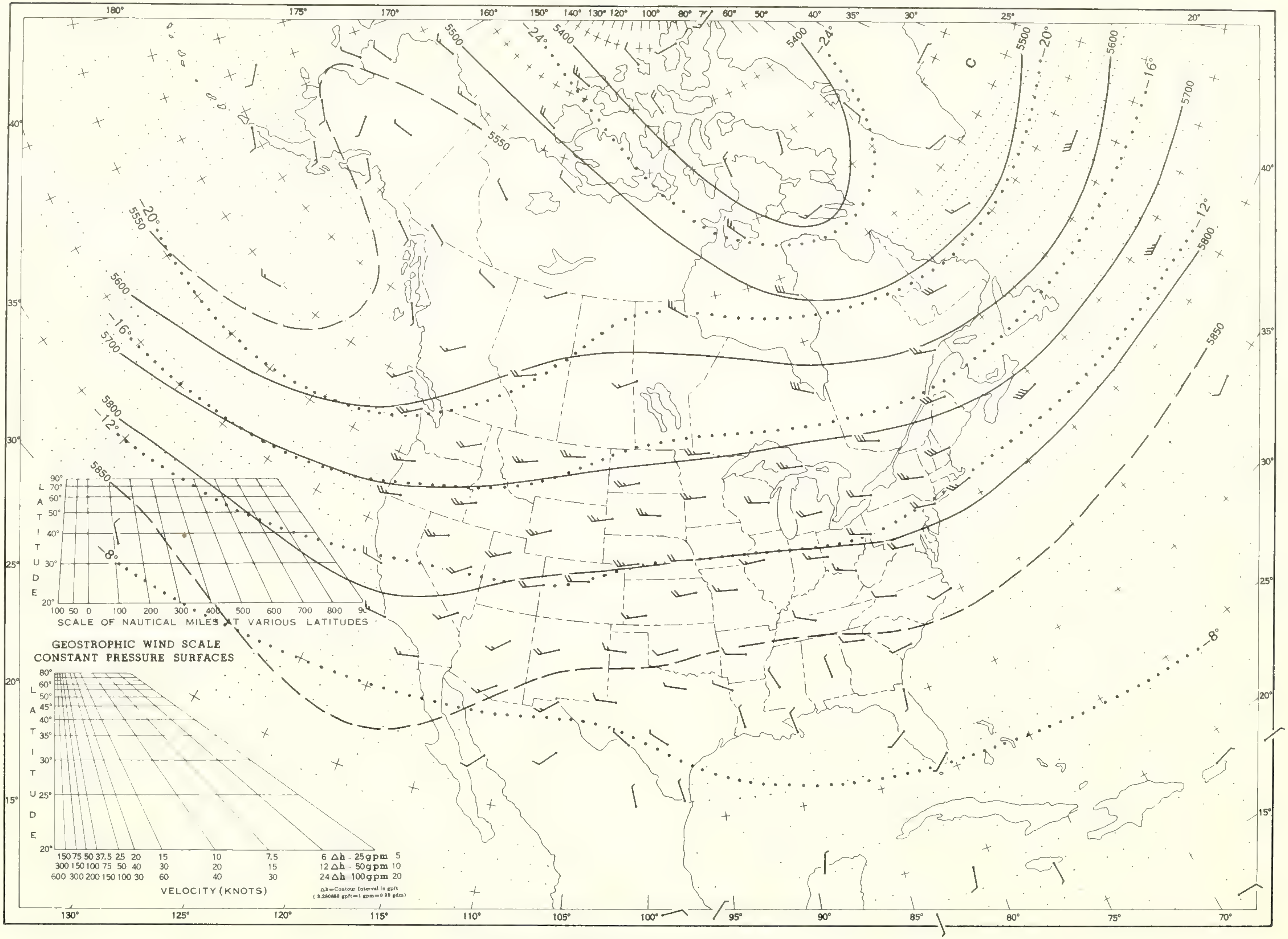
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, June 1966. Average Height and Temperature, and Resultant Winds.



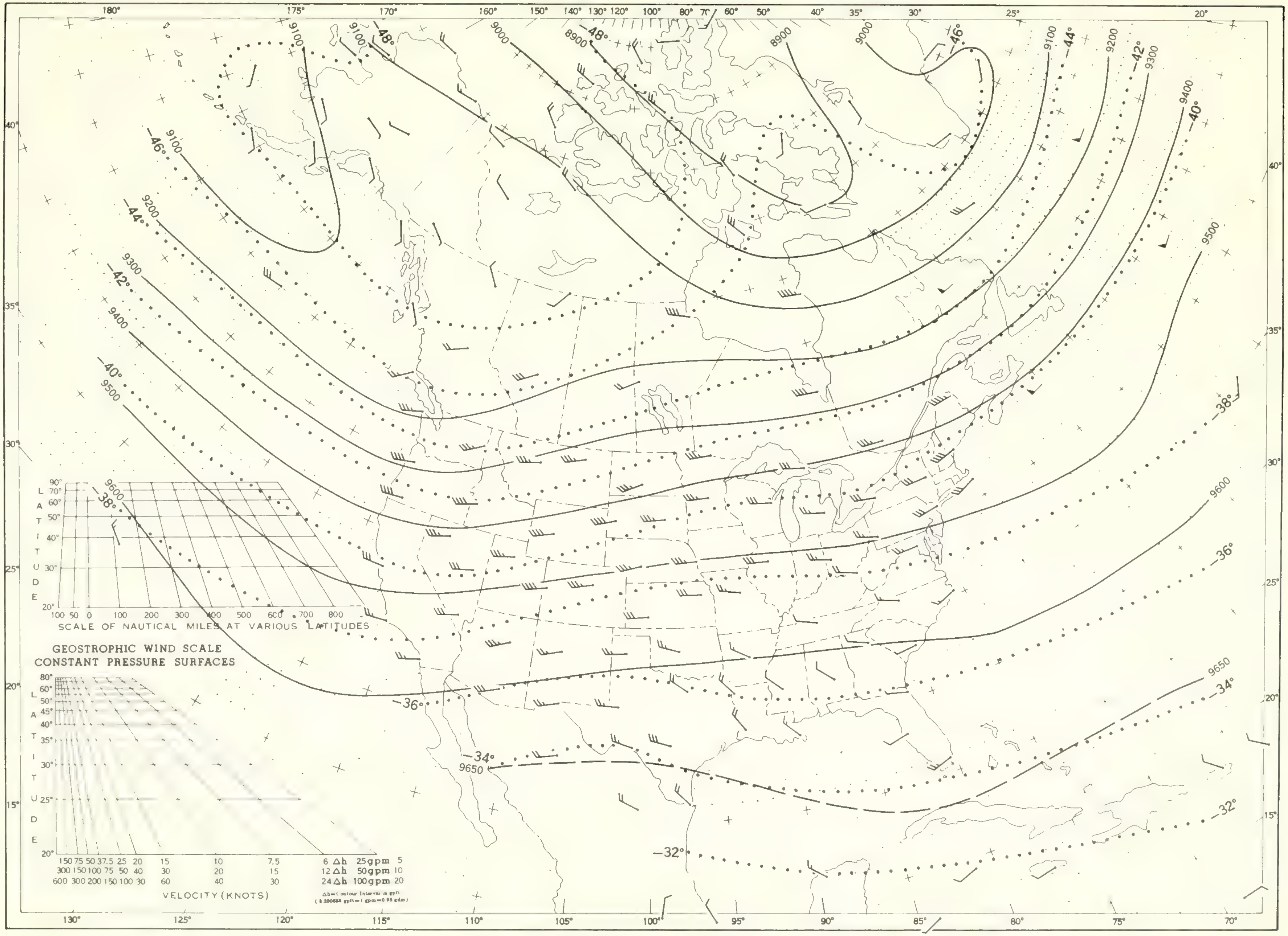
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, June 1966. Average Height and Temperature, and Resultant Winds.



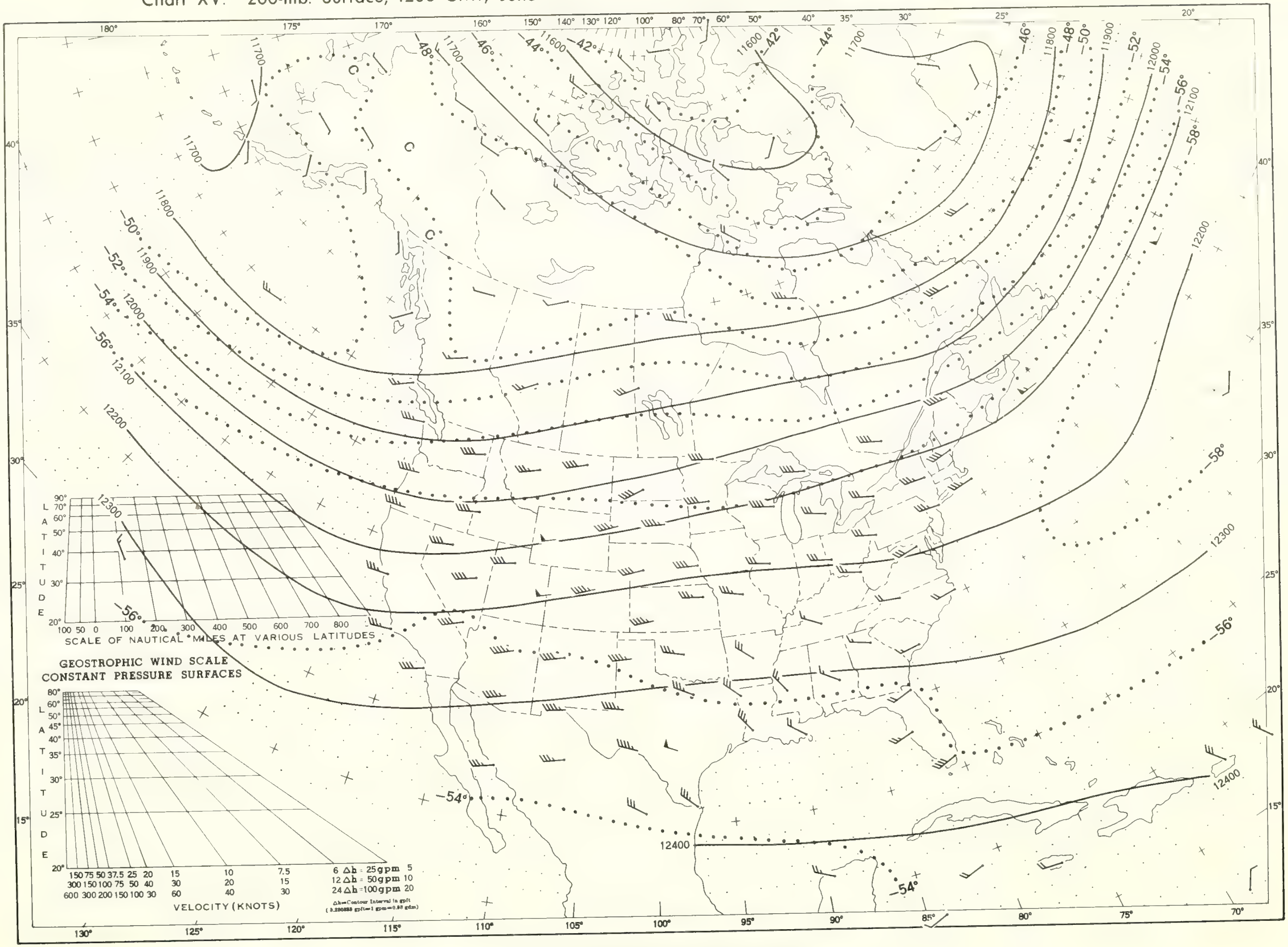
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, June 1966. Average Height and Temperature, and Resultant Winds.



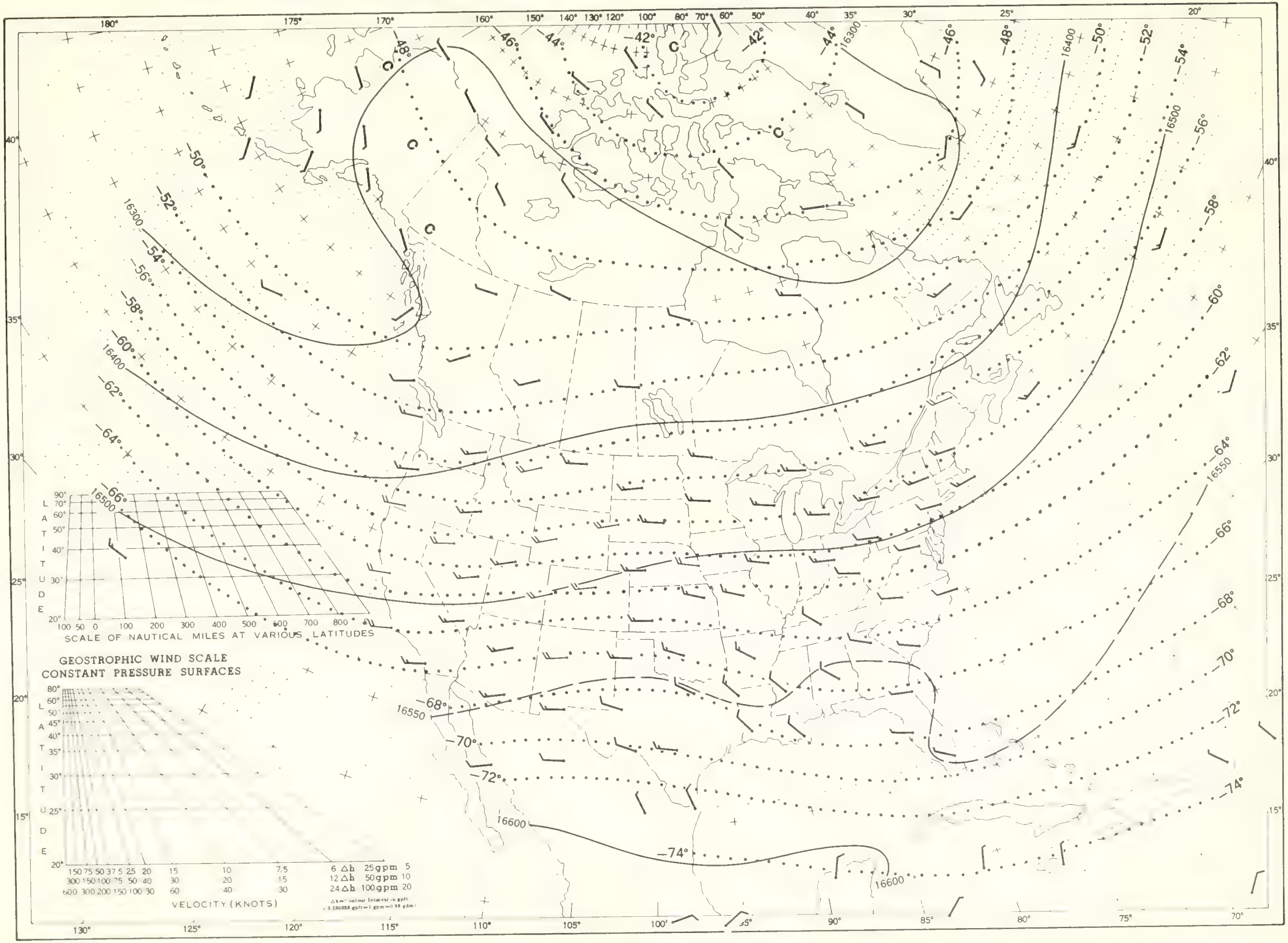
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, June 1966. Average Height and Temperature, and Resultant Winds.



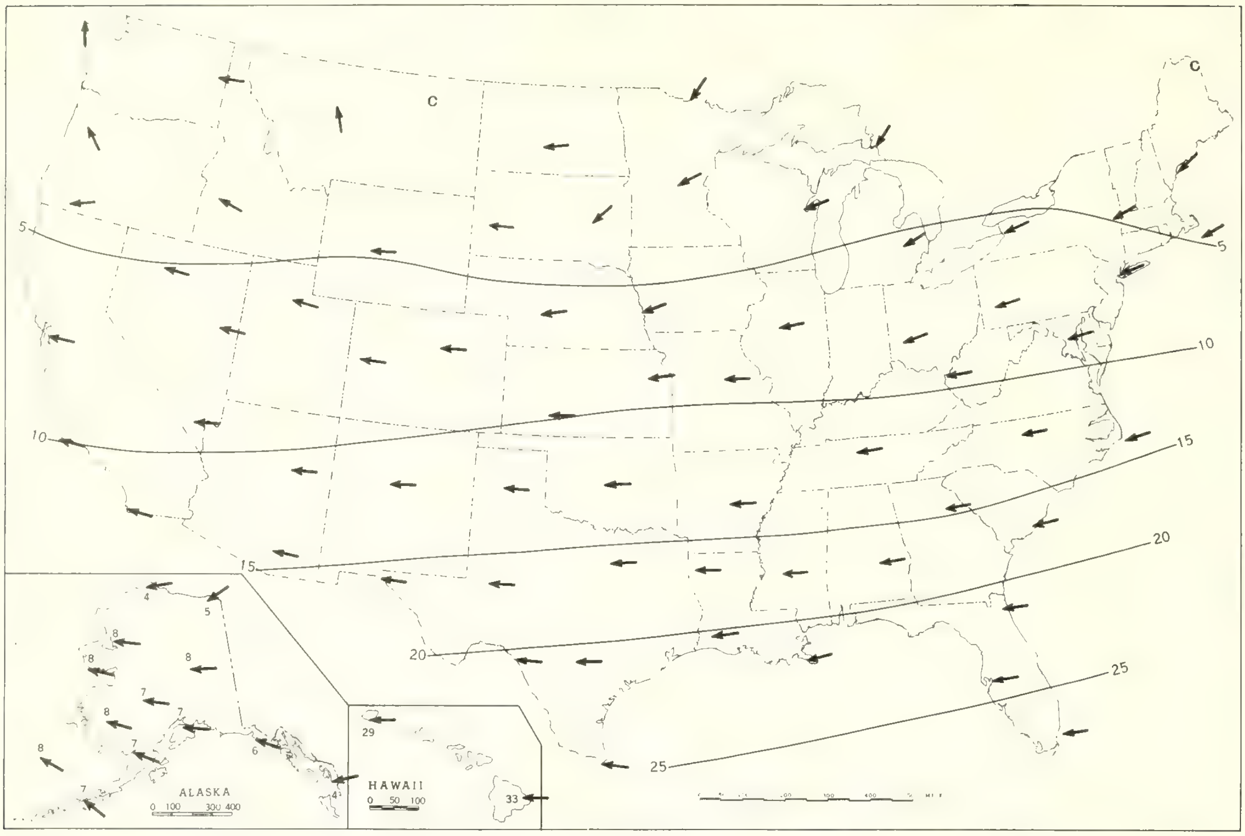
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, June 1966. Average Height and Temperature, and Resultant Winds.

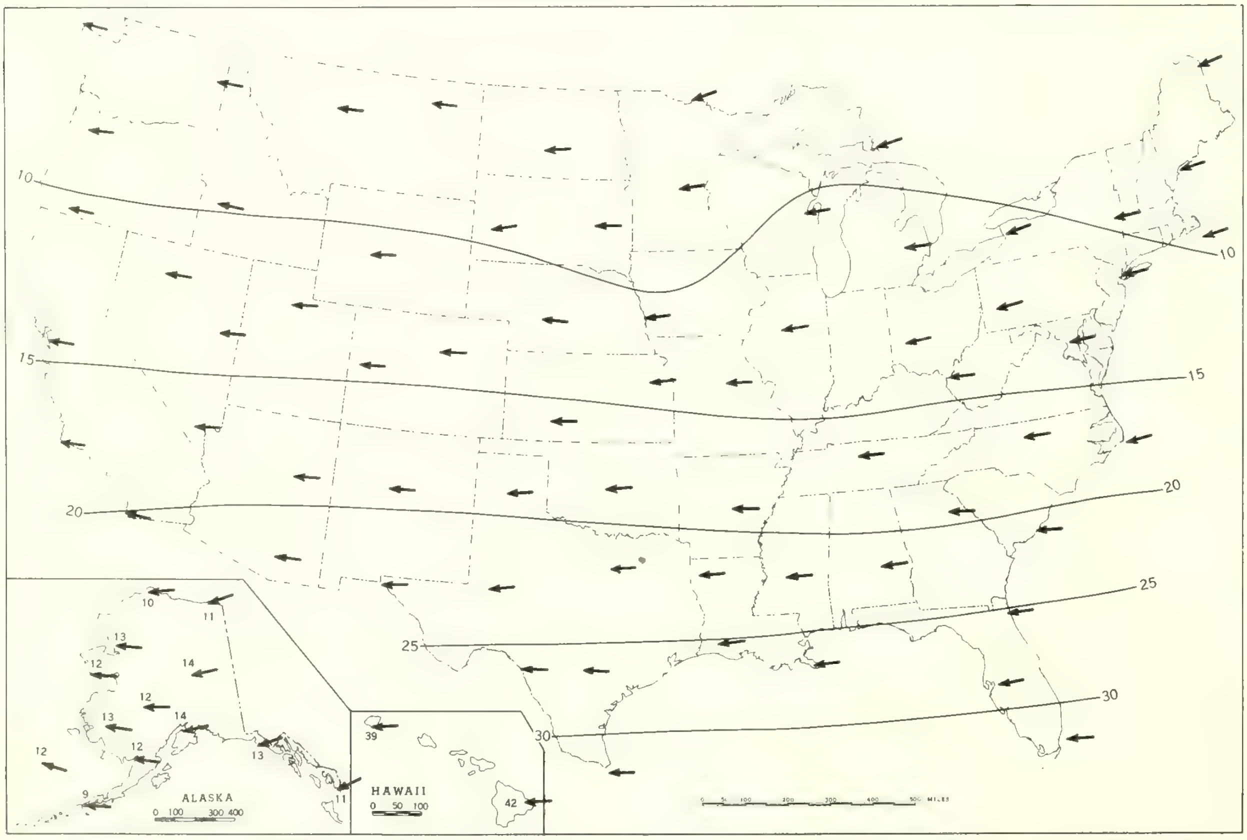


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, June 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, June 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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JULY 1966

Volume 17 No. 7

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 7 JULY 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Heat Wave in Northeast and Midcontinent.

2. Northeastern drought continued.

3. Record rainfall north Pacific coast.

TEMPERATURE.--Temperatures were featured by a heat wave that began in the northeast quarter of the Country in June and spread southward to the Gulf and westward over the Rockies during the first half of July. In the Northeast temperatures reached 100° or higher on as many as 5 days at some stations. Highest temperatures in the Northeast generally occurred on the 3d when Harrisburg, Pa., and La Guardia Field, N. Y., reported 107°, alltime records for both locations and for the New York City area.

In midcontinent areas temperatures rose to near record levels for July, and the number of days with temperatures above either 90° or 100° was among the greatest of record. Wichita Falls, Tex., recorded 100° or higher on 24 days, Huron, S. Dak., on 6 and Springfield, Ill., and Memphis, Tenn., on 8. High humidity added to the discomfort of the heat wave in the northern Great Plains, upper Mississippi Valley, and upper Great Lakes.

The heat wave was centered over the middle Mississippi Valley and east-central Great Plains where average temperatures for the first half of the month ranged from 6° to 9° above normal. At St. Louis, Mo., the 6-day period (9-14th) with maxima over 100° was the longest such period since the summer of 1953, and the low of 84° for the night of the 11-12th was the highest minimum since the memorable July of 1936 when a low of 87° was recorded on the 14th. The hot, dry weather burned pastures and slowed growth of spring-planted crops. High temperatures and hot winds damaged corn severely in parts of Missouri, and deterioration of both corn and soybeans was noted in southern Illinois. The heat wave was blamed for about 70 deaths in the St. Louis area and hundreds of others elsewhere east of the Rockies.

The month was cooler than normal in the Pacific States, by as much as 4° in a few small scattered areas. Red Bluff, Calif., reported its coolest July since 1903, and central Oregon reported spotty frost on the 3d.

PRECIPITATION.--Drought continued to plague the Northeast during July. Extreme drought at the beginning of the month extended along the Atlantic coast from southern New England to northern Virginia and central and northeastern West Virginia. Much of the area east of the Appalachians from Pennsylvania and New Jersey southward to North Carolina had less than 50 percent of normal rainfall, and a few sections in northern Virginia, central Maryland, and south-central Pennsylvania had less than 25 percent. With the lack of rain and abnormally high temperatures which resulted in rapid evaporation, the area of extreme drought extended over virtually all of West Virginia and over larger portions of Pennsylvania and West Virginia by the end of the month. Harrisburg, Pa., a station in the area of most intense drought, reported its hottest and driest July since 1955, and the least amount of precipitation, 1.86 inches, for the May-June-July period on record. Water levels were the lowest of record in southern New England, New Jersey, and western Maryland.

Drought was also prominent in other sections across the 48 states. The largest area included southern California and western portions of the Great Basin. Nevada, where the drought was worst, has had below normal precipitation for 8 consecutive months, and ranges were depleted.

In western Kentucky and southern portions of Illinois and Indiana precipitation generally was near 50 percent of normal. Some areas, however, were much below 50 percent. Greenville, in southwestern Illinois, reported only 0.28 inch for the entire month of July. This location was part of an area that extended into Missouri and included the St. Louis area where rainfall was the least since 1950. In the southwest Indiana-western Kentucky area, Spurgeon, Ind., reported only 0.34 inch and Henderson, Ky., only 0.45 inch for the month. These areas also had less than 50 percent of normal precipitation in June.

Precipitation was well above normal in north-central areas, particularly in the northern Great Plains and upper Mississippi Valley where many stations reported over 200 percent of their usual July rainfall. This was the wettest July since 1935 at Bismarck, N. Dak. Monthly totals in both the Dakotas ranged up to more than 8 inches.

Summer thunderstorms furnished normal or above amounts of precipitation in most of Arizona and New Mexico. A belt of unseasonably heavy precipitation extended from Washington through northern and western Oregon and along the northern coast of California. Walla Walla, Wash., measured 1.78 inches for the month, the greatest July amount there on record dating back to 1873. Sacramento, Calif., measured 0.09 inch, the greatest amount since 1876.

DESTRUCTIVE STORMS.--Few severe storms occurred during July. On the large Island of Hawaii flooding at Hilo, caused by rainfall ranging up to 17 inches on the mountain slopes, was responsible for damage estimated at several thousand dollars.

CONDENSED CLIMATOLOGICAL SUMMARY

JULY 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Auburn 3SW	106	13	Heflin	53	25	Claiborne	9.28	Martin Dam	0.98
Alaska	Data will be delayed									
Arizona	Granite Reef Dam	117	6	Fort Valley	37	15	Sala Ranch	9.34	2 Stations	.00
Arkansas	Evening Shade 1NE	113	15	Calico Rock	51	22	Paragould Radio KDRS	8.60	Danville	.71
California	Death Valley	119	29+	Bodie	15	3	Nightingale	2.62	159 Stations	.00
Colorado	3 Stations	106	17+	2 Stations	26	9+	Penrose 3NNW	8.40	Greeley	.06
Connecticut	Norwalk Gas Plant	103	4	3 Stations	42	21+	Mansfield Hollow Dam	5.41	Wepawaug Reservoir	.89
Delaware	4 Stations	102	4+	Middletown 1WSW	48	21	Wilmington N Castle WBAP	3.09	Lewes 1SW	1.25
Florida	Wewahitchka	104	10	Lake City 2E	60	1	Wewahitchka	16.62	Cedar Key 1WSW	2.07
Georgia	Thomaston 2S	105	14	2 Stations	52	24+	Brunswick	15.70	Montezuma	.50
Hawaii	Data will be delayed									
Idaho	Grand View 3WNW	107	24	Three Creek	24	30	Island Park Dam	1.57	13 Stations	.00
Illinois	Belleville So Ill Univ	108	10	Marengo	41	21	Moline WBAP	7.74	Greenville 1E	.28
Indiana	Marengo	109	13	Osgood	42	21	Elliston	8.39	Spurgeon 2N	.34
Iowa	Ottumwa FAA AP	105	10	3 Stations	47	21	New Hampton	7.70	Bartlett	.84
Kansas	Kirwin	113	19	2 Stations	58	7	Scott City	7.87	Ashland	.55
Kentucky	Henderson 7SSW	106	13	Vanceburg	46	22+	Cumberland	11.98	Henderson 7SSW	.45
Louisiana	Logansport	105	29+	Greensburg	62	25	Paradis 7S	13.16	Lake End	.56
Maine	Saco	98	3	3 Stations	35	21+	East Sangerville 5SE	7.76	Portland	.81
Maryland	Elkton	105	3	Oakland 1SE	37	21	Vienna	3.74	Annapolis	.07
Massachusetts	2 Stations	101	4+	2 Stations	39	21	Chester 2	6.95	South Wellfleet	.48
Michigan	do	102	3+	Kenton US Forest	34	20	Detroit WBAP M Wayne Co.	5.24	Brevort	.20
Minnesota	Beardsley	109	10	2 Stations	37	29+	Int Falls WBAP	9.52	Melrose	.67
Mississippi	2 Stations	104	16+	Corinth 4SW	54	23	Kipling	9.79	Byhalia	.23
Missouri	do	108	12	Louisiana Starks Nur	43	22	Granby	7.81	Mountain Grove 2N	.50
Montana	Miles City	113	16	Sula	22	3	Vida	5.87	Laurel	.03
Nebraska	Fairbury 2SSE	111	19	Valentine Lks Game Ref	49	23	Emerson	8.20	Newport	.67
Nevada	Sunrise Manor Las Vegas	115	18	Charleston	23	3	Montgomery Mnte Sta	2.90	14 Stations	.00
New Hampshire	Concord WBAP	102	3	Mount Washington	31	27	Mount Washington	5.63	Tamworth 2	1.38
New Jersey	Cape May 3W	106	7	2 Stations	41	21	Pennsauken	4.59	Oldwick	.68
New Mexico	2 Stations	107	11+	Eagle Nest	33	4	Capulin Natl Monument	8.67	Hope	.00
New York	do	107	3	Angelica	34	21	Berlin 2S	7.25	Watertown FAA AP	.62
North Carolina	Roxboro	104	14	2 Stations	46	23	Wilmington WBAP	15.12	Rocky Mount FAA AP	.72
North Dakota	Medora 22NNW	108	16	6 Stations	43	29+	Bowman Court House	8.21	Oaks	.35
Ohio	Toledo Blade	103	11+	Dorset	39	16	Sandusky	12.60	Willoughby 4N	.57
Oklahoma	Frederick	111	15	Kenton	55	3	Wilburton	11.12	Fort Cobb	.04
Oregon	Ontario KSRV	105	29	Fremont	23	25+	Headworks Ptld Works	3.75	12 Stations	.00
Pennsylvania	Everett	108	2	Clermont 4NW	31	21	Bear Gap	7.04	Hanover	.27
Puerto Rico	2 Stations	96	28+	Caguas 2ENE	52	23+	Palmarito	20.40	Puerto Real	.36
Rhode Island	Greenville	97	3	Kingston	43	21	Greenville	4.89	Block Island WBAP	1.18
South Carolina	3 Stations	103	29+	3 Stations	53	31+	Summerville 2WNW	14.00	Whitmore 2NE	.91
South Dakota	5 Stations	113	11+	Deerfield 4NW	39	9+	Tulare	8.42	Mission	1.24
Tennessee	Samburg Wildlife Ref	105	14	Mountain City No 2	47	9	Watauga Dam	9.10	Bolivar 2	1.34
Texas	3 Stations	110	22+	Mount Locke	56	8	Horger	7.65	22 Stations	.00
Utah	Saint George	110	19	Strawberry Hwy Station	30	18+	Bluff	3.96	4 Stations	.00
Vermont	4 Stations	98	4+	Somerset	34	21	Salisbury	5.81	Montpelier FAA AP	1.49
Virginia	2 Stations	103	28+	Monterey	41	31+	St Paul	10.11	Mount Weather	.66
Washington	Lower Granite Dam	103	30	Mount Spokane Summit	25	2	Tolt South Fork Resvr	6.01	Hoquiam FAA AP	.35
West Virginia	Berkeley Springs	102	3	Canaan Valley	33	31+	Williamson 2	8.77	Martinsburg FAA AP	.72
Wisconsin	3 Stations	102	10	Foxboro	33	20	Platteville	9.81	Brule Island	.97
Wyoming	2 Stations	108	16	Bondurant 3NW	23	30	Tennyson	4.87	2 Stations	.00

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
																									Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	993.6	1015.6	92	70	81.3	- 0.3	102	15	62	24	21	0	70	72	4.99	- 0.17	1.78	11	7	0.0	0	0.6	3	26	N	19	11	15	5	4.6	84
HUNTSVILLE	600	992.9	1015.4	95	73	83.8	2.7	104	14	65	24	28	0	70	66	3.28	- 0.97	1.19	10	9	0.0	0	1.2	16	33	3	6	9	15	7	5.3	
MOBILE	211	1007.5	1015.4	93	75	83.8	1.2	99	8	70	24+	30	0	71	71	5.20	- 4.47	1.97	15	15	0.0	0	0.8	22	25	16	14	2	22	7	6.1	
MONTGOMERY	194	1008.1	1015.3	93	73	82.7	0.9	102	14	66	24	23	0	72	75	2.58	- 2.82	1.30	8	8	0.0	0	1.1	27	32	NW	15	4	19	8	5.9	71
ALASKA												B																				
ANCHORAGE PRK STRIP	85			65	51	58.3	1.2	74	20	42	1	6	0			0.82	- 1.04	0.24	11		0.0	0										
ANCHORAGE	114	1010.5	1015.2	65	51	57.9		75	24	39	1	9	0	48	70	0.71		0.18	9	1	0.0	0	2.7	20	21	16	11+	7	5	19	7.1	45
ANNETTE	110	1012.9	1017.0	67	53	59.9	2.6	84	23	47	10	11	0	51	77	2.77	- 3.25	1.18	9	0	0.0	0	2.3	27	23	14	31	8	5	18	6.6	
BARROW	22	1012.5	1013.2	43	32	37.4	- 1.7	59	15	28	2	0	18	36	96	2.01	1.24	0.65	14	0	T	T	2.0	9	24	13	15	1	4	26	8.8	
BARTER ISLAND	39	1011.5	1013.4	48	35	41.2	- 0.1	62	21	27	27	0	10	37	87	1.61	0.73	0.70	9	0	T	0	1.6	3	24	9	15	2	2	27	8.6	
BETHEL	125	1008.1	1013.6	60	47	53.2	- 1.5	83	24	40	3	6	0	48	85	2.40	0.37	1.22	15	1	0.0	0	5.0	20	28	18	12	2	5	24	8.6	
COLD BAY	96	1010.5	1014.6	53	45	48.6	- 1.1	63	20	40	12	0	0	45	89	4.63	2.81	1.23	21	0	0.0	0	8.1	18	50	15	3	0	3	28	9.5	
FAIRBANKS	436	997.3	1014.1	73	52	62.5	2.8	83	21+	44	29+	22	0	43	52	0.83	- 1.01	0.32	10	2	0.0	0	1.7	25	28	27	17	3	12	16	7.3	
JUNEAU	12	1015.9	1016.8	66	47	56.2	0.9	81	25+	38	10	7	0	50	83	3.91	- 0.58	1.47	12	0	0.0	0	2.0	2	22	11	31+	1	8	22	8.3	35
KING SALMON	43	1012.5	1014.6	60	45	52.6	- 2.3	78	25+	33	9	6	0	47	85	2.45	0.39	0.57	14	1	0.0	0	6.7	18	49	8	1	2	8	21	8.1	
KOTZEBUE	10	1011.2	1011.6	59	47	52.9	0.2	76	26	36	10	2	0	46	81	1.25	- 0.21	0.39	17	0	0.0	T	3.5	19	29	31	31+	1	5	25	8.7	
MC GRATH	349	1001.4	1013.9	65	46	55.4	- 3.3	81	24	35	19	9	0	46	72	0.55	- 1.88	0.20	13	1	0.0	0	2.8	20	31	19	12	6	4	21	7.6	
NOME	13	1010.2	1011.0	55	44	49.2	- 0.3	76	25	37	19+	2	0	46	86	2.68	0.39	0.62	14	0	0.0	0	3.8	18	32	21	13	5	4	22	8.1	30
ST. PAUL ISLAND	22	1011.2	1012.0	49	42	45.5	0.0	55	20	36	20	0	0	43	93	1.41	- 0.84	0.49	14	0	0.0	0	3.7	18	26	24	12	0	3	28	9.5	
SHEMYA	122	1007.8	1011.4	48	41	44.7	- 1.7	54	30	37	1	0	0	43	96	1.87	- 0.28	0.76	13	0	0.0	0	3.3	23	35	1	3	0	0	31	9.9	
YAKUTAT	28	1015.9	1017.0	58	46	52.0	- 2.1	66	23	39	10	0	0	49	91	3.01	- 5.42	0.77	12	0	0.0	0			17	16	30+	0	4	27	9.2	
ARIZONA																																
FLAGSTAFF	6993	791.1	1014.9	82	51	66.4	0.9	88	6	42	1	0	0	46	56	1.62	- 0.66	0.65	12	15	0.0	0	3.0	22	21	24	7	7	12	12	5.9	
PHOENIX	1117	970.2	1007.9	107	80	93.0	3.2	113	6	68	6	31	0	58	34	0.09	- 0.68	0.04	3	4	0.0	0	2.6	27	47Y	SE	24	17	10	4	3.7	82
TUCSON	2584	923.8	1009.2	98	73	85.3	- 1.0	105	6	66	1	30	0	58	45	2.57	0.51	1.06	9	10	0.0	0	2.3	23	40	E	15	6	18	7	5.5	80
WINSLOW	4895	852.4	1011.8	95	64	79.4	- 0.8	103	6	56	3+	30	0	51	45	1.34	0.32	0.67	10	14	0.0	0	3.7	22	52	29	24	6	21	4	5.3	
YUMA	194	1000.7	1007.8	105	80	92.8	0.0	113	6	72	4	31	0	58	35	0.20	- 0.03	0.11	4	2	0.0	0	5.4	20	30	E	25	18	7	6	3.8	79
ARKANSAS																																
FORT SMITH	447	997.6	1013.7	96	73	84.4	1.4	105	15	68	3	26	0	70	67	1.32	- 1.48	0.51	4	3	0.0	0	1.9	11	26	NE	16	10	12	9	5.7	67
LITTLE ROCK	257	1005.4	1014.7	95	73	84.2	2.3	105	15	67	22+	25	0	72	71	3.54	0.20	0.93	9	6	0.0	0	2.3	18	33	W	4	11	14	6	4.8	71
TEXARKANA	372	1001.7	1014.3	94	74	84.0	1.4	101	19	69	26	27	0	73	74	5.58	1.74	1.63	6	8	0.0	0	2.7	19				16	7	8	4.8	
CALIFORNIA																																
BAKERSFIELD	494	994.2	1011.5	96	67	81.4	- 2.9	106	25+	59	12	28	0	47	33	T	- 0.01	T	0	0	0.0	0	4.8	33	18	31	11	27	0	4	1.4	
BISHOP	4108			97	55	75.6	- 1.0	104	29+	46	14	30	0			T	- 0.12	T	0		0.0	0						23	4	4	2.2	
BLUE CANYON	5280			74	55	64.8	- 3.2	84	28	46	14	0	0			0.02	- 0.07	0.02	1		0.0	0			23	17	1	27	3	1	1.2	
EUREKA U	43			61	52	56.6	0.3	65	18	47	3	0	0			0.25	0.14	0.15	6		0.0	0			23	NW	24	7	5	19	7.0	54
FRESNO	328	999.7	1011.3	96	60	78.2	- 3.1	108	23	54	3	26	0	51	43	0.03	0.03	0.03	1	0	0.0	0	6.1	29	23	NW	11	26	3	2	1.3	94
LONG BEACH	34	1011.5	1012.9	85	62	73.6	2.0	91	17	56	13	3	0	56	62	T	0.00	T	0	0	0.0	0	3.2	25	17	28	16+	21	8	2	2.7	
LOS ANGELES	97	1009.1	1012.7	75	61	68.2	- 0.9	79	26+	58	15+	0	0	58	74	0.01	0.00	0.01	1	2	0.0	0	6.4	26	23Y	W	11+	17	10	4	3.6	
LOS ANGELES U	270			84	64	74.4	1.4	91	18	61	13	1	0			T	0.00	T	0		0.0	0			17	W	10	20	9	2	2.5	75
MT SHASTA R	3544			82	48	64.9	- 3.1	97	29	39	2	6	0			0.04	- 0.26	0.04	1		0.0	0										
OAKLAND	6	1014.2	1014.6	69	57	63.2	- 1.1	86	31	53	4	0	0	54	74	0.14	0.14	0.14	1	0	0.0	0	8.4	28	25	27	2	15	10	6	4.1	
RED BLUFF	341	998.6	1011.2	93	62	77.6	- 6.2	106	22	54	12+	19	0	44	34	T	- 0.04	T	0	0	0.0	0	3.7	18	38	N	1	25	3	3	1.5	96
SACRAMENTO	17	1011.2	1012.0	90	56	72.9	- 2.5	102	22	53	28+	18	0	52	56	0.10	0.10	0.09	2	0	0.0	0	7.0	21	29	SW	1	29	0	2	1.1	96
SANDBERG R	4517			83	62	72.4	- 2.0	91	23+	50	10	3	0			T	- 0.02	T	0		0.0	0			29	21	11	25	3	3	1.8	
SAN DIEGO	13	1011.5	1012.6	74	64	69.2	- 0.9	78	24+	60	13	0	0	61	79	T	- 0.01	T	0	1	0.0	0	4.2	28	23	NW	11	19	8	4	3.6	74
SAN FRANCISCO	8	1014.2	1014.9	68	53	60.5	- 2.2	87	31	50	20+	0	0	51	76	0.03	0.02	0.03	1	0	0.0	0	10.9	29	30	W	17	17	8	6	3.4	
SAN FRANCISCO U	52			64	53	58.2	- 0.6	79	31	49	6+	0	0			0.06	0.05	0.03	2		0.0	0			30	W	1					73
SANTA CATALINA	1568			79	61	70.0	1.3	90	23+	55	2+	2	0			T	- 0.02	T	0	1	0.0	0						23	6	2	2.1	
SANTA MARIA	236			72	51	61.1	- 1.1	80	3	45	9+	0	0			0.16	0.13	0.16	1		0.0	0						20	8	3	3.2	
STOCKTON	22	1011.9	1012.9	91	58	74.6	- 3.6	104	22	54	15+	19	0	49	47	0.14	0.13	0.14	1	1	0.0	0	9.1	29	26	25	1	28	1	2	1.2	
COLORADO																																
ALAMOSA	7536			84	51	67.5	2.5	90	6	42	2	1	0			0.78	- 0.29	0.36	7		0.0	0						5	23	3	5.1	
COLORADO SPRINGS	6145	814.1	1012.8	88	60	73.9	3.4	96	4	55	24+	15	0	51	53	2.91	0.54	0.68	20	23	0.0	0	1.8	3	38	36	18	6	18	7	5.5	
DENVER	5283	837.8	1011.0	92	62	76.9	4.0	98	16+	55	3	22	0	52	49	1.04	- 0.49	0.41	8	12	0.0	0	2.5	15	34	E	13	7	20	4	5.2	68

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max. 90°F. or above	No. of days: Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days: .01 inch or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
GRAND JUNCTION	4855	852.0	1009.9	95	67	80.9	2.7	101	6	57	2	29	0	46	33	0.31	- 0.26	0.27	6	6	0.0	0	2.1	13	38	NE	20	11	16	4	4.6	76
PUEBLO	4684	856.1	1010.7	95	65	79.9	3.4	102	5+	59	15	24	0	54	48	1.68	- 0.14	1.09	5	9	0.0	0	1.2	3	49	NW	27	9	17	5	5.4	77
CONNECTICUT																																
BRIDGEPORT	7	1013.2	1013.8	86	68	77.0	3.3	100	2	57	21	8	0	61	60	1.39	- 2.38	0.65	5	4	0.0	0	4.6	24	24	21	13	9	13	9	5.3	
HARTFORD	169	1006.4	1012.9	89	62	75.8	2.4	102	3	50	21	16	0	60	62	3.96	0.35	1.76	5	6	0.0	0	2.6	25	36	NW	19	8	14	9	5.9	81
NEW HAVEN	6			83	64	73.5	1.6	97	3	53	21	4	0			1.60	- 1.83	1.00	8		0.0	0			20	SW	28+	7	17	7	5.4	83
DELAWARE																																
WILMINGTON	78	1011.5	1014.4	88	66	77.2	1.2	102	4+	54	21	13	0	61	61	3.09	- 1.16	1.32	8	11	0.0	0	2.2	26	24	30	8	13	11	7	4.6	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1011.9	1014.1	91	71	80.9	2.7	101	3	60	21	20	0	63	57	0.93	- 3.22	0.48	7	4	0.0	0	1.8	21	30	NW	14	13	10	8	5.0	69
FLORIDA																																
APALACHICOLA U	13			89	76	82.1	0.6	93	13	71	1	12	0			10.68	2.75	4.70	16	18	0.0	0			25	E	22+	8	15	8	5.7	64
DAYTONA BEACH	31	1014.6	1015.9	89	74	81.6	1.5	94	15+	71	20	15	0	72	78	7.09	0.35	2.14	13	11	0.0	0	1.7	16	29	13	21	2	14	15	7.3	
FORT MYERS	15	1015.2	1015.7	90	75	82.6	0.4	92	28+	71	10	23	0	74	80	8.22	- 0.86	1.56	18	18	0.0	0	0.3	20	35	25	31+	1	16	14	7.1	
JACKSONVILLE	20	1014.2	1015.4	92	73	82.4	- 0.2	97	16+	69	23	20	0	71	75	11.09	3.41	10.09	14	7	0.0	0	1.8	22	37	W	30	3	16	12	6.7	66
KEY WEST	4	1014.6	1015.3	88	78	83.0	- 0.3	89	29+	71	10	0	0	75	76	5.63	1.47	1.61	15	14	0.0	0	3.7	13	31	SE	10	3	16	12	6.7	72
LAKELAND U	214			90	73	81.4	- 0.2	93	17	69	7	14	0			5.09	- 3.21	0.95	16		0.0	0						1	17	13	6.7	56
MIAMI	7	1015.2	1015.4	87	75	81.1	- 0.7	94	19+	71	22	9	0	74	83	8.50	1.75	2.27	19	19	0.0	0	2.9	13	22	33	31	1	14	16	7.7	
ORLANDO	108	1011.5	1015.7	90	74	82.3	- 0.2	93	16+	72	28+	22	0			6.73	- 1.27	1.55	13	12	0.0	0	1.4	23	24	20	25+	2	13	16	7.4	
PENSACOLA	112	1011.5	1015.6	90	74	82.4	0.7	97	8	71	31+	17	0	73	77	3.16	- 4.86	1.12	18		0.0	0	1.7	21	56	E	14					51
TALLAHASSEE	55	1013.2	1015.5	93	72	82.5	1.2	100	8	67	3	27	0	71	74	6.54	- 1.51	3.11	14	14	0.0	0	0.8	31	24	5	13	1	18	12	6.6	
TAMPA	19	1015.2	1015.6	89	74	81.7	0.1	92	17+	71	8	14	0	71	73	7.62	- 1.00	2.63	12	15	0.0	0	1.7	24	23	15	11	2	15	14	7.1	64
WEST PALM BEACH	15	1014.9	1015.7	88	75	81.5	- 1.1	93	21	71	7	10	0	74	82	8.19	1.53	1.85	16	16	0.0	0	3.2	15	44	17	1	4	5	22	7.6	
GEORGIA																																
ATHENS	802	987.5	1015.8	91	69	79.9	0.2	101	14	60	31+	21	0	69	75	2.50	- 2.49	0.84	7	11	0.0	0	1.2	1	23	36	7+	7	15	9	5.8	
ATLANTA	1010	979.7	1015.7	88	69	78.2	- 0.7	96	12	62	23	12	0	68	76	3.32	- 1.40	0.96	12	8	0.0	0	1.3	36	52	N	15	9	12	10	5.7	63
AUGUSTA	145	1009.5	1014.8	92	69	80.6	- 0.1	99	11	60	23	22	0	69	74	3.44	- 1.06	1.27	10	11	0.0	0	0.5	3	29	31	3	8	12	11	5.9	
COLUMBUS	385			93	72	82.2	1.1	102	14	65	24	24	0	71	75	5.10	- 0.77	2.04	11		0.0	0	1.6	3	29	32	19	5	16	10	6.1	
MACON	354	1002.7	1015.6	93	70	81.2	- 0.7	101	12	62	23	24	0	69	72	3.20	- 2.44	1.33	12	14	0.0	0	1.6	1	34	N	6	10	10	11	5.8	75
ROME	637			92	67	79.6	0.6	101	15+	59	24	21	0			2.32	- 2.57	0.76	10		0.0	0										
SAVANNAH	46	1013.5	1015.2	90	72	80.9	- 0.4	96	12	61	23	17	0	73	81	7.89	1.28	3.04	16	13	0.0	0	1.3	19	31	SW	30	7	15	9	5.6	62
HAWAII																																
HILO	31	1015.6	1016.6	84	70	76.6	1.7	86	29	68	23+	0	0	70	85	13.26	3.44	4.47	26	1	0.0	0	0.6	19	16	E	13	0	9	22	8.4	29
HONOLULU	7	1015.2	1015.8	88	74	80.8	2.0	90	20+	71	13	2	0	65	62	0.43	- 0.01	0.39	4	0	0.0	0	12.2	6	29	E	2	5	17	9	6.2	71
KAHULUI	48	1013.2	1015.6	86	71	78.9	0.6	93	25	65	20	1	0			0.37	- 0.06	0.25	4	1	0.0	0	15.2	6	34	NE	16	5	20	6	5.6	71
LIHUE	103	1012.2	1017.2	83	73	78.1	0.5	85	23+	70	30+	0	0	68	75	1.95	0.01	1.27	14	1	0.0	0	13.3	7	24	E	17	0	17	14	7.4	69
IDAHO																																
BOISE	2838	912.6	1010.4	91	56	73.2	- 2.0	98	24+	43	3	22	0	40	33	0.06	- 0.15	0.06	1	1	0.0	0	3.3	30	30	SE	31	26	4	1	1.5	95
IDAHO FALLS 42NW R	4790			92	48	69.7	0.6	99	30	33	4	23	0			0.30	- 0.14	0.19	4													
IDAHO FALLS 46W R	4932			88	49	68.6	- 0.4	97	30	38	4	17	0			0.25	- 0.01	0.25	1		0.0	0	4.9	22	32	W	2					
LEWISTON	1413			88	58	72.8	- 1.0	98	29+	46	4	14	0			0.28	- 0.15	0.17	5		0.0	0						21	6	4	2.7	
POCATELLO	4454	862.2	1011.0	91	53	72.2	- 0.2	100	30	42	4	22	0	35	29	0.10	- 0.41	0.05	3	9	0.0	0	7.4	22	40	SW	23	17	11	3	3.2	81
ILLINOIS																																
CAIRO U	314			93	74	83.0	1.9	103	14+	62	22	19	0			2.62	- 0.57	1.14	10		0.0	0			26	N	6	10	11	10	5.0	70
CHICAGO O HARE	658	991.2	1015.3	87	62	74.5	1.8	97	10	48	22+	12	0	62	66	2.19	- 1.20	1.31	7	7	0.0	0	0.7	32	38	32	11	13	8	10	4.8	
CHICAGO MIDWAY	607	992.9		88	69	78.3	2.7	98	10	58	21	14	0	62	61	6.60	3.23	5.39	8	7	0.0	0	0.2	29	39	W	18	12	10	9	4.7	84
MOLINE	582	993.6	1014.6	90	66	77.9	2.3	100	18	51	21	14	0	64	65	7.74	4.48	3.13	10	5	0.0	0	1.2	15	42	N	28	13	12	6	4.7	78
PEORIA	652	991.5	1015.1	90	67	78.4	2.4	102	13+	57	22+	17	0	63	61	3.66	0.12	2.69	6	4	0.0	0	1.8	11	30	NE	11+	15	6	10	4.5	76
ROCKFORD	724	988.5	1014.9	87	64	75.4	1.2	98	18+	50	21	12	0	64	69	1.59	- 2.55	0.85	5	7	0.0	0	0.3	22	29	36	11	13	11	7	4.8	
SPRINGFIELD	588	992.9	1014.5	94	68	80.8	2.8	106	13+	54	21	19	0	64	61	0.96	- 2.53	0.67	4	7	0.0	0	0.8	17	38	NW	5	13	10	8	4.6	79

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1001.4	1015.0	94	69	81.8	3.0	104	13	50	22	26	0	67	66	1.96	-1.36	1.13	6	5	0.0	0	0.7	27	42	E	6	12	13	6	4.6	75
FORT WAYNE	791	985.8	1015.3	85	63	73.8	-0.4	94	3+	51	22+	5	0	60	66	4.83	1.46	2.60	9	6	0.0	0	0.9	30	43	N	12	11	8	12	5.3	75
INDIANAPOLIS	792	986.8	1015.2	91	68	79.2	4.0	99	13+	53	21	19	0	62	59	2.71	-0.79	0.96	11	9	0.0	0	0.0		42	NW	11	8	16	7	5.2	70
SOUTH BEND	773	987.8	1015.3	83	63	72.9	-0.7	94	12+	50	22+	5	0	61	67	4.40	0.93	1.59	9	9	0.0	0	1.1	29	29	33	18	12	10	9	4.9	
IOWA																																
BURLINGTON	692			89	68	78.6	2.0	101	18+	59	30+	15	0	66	66	2.87	-0.53		7	5	0.0	0	0.4	9	21	2	28	15	9	7	4.5	
DES MOINES	938	980.7	1014.6	88	69	78.6	2.3	100	10	57	21	14	0	66	67	2.43	-0.63	1.22	9	7	0.0	0	3.9	14	54	NW	5	14	11	6	4.3	79
DUBUQUE	1056			84	63	73.7	1.1	93	11+	52	20	8	0			2.95	-0.56	1.66	9		0.0	0						11	12	8	4.9	
SIOUX CITY	1095	974.6	1013.5	87	69	78.0	0.6	97	10	58	21	14	0	70	77	2.93	-0.18	1.09	5	5	0.0	0	5.6	15	35	NW	8	13	11	7	4.6	78
WATERLOO	868	983.4	1014.6	87	64	75.7	1.9	99	11	55	30	9	0	65	74	6.06	2.27	4.16	9	7	0.0	0	2.9	15	40	36	5	13	13	5	4.2	
KANSAS																																
CONCORDIA	1470	960.7	1011.9	96	71	83.4	3.1	108	18	61	21	24	0	65	60	2.10	-0.73	0.48	8	10	0.0	0	7.2	14	42	NW	7	14	10	7	4.4	71
DODGE CITY	2582	923.5	1011.2	97	72	84.2	4.0	105	5	67	7	27	0	63	54	1.48	-0.83	1.08	5	8	0.0	0	9.0	15	40	S	6	12	9	10	5.1	89
GOODLAND	3645	888.6	1011.7	94	66	79.6	3.0	103	26+	61	7	22	0	61	60	2.26	-0.41	0.59	8	12	0.0	0	6.9	14	38	28	8+	10	15	6	5.1	
TOPEKA	876	982.1	1013.0	94	72	83.1	3.2	105	18	61	31	23	0	67	62	0.75	-2.85	0.38	4	6	0.0	0	4.1	16	32	N	5	16	4	11	4.4	79
WICHITA	1321	965.8	1012.2	96	74	84.9	4.0	104	18+	69	21+	24	0	68	61	1.78	-1.86	1.22	8	6	0.0	0	7.6	16	34	N	7	13	8	10	4.8	66
KENTUCKY																																
COVINGTON	869	984.8	1015.5	90	68	78.8	3.4	97	13+	55	21	16	0	64	63	4.06	0.45	1.14	9	11	0.0	0	0.3	1	35	32	14+	8	12	11	5.5	
LEXINGTON	966	981.0	1015.7	89	66	77.4	0.0	98	13	53	21	15	0	65	69	5.74	1.76	1.74	11	11	0.0	0	1.0	17	37	29	14	8	12	11	5.5	
LOUISVILLE	477	997.6	1014.9	92	70	81.1	3.5	101	13	57	22	21	0	66	63	2.13	-1.23	0.86	10	6	0.0	0	0.6	28	60	NW	6	9	13	9	5.4	80
LOUISIANA																																
ALEXANDRIA	92	1010.8	1014.8	94	71	82.7	0.5	100	20	68	6+	29	0	73	78	4.13	-1.12	1.75	9	9	0.0	0	1.4	18	17	4	30+	6	17	8	6.0	
BATON ROUGE	64	1012.5	1015.4	92	74	82.9	0.2	95	20+	70	4+	27	0	71	73	6.33	0.06	2.72	12	17	0.0	0	0.5	23	30	8	2	4	16	11	6.3	
LAKE CHARLES	9	1013.9	1015.0	92	76	84.0	1.7	97	15	72	2+	26	0	74	77	4.90	-2.39	3.00	8	10	0.0	0	1.9	19	22	12	31	7	13	11	6.1	
NEW ORLEANS	3	1014.2	1014.9	92	73	82.2	0.6	97	29+	67	3	25	0	72	75	9.42	2.70	4.30	13	13	0.0	0	0.8	23	24	18	23	5	15	11	6.3	
SHREVEPORT	252	1005.1	1014.1	95	75	85.0	1.3	101	15	70	1	28	0	72	70	0.58	-3.17	0.32	7	5	0.0	0	4.0	17	30	8	20	12	12	7	5.3	71
MAINE																																
CARIBOU	624			75	53	64.1	-0.4	84	18+	44	6	0	0			3.27	-0.77	1.01	12		0.0	0						2	14	15	7.0	
PORTLAND	47	1009.8	1012.1	80	56	67.7	-0.4	93	13+	47	22+	2	0	57	71	0.96	-1.90	0.58	9	3	0.0	0	3.0	24	24	w	13	6	14	11	6.1	61
MARYLAND																																
BALTIMORE	14[illegible]	1009.1	1014.6	92	66	78.9	2.1	102	3	53	22+	20	0	60	56	1.48	-2.74	1.09	7	3	0.0	0	2.0	25	30	w	27	13	13	5	4.5	77
MASSACHUSETTS																																
BLUE HILL OBS R	629			83	62	72.3	1.4	95	3	53	21	4	0			4.23	0.96	2.11	7		0.0	0			39	NW	19					73
BOSTON	15	1011.9	1012.8	84	66	74.9	1.2	97	3	59	21	5	0	58	59	3.21	0.33	0.91	7	7	0.0	0	4.9	24	35	SW	10	10	11	10	5.4	77
NANTUCKET	43	1013.2	1013.7	76	59	67.4	-0.6	88	4	52	24+	0	0	60	80	0.49	-2.22	0.27	3	3	0.0	0	4.7	22	26	S	19	9	11	11	5.5	66
PITTSFIELD	1170			82	54	68.0	0.2	95	3	40	16	4	0			6.40	1.51	2.56	9		0.0	0										
WORCESTER	986	977.3	1013.6	81	60	70.7	0.9	93	3	51	21	3	0	55	60	3.76	0.13	1.47	8	7	0.0	0	5.7	27	27	33	10	8	14	9	5.3	
MICHIGAN																																
ALPENA	689	989.5	1014.2	84	53	68.5	2.6	98	2	41	5	9	0	53	60	0.91	-1.95	0.57	4	8	0.0	0	1.7	29	26	Nw	10	12	11	8	4.8	75
DETROIT	619	992.2	1014.6	86	65	75.6	1.2	99	3	50	21	12	0	60	59	2.19	-0.63	1.24	4	3	0.0	0										
DETROIT M WAYNE CO	633	991.2	1014.8	84	63	73.5	0.6	98	3	51	21	6	0	62	68	5.24	2.55	3.19	6	4	0.0	0	2.1	27	33	NW	9	11	12	8	4.7	66
DETROIT WILLOW RUN	711	987.8	1015.4	85	60	72.5	-1.7	98	3	48	21	8	0	58	63	4.96	2.28	2.67	6	3	0.0	0	2.0	27	29	16	9	12	11	8	4.8	
FLINT	770	987.5	1015.0	83	58	70.5	0.4	94	3+	46	30+	5	0	58	66	1.51	-1.40	0.55	7	4	0.0	0	2.7	26	40	33	12	10	12	9	5.2	
GRAND RAPIDS	784	986.5	1015.0	87	61	73.6	1.3	97	3+	50	22+	10	0	60	65	1.95	-0.78	0.69	6	5	0.0	0	2.6	26	29	SW	11	12	9	10	4.6	67
HOUGHTON LAKE	1149	974.3	1015.5	84	55	69.1		96	2	41	16	6	0	56	63	1.74		1.05	7	6	0.0	0	3.1	28	32	32	25	14	10	7	4.3	
LANSING	841	983.7	1015.0	87	59	72.9	1.2	99	3	44	21	10	0	58	60	1.59	-0.99	0.64	6	2	0.0	0	2.7	28	35	Nw	12	11	11	9	5.1	71
MARQUETTE U	677			79	61	69.9	3.2	93	18	49	15	2	0			1.80	-1.40	0.60	8	5	0.0	0			35	S	9	14	9	8	4.7	75
MUSKEGON	627	992.6	1015.1	84	62	73.1	1.8	95	2	51	31+	4	0	60	64	2.24	-0.17	0.83	7	5	0.0	0	2.7	26	23	31	12+	14	6	11	4.5	
SAULT STE MARIE	721	988.2	1014.2	79	55	67.1	2.5	94	2+	43	8	3	0	55	69	1.24	-1.24	0.47	8	7	0.0	0	3.6	29	28	SW	9	12	9	10	5.2	76
MINNESOTA																																
DULUTH	1428	964.4	1015.0	79	58	68.0	2.5	90	12	42	20	1	0	58	72	6.13	2.59	1.84	12	11	0.0	0	2.4	22	50	w	9	11	10	10	5.5	67

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	971.2	1013.8	82	57	69.5	3.9	94	1	46	29	4	0	61	75	9.52	6.03	4.87	10	11	0.0	0	2.7	22	25	31	2	8	14	9	5.5	
MINNEAPOLIS	834	984.8	1014.4	88	66	76.8	4.5	99	11+	54	21	15	0	62	63	2.47	-0.80	0.98	7	8	0.0	0	2.7	19	56	NE	10	14	13	4	4.0	78
ROCHESTER	1297	968.5	1015.3	82	62	71.9	-0.4	94	11	49	20	4	0	62	74	3.03	-0.65	1.69	7	6	0.0	0	3.9	20	32	3	10	16	10	5	4.0	
ST CLOUD	1034	976.6	1013.8	86	63	74.4	3.4	97	10	52	20	12	0		68	3.51	0.25	1.39	8		0.0	0						13	12	6	4.4	
MISSISSIPPI																																
JACKSON	310	1003.4	1015.0	94	71	82.4	0.1	101	15	65	25	27	0	71	73	3.14	-1.62	1.45	7	7	0.0	0	1.8	15	31	NW	20	10	17	4	4.9	71
MERIDIAN	290	1004.4	1015.4	94	70	81.8	0.3	102	15	64	24	28	0	71	75	2.93	-3.29	1.13	8	8	0.0	0	0.2	1	30	26	2	8	17	6	5.3	
VICKSBURG U	234			92	74	83.1	1.3	98	15	70	5+	24	0			0.82	-3.08	0.24	10		0.0	0			26	NE	31					82
MISSOURI																																
COLUMBIA	778	986.5	1013.9	92	72	81.7	3.0	102	14	60	21	16	0	66	62	4.08	0.67	1.84	7	6	0.0	0	3.0	15	45	N	29	16	6	9	4.6	83
KANSAS CITY	742	987.1	1013.2	92	75	83.4	1.9	102	18	66	31+	19	0	69	64	0.89	-2.30	0.40	7	5	0.0	0	3.2	15	34	NW	5	15	4	12	4.8	77
SAINT JOSEPH	811			93	70	81.4	2.0	100	18	58	31	23	0	69	71	0.98	-2.24	0.48	7	5	0.0	0	3.2	15	25	30	5	16	9	6	4.0	
ST LOUIS	535	994.9	1014.7	94	72	82.9	4.8	106	13+	57	22	22	0	65	58	1.26	-2.04	0.34	8	6	0.0	0	1.1	17	32	N	28+	10	11	10	5.4	77
SPRINGFIELD	1268	970.2	1014.5	94	69	81.6	2.8	101	11	62	23+	25	0	67	67	5.24	1.35	1.73	5	8	0.0	0	3.9	17	30	NW	7	13	12	6	4.8	72
MONTANA																																
BILLINGS	3567	889.9	1010.7	92	61	76.2	1.5	103	16	55	5+	19	0	48	43	1.45	0.55	0.92	5	7	0.0	0	1.5	3	43	W	19	16	13	2	3.4	86
GLASGOW	2284			84	59	71.6	0.9	100	16	51	23+	11	0			3.13	1.80	0.84	12		0.0	0						12	11	8	4.9	
GREAT FALLS	3662	887.6	1011.9	86	54	70.0	0.6	96	19	46	26+	9	0	46	48	1.81	0.53	0.79	7	9	T	0	0.9	31	38	SW	7	19	10	2	3.3	87
HAVRE	2582			86	56	70.8	0.8	98	19	47	28+	8	0			1.69	0.42	0.72	6		0.0	0			42	SW	7	18	9	4	3.6	85
HELENA	3828	879.8	1011.9	88	55	71.5	3.1	99	15	44	4	12	0	42	39	0.32	-0.71	0.21	4	9	0.0	0	3.5	31	44	SW	8	17	12	2	3.0	85
KALISPELL	2965	910.3	1013.2	81	48	64.4	-1.3	92	30	37	26+	2	0	49	61	0.37	-0.67	0.30	4	9	0.0	0	0.4	11	24	14	10	17	10	4	3.6	
MILES CITY	2629	920.1	1010.6	93	64	78.3	3.0	108	16	55	28+	21	0	53	47	1.61	0.27		11	8	0.0		3.6	7								
MISSOULA	3190	903.2	1013.1	88	50	69.1	2.1	99	30	41	4	16	0	43	45	0.71	-0.14	0.32	4	7	0.0	0	4.2	33	27	SW	8	19	9	3	2.9	85
NEBRASKA																																
GRAND ISLAND	1841	948.2	1012.7	94	68	81.0	3.8	105	12+	61	30+	21	0	66	67	3.47	0.96	1.28	12	8	0.0	0	6.2	15	32	6	26	12	14	5	4.6	
LINCOLN U	1150			91	72	81.4	1.3	105	12	61	24	18	0			2.63	-0.64	1.07	7		0.0	0			35	N	26	12	13	6	4.9	70
NORFOLK	1544			89	68	78.7	1.7	105	10	58	30+	18	0			2.17	-0.85	0.73	8		0.0	0						9	15	7	4.9	
NORTH PLATTE	2775	916.7	1011.8	90	66	77.6	1.5	100	10	58	7+	16	0	65	69	3.35	0.83	1.13	9	10	0.0	0	6.4	14	40	N	28	11	10	10	5.2	69
OMAHA	977	979.0	1013.5	89	70	79.4	0.9	99	12	60	30	15	0	68	70	4.70	1.33	1.90	7	6	0.0	0	5.1	15	36	N	5	14	12	5	4.3	74
SCOTTSBLUFF	3957	879.1	1011.2	93	63	77.6	2.9	101	11+	55	9	24	0	59	61	3.34	1.89	1.16	9	10	0.0	0	4.9	10	39	27	13	17	10	4	3.9	
VALENTINE	2587			93	65	79.1	3.7	108	10	58	23	23	0			1.71	-0.61	1.01	8		0.0	0			42	E	11	10	14	7	4.9	77
NEVADA																																
ELKO	5050	844.2	1010.9	92	48	70.1	0.5	100	29	34	3	24	0	30	25	0.69	0.29	0.52	3	2	0.0	0	3.1	22	23	16	30+	24	4	3	2.4	
ELY	6253	810.0	1009.9	88	50	68.6	1.1	93	29+	37	3	13	0	32	28	0.16	-0.49	0.12	2	3	0.0	0	9.5	20	35	S	30	16	10	5	3.3	87
LAS VEGAS	2162	934.3	1008.3	104	75	89.3	-0.4	111	18	66	13+	31	0	39	21	0.30	-0.20	0.30	1	2	0.0	0	6.6	21	51	SE	30	16	10	5	3.5	89
RENO	4404	865.2	1012.3	89	43	65.7	-2.0	100	29	35	3	14	0	36	36	T	-0.27	T	0	0	0.0	0	3.4	27	31	NW	13	27	1	3	1.6	95
WINNEMUCCA	4299	866.2	1011.0	91	49	70.0	-1.0	101	29	36	3	19	0	25	20	0.02	-0.25	0.01	2	0	0.0	0	3.6	27	30	SW	9	26	3	2	1.6	90
NEW HAMPSHIRE																																
CONCORD	342	1000.3	1012.8	88	56	72.2	2.6	102	3	43	21	13	0	59	65	2.30	-1.11	1.04	9	5	0.0	0	2.5	29	23	N	12	9	14	8	5.5	76
MT WASHINGTON OBS	6262			55	42	48.1	-1.0	65	3	31	27	0	2			5.63	-1.08	0.94	17	3	0.0	0			78Y	W	10	3	7	21	7.9	36
NEW JERSEY																																
ATLANTIC CITY	64	1012.2	1014.7	87	64	75.2	0.1	104	3	51	21	11	0	63	68	2.59	-1.13	1.01	9	8	0.0	0	2.3	22	29	33	7	9	14	8	5.1	71
ATLANTIC CITY U	11			83	70	76.6	2.4	99	4	58	21	7	0			2.70	-1.16	1.11	6						31	SSW	19					
NEWARK	7	1012.9	1013.9	90	69	79.6	2.3	105	3	60	22	14	0	60	54	0.89	-2.78	0.45	5	3	0.0	0	3.6	24	30	30	26	11	14	6	4.8	
TRENTON U	56			89	68	78.3	2.3	102	3	58	21	13	0			1.31	-2.87	0.62	7		0.0	0			26	NW	19	13	14	4	4.4	76
NEW MEXICO																																
ALBUQUERQUE	5311	839.5	1010.9	94	66	79.8	1.3	99	26+	60	2	27	0	52	43	1.63	0.43	1.11	7	7	0.0	0	1.0	13	45	SE	15	10	14	7	5.2	83
CLAYTON	4969			91	63	76.9	2.4	99	5	56	2	20	0			3.82	1.49	1.32	12		0.0	0						12	10	9	4.9	
RATON	6379			88	57	72.7	2.9	96	5	50	6	11	0			4.59	2.19	1.63	16		0.0	0						4	14	13	6.4	
ROSWELL	3617			101	68	84.3	5.7	106	3	62	13+	31	0			0.15	-1.62	0.06	3	7	0.0	0			31	SW	12	14	11	6	4.4	
SILVER CITY	5373			92	64	78.1	1.0	98	6	60	14+	26	0			1.50	-0.59	0.40	12		0.0	0						7	23	1	5.1	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)				
																			No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1003.1	1013.4	86	59	72.2	0.1	98	2	47	21+	8	0	58	63	3.88	0.39	2.24	7	6	0.0	0	2.6	25	29	SW	8	6	16	9	5.9	75
BINGHAMTON	1590	957.0	1014.5	83	60	71.2	2.8	95	3	47	21	5	0	55	60	1.45	- 2.26	0.61	5	5	0.0	0	4.4	28	27	NW	20	6	16	9	5.9	81
BUFFALO	705	989.2	1014.4	82	61	71.4	1.6	94	2	51	31+	3	0	59	66	4.92	2.35	1.58	8	6	0.0	0	6.0	25	32	SW	6	9	14	8	5.5	70
NEW YORK U	132	1010.5	1013.7	90	69	79.7	2.9	103	3	61	21	16	0	58	53	1.25	- 2.45	0.56	6	3	0.0	0	2.1	24	26	N	8	16	13	2	3.8	81
J.F. KENNEDY	13	1013.2	1013.9	87	67	77.0	1.1	104	3	59	22+	8	0	61	63	0.69	- 3.35	0.34	5	5	0.0	0	4.1	22	28	20	19+	11	14	6	4.8	
NEW YORK LA GUARDIA	11	1011.9	1013.8	89	72	80.8	4.0	107	3	65	21	12	0	59	51	1.12	- 2.59	0.52	6	5	0.0	0	3.0	24	26	SW	28	10	14	7	5.2	
ROCHESTER	547	994.9	1014.7	85	61	73.0	1.4	98	3	50	16	10	0	58	61	2.77	- 0.07	2.07	5	4	0.0	0	5.0	26	31	W	28+	11	13	7	5.0	72
SYRACUSE	410	998.6	1013.4	83	59	71.1	- 1.1	96	3	49	21	5	0	56	59	2.09	- 1.00	0.93	7	5	0.0	0	4.3	28	26	W	10	12	11	8	5.1	75
NORTH CAROLINA																																
ASHEVILLE	2140	941.8	1016.5	82	60	71.1	- 1.3	90	14	50	23	1	0	64	83	3.24	- 2.61	0.81	13	9	0.0	0	2.9	36	43	35	19	5	12	14	6.6	67
CAPE HATTERAS R	7	1014.6	1014.9	84	72	78.1	0.1	92	5	58	19	1	0	71	80	2.16	- 3.99	1.67	7	8	0.0	0	2.3	20	25	WSW	30+	4	15	12	6.5	74
CHARLOTTE	736	988.2	1015.1	91	69	79.6	0.4	99	28+	57	31	21	0	63	61	1.86	- 3.02	0.85	10	5	0.0	0	0.6	1	32	NE	19	8	13	10	5.7	75
GREENSBORO	897	984.4	1015.4	91	67	79.0	1.7	100	14	57	31	20	0	68	72	2.01	- 2.78	1.19	6	6	0.0	0	0.9	30	34	NW	4	7	12	12	5.7	68
RALEIGH	434	999.3	1014.7	90	68	79.1	1.2	97	14+	56	23	20	0	66	68	0.91	- 4.58	0.45	4	6	0.0	0	0.4	20	24	33	14	8	18	5	5.0	65
WILMINGTON	28	1013.5	1015.0	90	72	80.9	0.9	96	5	63	22	18	0	71	77	15.12	7.44	5.63	12	9	0.0	0	1.5	19	42	SW	9	2	18	11	6.6	68
NORTH DAKOTA																																
BISMARCK	1647	953.9	1012.4	86	59	72.6	0.9	96	30+	48	28	11	0	60	68	4.27	2.08	1.40	12	14	0.0	0	3.3	10	35	N	31	9	15	7	5.1	67
FARGO	896	981.0	1013.1	86	62	73.8	2.4	95	17	52	28	10	0	61	67	4.01	1.10	1.94	12	13	0.0	0	2.4	15	43	NW	8	12	11	8	5.0	69
WILLISTON	1899			87	59	73.0	1.7	107	16	50	28	12	0			1.92	0.05	0.60	10		0.0	0			64	NW	1	10	11	10	5.4	64
OHIO																																
AKRON	1208	971.9	1015.5	85	62	73.5	0.9	93	3+	49	21	5	0	61	68	2.82	- 0.95	0.87	14	6	0.0	0	1.7	30	22	33	19	8	14	9	5.4	
CINCINNATI OBS	761			90	67	78.7	1.8	99	13	55	21	18	0			1.94	- 1.65	0.59	11		0.0	0			33	NW	13					68
CLEVELAND	777	986.8	1015.3	84	62	72.7	1.2	96	3	46	21	6	0	60	66	3.89	0.58	1.93	7	4	0.0	0	1.6	26	26	E	24	10	10	11	5.3	70
COLUMBUS	812	986.1	1015.7	87	65	75.6	0.8	97	3+	50	22+	10	0	62	66	5.91	1.98	2.56	10	7	0.0	0	0.2	6	32	NE	10+	8	14	9	5.7	66
DAYTON	1002	980.0	1015.5	89	66	77.5	2.3	99	2	52	21	18	0	64	66	3.95	0.42	1.35	12	8	0.0	0	1.0	27	39	NW	9	9	11	11	5.5	77
MANSFIELD	1295			83	61	72.0	0.3	93	3+	50	21	2	0			3.82	0.34	2.38	9	7	0.0	0						9	12	10	5.3	
TOLEDO	676	990.9	1015.5	86	63	74.1	1.4	96	3	49	21	8	0	61	67	3.73	1.14	1.55	6	5	0.0	0	1.7	26	32	W	9	12	10	9	4.8	71
YOUNGSTOWN	1178	973.6	1015.5	85	59	72.4	1.9	97	3	47	22	8	0	57	61	2.52	- 1.80	1.32	9	6	0.0	0	1.4	29	23	27	25	10	9	12	5.1	
OKLAHOMA																																
OKLAHOMA CITY	1280	967.5	1012.4	100	73	86.4	3.9	108	19	68	3+	29	0	68	60	2.38	0.01	1.45	9	8	0.0	0	7.7	16	48	E	15	14	8	9	4.9	66
TULSA	650	989.5	1013.0	99	76	87.3	5.1	106	19+	70	3	29	0	69	60	2.00	- 0.94	1.06	6	3	0.0	0	7.5	18	27	SE	2	11	11	9	4.9	63
OREGON																																
ASTORIA	8	1016.9	1017.8	67	52	59.6	- 1.0	73	26	44	21	0	0	54	85	0.54	- 0.73	0.30	8	0	0.0	0	5.4	29	21	31	29+	3	13	15	6.9	
BURNS U	4151	872.7	1013.0	83	50	66.5	- 3.0	94	30+	34	3	5	0	37	37	0.22	- 0.12	0.16	4		0.0	0	3.7	30				23	5	3	2.3	
EUGENE	359	1003.1	1016.4	82	52	66.7	0.1	95	29	45	25	5	0	51	63	0.45	0.18	0.43	2	1	0.0	0	2.8	31	22	36	20	16	6	9	4.1	
MEACHAM	4050	877.4	1014.2	72	48	59.7	- 3.7	85	29	40	25+	0	0	39	51	1.49	0.99	0.97	5		0.0	0	3.5	30				19	6	6	3.3	
MEDFORD	1298	967.8	1014.8	86	52	68.7	- 3.3	100	29	43	3	10	0	47	52	1.63	1.42	1.07	5	3	0.0	0	3.6	31	21	24	9	18	7	6	3.2	
PENDLETON	1482	961.4	1014.0	85	57	71.0	- 2.6	99	29	51	26+	11	0	43	42	0.79	0.57	0.38	5	1	0.0	0	4.4	27	28	26	14	19	7	5	3.0	
PORTLAND	21	1014.9	1016.2	77	56	66.4	- 0.8	89	29	52	21+	0	0	54	68	1.19	0.78	0.91	6	0	0.0	0	4.9	31	22	NW	20	12	7	12	5.2	59
SALEM	196	1009.1	1016.3	81	50	65.2	- 0.9	96	29	43	25+	5	0	52	66	0.53	0.18	0.34	3	1	0.0	0	3.0	32	22	36	20	15	5	11	4.6	
SEXTON SUMMIT R	3836	884.5	1014.7	72	48	59.8	- 3.8	83	29+	37	2+	0	0			0.95	0.63	0.43	4		0.0	0			30	18	9	17	7	7	3.2	
PACIFIC AREA																																
CANTON ISLAND	8			88	78	83.0	- 0.6	89	31+	74	22	0	0			5.18	2.59	2.27	18		0.0	0						5	10	16	7.2	
ENIWETOK	13	1008.5	1009.2	89	79	83.6	0.8	90	30+	75	10+	5	0	77	79	3.82	- 2.63	1.58	19		0.0	0	11.8	8								
TAGUAC GUAM R	361			87	74	80.6	1.1	93	28+	71	12	2	0			6.74	- 2.24	1.32	24		0.0	0			22	SE	20					56
JOHNSTON	7	1012.2	1012.9	85	78	81.6	0.5	87	31	75	7	0	0	72	74	1.25	- 0.05	0.34	14	0	0.0	0	14.3	9	30	E	29	3	19	9	6.0	63
KOROR R	94	1005.1	1008.9	87	75	81.1	0.2	90	18+	73	30+	4	0	76	87	23.68	8.51	4.11	29	3	0.0	0	2.7	26	23	NW	9	0	0	31	9.9	54
KWAJALEIN	8	1008.1	1008.8	87	78	82.4	0.8	89	1	74	16	0	0	76	82	7.38	- 1.53	1.65	23	0	0.0	0	7.8	8	32	9	16	1	8	22	8.4	
MAJURO	10	1008.5	1009.0	86	77	81.9	1.7	89	1	74	20+	0	0	75	81	14.94	2.41	4.32	23	3	0.0	0	6.3	8	26	E	4	0	10	21	8.3	63
MARCUS ISLAND	20			89	78	83.3	0.7	91	15+	71	21	16	0			6.39	- 0.67	2.45	23		0.0	0			26	SE	26	4	14	13	6.8	
PAGO PAGO	12	1011.5	1011.6	84	75	79.6		86	31+	69	6	0	0	74	83	6.40		3.12	16	0	0.0	0	11.6	10	28	SE	15	5	12	14	6.7	
PONAPE R	123	1003.1	1008.6	88	73	80.4	0.7	90	21+	71	10	2	0	75	89	24.22	8.00	3.50	30	7	0.0	0	2.6	12	17	E	20	0	2	29	9.1	52
TRUK MOEN ISLAND	5	1008.1	1008.5	87	75	81.1	0.6	89	25+	73	28+	0	0	76	86	20.11	7.78	5.66	25	2	0.0	0	2.0	11	38	SW	30	0	1	30	9.4	71
WAKE	11	1012.2	1012.5	88	78	82.9	0.9	89	31+	74	25	0	0	75	78	1.70	- 2.90	0.47	20	3	0.0	0	10.4	6	20	12	24+	3	13	15	6.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation								Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1006.4	1008.4	87	75	81.1	-0.3	90	20+	72	27	3	0	76	87	17.98	4.20	3.52	28	2	0.0	0	0.6	12	20	S	8	0	0	31	9.7	45
PENNSYLVANIA																																
ALLENTOWN	387	1000.7	1014.4	91	63	77.0	2.9	105	3	49	21	20	0	58	57	1.91	-2.91	0.93	7	7	0.0	0	2.8	26	26	36	4	11	12	8	4.9	
ERIE	731	988.8	1015.1	81	62	71.8	0.7	92	3	50	21+	1	0	60	68	2.08	-1.59	1.10	5	7	0.0	0	2.5	26	25	30	6	12	13	6	4.4	
HARRISBURG	338	1001.7	1014.3	93	67	79.9	3.7	107	3	53	21	23	0	58	51	0.81	-2.70	0.38	7	7	0.0	0	2.0	28	25	N	26	10	12	9	5.2	83
PHILADELPHIA	5	1013.2	1014.2	90	66	77.9	2.3	104	3	51	21	17	0	61	60	2.35	-1.81	1.05	9	4	0.0	0	2.3	25	29	NW	10	10	13	8	5.1	69
PITTSBURGH	1137	972.2	1015.4	88	64	75.6	3.5	98	3	46	21	12	0	61	65	2.70	-1.18	1.19	12	7	0.0	0	2.6	28	42	30	28	6	16	9	5.8	61
READING U	266			90	68	78.9	2.0	103	3	56	21	16	0			2.36	-1.90	0.82	8		0.0	0			38	NW	10	12	12	7	4.7	74
SCRANTON	930	981.0	1014.8	88	62	75.0	2.6	101	3	48	21	9	0	57	58	1.89	-2.90	0.84	9	7	0.0	0	2.4	24	31	W	27	13	9	9	5.0	75
WILLIAMSPORT	524	995.9	1014.6	86	59	72.2	-1.4	100	3	44	21	7	0	60	69	3.90	-0.28	2.20	13	10	0.0	0	3.0	28	20	32	29+	10	14	7	4.9	
RHODE ISLAND																																
BLOCK ISLAND	110			77	63	70.1	0.5	86	3	55	21	0	0			1.18	-1.51	0.80	7		0.0	0						13	11	7	5.0	
PROVIDENCE	51	1010.8	1013.3	84	62	72.7	0.6	96	3	51	21	4	0	58	63	2.77	-0.14	1.21	8	8	0.0	0	4.4	23	25	32	19	11	12	8	5.2	73
SOUTH CAROLINA																																
CHARLESTON	40	1013.2	1014.9	88	71	79.6	-1.0	94	12	60	23	13	0	71	77	11.48	3.77	5.08	18	11	0.0	0	1.2	20	39Y	NW	9	4	16	11	6.3	65
CHARLESTON U	9			88	74	80.9	-0.6	97	12	66	31	13	0			8.70	0.92	3.57	15		0.0	0			38	E	1					
COLUMBIA	217	1006.8	1014.6	93	70	81.6	0.0	103	29	61	23	25	0	68	69	2.87	-3.22	1.40	8	6	0.0	0	0.5	1	35	1	15	7	16	8	5.8	61
GNVLE-SPARTANBURG	957	981.7	1015.5	88	67	77.9	-1.1	98	28	59	23	13	0	66	70	2.98	-1.67	0.79	10	9	0.0	0	1.2	1	52	NE	15	9	8	14	5.9	67
SOUTH DAKOTA																																
ABERDEEN	1296	966.5	1012.3	89	64	76.4	2.9	110	10	53	7	16	0	62	65	4.66	2.16	1.50	7	7	0.0	0	4.0	13	58	20	31	11	16	4	4.8	
HURON	1282	966.5	1011.8	92	65	78.3	3.3	112	10	53	7	20	0	64	66	4.24	2.43	1.23	7	9	0.0	0	6.9	14	45	W	11	10	14	7	4.7	81
RAPID CITY	3162	903.5	1011.4	91	62	76.6	2.8	103	16+	53	29	17	0	58	58	3.93	2.15	1.32	11	14	0.0	0	3.0	12	45	W	26	12	15	4	4.2	69
SIOUX FALLS	1418	963.1	1013.3	91	66	78.7	4.4	106	10	55	7	20	0	63	61	1.54	-1.30	0.87	7	8	0.0	0	6.0	16	46	31	4	11	14	6	4.4	
TENNESSEE																																
BRISTOL	1507	963.4	1016.7	86	65	75.4	-0.5	93	27+	59	22+	6	0	65	74	6.21	0.66	1.50	13	11	0.0	0	0.1	15	26	30	19	9	7	15	6.6	
CHATTANOOGA	665	991.2	1015.4	89	68	78.9	-1.8	98	15+	62	24+	15	0	69	77	4.51	-0.60	1.08	11	11	0.0	0	0.3	8	38	NE	15	7	13	11	5.9	67
KNOXVILLE	980	981.7	1016.1	89	69	79.3	0.9	98	14	64	21+	18	0	68	74	5.44	0.62	2.40	11	9	0.0	0	1.0	26	29	NW	15	7	11	13	6.3	66
MEMPHIS	255	1005.1	1015.0	95	75	84.7	3.4	102	15	65	22	28	0	70	65	2.18	-1.36	1.62	7	7	0.0	0	2.3	19	29	W	29	14	8	9	4.9	71
NASHVILLE	590	993.9	1015.1	94	71	82.3	2.1	103	14+	63	31	21	0	69	70	2.70	-1.02	1.28	9	12	0.0	0	1.9	20	50	NW	7	7	16	8	5.6	72
OAK RIDGE	905			90	67	78.4	1.2	100	13	60	25	18	0			2.57	-3.38	0.76	13		0.0	0						8	12	11	6.3	
TEXAS																																
ABILENE	1762	952.3	1011.8	97	77	86.9	3.7	103	29+	70	1	31	0	63	48	0.12	-2.16	0.09	3	1	0.0	0	9.2	17	27	N	24	13	9	9	4.9	76
AMARILLO	3604	891.0	1010.0	96	70	82.9	2.3	102	22+	66	13	30	0	60	50	1.37	-0.97	0.52	7	10	0.0	0	10.1	19	34	W	24	18	8	5	4.0	74
AUSTIN	597	991.9	1013.3	96	74	84.7	0.2	101	31	69	2	30	0	69	64	0.47	-1.71	0.47	2	3	0.0	0	7.2	18	23	SE	5	9	20	2	4.7	74
BROWNSVILLE	16	1012.5	1013.0	92	75	83.3	-0.7	94	31+	67	1	28	0	74	77	1.58	-0.10	1.08	6	3	0.0	0	9.5	14	24	SE	29+	9	18	4	4.8	84
CORPUS CHRISTI	41	1011.9	1013.5	93	75	83.6	-0.5	97	31+	70	1	29	0	75	80	1.23	-1.09	0.55	6	2	0.0	0	8.3	15	25	SE	29	3	22	6	5.5	71
DALLAS	481	995.9	1012.9	95	78	86.8	1.9	101	31	73	2	29	0	71	63	1.37	-0.57	0.79	3	6	0.0	0	7.5	17	22	W	24	15	8	8	4.6	70
DEL RIO	1026	976.3	1011.4	98	76	86.9	0.7	102	31	69	1	31	0	66	53	0.05	-1.26	0.05	1	0	0.0	0	10.0	13	17	13	6	16	10	5	3.9	
EL PASO	3918	880.8	1008.6	96	72	83.6	1.7	102	4	67	27+	31	0	59	47	1.17	-0.12	0.62	5	8	0.0	0	2.0	11	68	NE	27	18	11	2	3.5	95
FORT WORTH	537	992.9	1012.9	95	77	86.3	0.9	99	31+	72	2+	31	0	71	63	3.26	1.51	1.62	4	4	0.0	0	6.2	17	26	20	7	14	9	8	4.7	
GALVESTON U	7			88	79	83.4	0.3	91	26	71	5	2	0			1.25	-3.54	0.96	4		0.0	0			38	W	5					70
HOUSTON U	41			92	77	84.6	0.7	96	26+	72	2+	23	0			3.94	-1.21	1.04	10		0.0	0										
HOUSTON	50	1012.2	1014.3	93	76	84.3	1.3	97	31+	70	1	27	0	73	74	1.45	-2.84	1.01	7	10	0.0	0	5.1	17	23	19	5	5	16	10	6.1	72
LUBBOCK	3254	903.2	1010.8	98	73	85.4	5.9	103	3	69	14+	31	0	60	45	0.57	-1.44	0.32	4	4	0.0	0	7.6	17	32	13	10	13	13	5	4.2	
MIDLAND	2851	915.0	1010.3	97	71	84.1	1.2	101	31+	66	2+	30	0	60	47	0.17	-1.71	0.13	3	3	0.0	0	7.6	15	31	4	10	13	11	7	4.6	
PORT ARTHUR	16	1013.9	1014.7	93	75	84.3	2.4	97	21	71	2	28	0	75	80	3.97	-2.03	1.55	16	14	0.0	0	3.6	20	41	SE	1	6	19	6	5.7	73
SAN ANGELO	1903	946.5	1011.0	99	75	87.0	2.2	103	22	67	1	31	0	63	49	0.09	-1.32	0.08	2	3	0.0	0	7.7	17	25	18	8	13	12	6	4.7	
SAN ANTONIO	788	986.1	1013.4	95	74	84.2	0.2	99	31	67	11+	30	0	70	67	0.06	-2.03	0.06	2	0	0.0	0	7.6	16	29	SE	5	8	21	2	4.6	78
VICTORIA	104	1009.8	1014.0	92	75	83.8	0.6	99	31	72	5+	28	0	74	77	5.14	1.53	3.98	8	6	0.0	0	6.1	15	35Y	SSW	6	1	21	9	6.0	
WACO	500	995.6	1013.3	99	78	88.6	3.3	105	31	71	2	31	0	67	52	0.46	-1.53	0.46	1	1	0.0	0	9.0	17	21	35	24+	16	9	6	3.9	
WICHITA FALLS	994	976.3	1011.8	101	75	88.2	2.6	106	31+	71	10+	31	0	67	54	3.13	1.16	2.70	6	4	0.0	0	9.4	16	35	12	30	10	11	10	5.1	
UTAH																																
MILFORD	5028			94	56	74.9	1.1	101	28+	42	13	29	0			0.15	-0.55	0.08	3		0.0	0						12	11	8	4.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

JULY 1966

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90°F. or above	Temperature: No. of days: Min. 32°F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	870.0	1009.7	96	64	80.1	3.2	102	19	49	4+	29	0	43	31	0.33	- 0.25	0.24	4	8	0.0	0	5.8	13	38	SW	24	10	17	4	4.6	88
WENDOVER	4237			94	67	80.6	1.2	99	19	56	3	27	0			0.44	0.13	0.40	3		0.0	0						22	6	3	2.7	
VERMONT																																
BURLINGTON	332	1000.0	1012.2	82	57	69.6	0.6	98	3	45	21	3	0	56	65	1.92	- 1.93	0.56	11	9	0.0	0	1.7	21	26	NW	28	7	15	9	5.7	82
VIRGINIA																																
LYNCHBURG	916			91	65	77.9	1.6	99	14	57	31	18	0			2.97	- 1.24	2.00	6	7	0.0	0			25	NE	15	7	14	10	5.3	73
NORFOLK	22	1013.5	1014.7	88	69	78.0	- 0.8	97	13	58	22	15	0	67	72	4.26	- 1.66	3.70	2	4	0.0	0	1.4	15	34	NE	30	9	14	8	5.6	75
RICHMOND	162	1009.1	1014.9	89	64	76.4	- 1.7	98	28	55	21	17	0	65	72	4.07	- 1.54	2.23	5	5	0.0	0	0.7	19	34	N	15	10	12	9	5.6	71
ROANOKE	1149	974.3	1015.2	91	65	77.9	1.3	100	14	54	31	21	0	60	57	3.00	- 1.25	2.72	4	6	0.0	0	1.5	29	23	29	4	7	15	9	5.5	
WASHINGTON																																
OLYMPIA	195	1009.8	1017.1	74	48	60.9	- 3.0	87	29	40	21+	0	0	50	69	1.34	0.58	0.69	7	2	0.0	0	1.9	23	24	22	24	6	12	13	6.3	
SEATTLE TACOMA	400	1000.7	1016.9	71	54	62.1	- 2.8	84	28	51	21+	0	0	51	72	1.35	0.54	0.64	7	1	0.0	0	1.4	28	17	22	24+	8	9	14	6.2	60
SPOKANE	2356	930.6	1013.0	83	54	68.2	- 2.3	94	30	47	4+	6	0	43	45	0.95	0.57	0.59	6	4	0.0	0	3.6	22	29	SW	12	15	12	4	3.7	78
STAMPEDE PASS R	3958			62	46	53.7	- 2.5	74	29	38	20	0	0			2.97	1.51	1.10	13		0.0	0						9	8	14	6.2	
TATOOSH ISLAND R	101	1014.2	1017.5	58	52	55.1	- 0.4	62	17+	49	21	0	0	52	92	1.32	- 1.02	0.55	15	0	0.0	0	5.5	20	25	S	2	2	7	22	8.2	24
WALLA WALLA U	949			85	60	72.5	- 3.5	98	29	51	2	11	0			1.78	1.57	0.94	4		0.0	0			21	NW	14	18	9	4	2.9	83
YAKIMA	1052	975.3	1013.1	83	52	67.6	- 3.4	95	29	45	25+	6	0	49	53	0.71	0.58	0.54	5	3	0.0	0	2.7	28	22	21	18	22	3	6	3.3	
WEST INDIES																																
SAN JUAN P.R.	13	1014.2	1016.4	88	77	82.1	1.7	92	1	74	24+	3	0	74	78	4.21	- 2.04	0.55	21	6	0.0	0	8.7	9	27	NE	6	3	19	9	6.6	71
SWAN ISLAND	28			86	78	82.1	- 0.4	89	23	71	9	0	0			6.04	1.84	1.78	15	7	0.0	0						2	14	15	7.4	
WEST VIRGINIA																																
BECKLEY	2504	930.2	1016.0	82	61	71.3		90	14	47	21	1	0	60	70	3.66		1.78	10	10	0.0	0	1.9	22	25	30	14	5	9	17	6.7	
CHARLESTON	939	981.7	1015.2	89	65	77.3	2.4	97	3+	50	22+	16	0	64	68	2.94	- 2.73	0.90	10	9	0.0	0	1.6	21	29	28	14	3	14	14	6.6	
ELKINS	1970	946.8	1016.8	84	56	69.9	- 0.2	93	2	41	22	4	0	59	76	3.24	- 2.25	1.79	10	8	0.0	0	1.4	27	29	32	14	6	13	12	6.4	
HUNTINGTON	827	985.8	1015.4	88	65	76.4	1.2	96	2	53	22	11	0	66	76	6.37	1.87	2.99	12	9	0.0	0	1.4	20	26	32	13	4	14	13	6.5	
PARKERSBURG U	615			87	66	76.3	0.5	98	3	53	22	11	0			4.60	0.49	2.04	11		0.0	0			47	W	14					61
WISCONSIN																																
GREEN BAY	682	989.8	1014.9	83	58	70.9	0.4	97	3	45	16	6	0	58	66	4.19	1.48	2.00	7	6	0.0	0	2.4	26	29	NW	10	12	12	7	4.7	70
LA CROSSE	651	990.9	1014.8	88	63	75.3	1.5	98	11+	49	20	12	0	65	73	4.60	0.85	1.88	8	7	0.0	0	2.8	16	46	36	10	18	5	8	4.1	
MADISON	858	984.4	1015.4	85	58	71.1	0.0	97	10	41	21	7	0	62	73	3.24	- 0.34	1.65	11	9	0.0	0	1.3	28	38	NW	10	14	10	7	4.5	80
MILWAUKEE	672	991.2	1016.2	84	64	73.5	4.8	97	3	51	21	8	0	61	68	3.32	0.37	1.26	11	6	0.0	0	0.8	27	37	W	10	14	11	6	4.2	79
WYOMING																																
CASPER	5338	838.5	1011.0	93	57	74.9	3.2	99	30+	49	29	25	0	41	36	0.46	- 0.54	0.22	5	2	0.0	0	3.8	24	35	30	26	14	10	7	4.6	
CHEYENNE	6126	815.4	1013.1	90	59	74.5	4.5	95	16+	52	2	18	0	49	50	3.38	1.56	1.70	8	12	0.0	0	2.5	23	45	SE	22	9	17	5	5.0	66
LANDER	5563	830.0	1011.0	91	59	74.7	4.1	96	16+	50	2	19	0	43	36	0.28	- 0.49	0.17	4	5	0.0	0	4.1	25	47	SW	9	7	17	7	5.1	68
SHERIDAN	3964	878.1	1011.4	90	55	72.5	1.2	103	16	45	29	16	0			0.29	- 0.90	0.17	4	4	0.0	0	0.9	27	35	NW	3	14	10	7	4.5	77

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	C.	°C.	C.	C.		C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	993.6	1015.6	33.3	21.1	27.4	-0.2	38.9	15	16.7	24	21	0	21.1	72	127	- 4	45	11	7	0	0	0.3	3	11.6	N	19	11	15	5	4.6	84
HUNTSVILLE	183	992.9	1015.4	35.0	22.8	28.8	1.5	40.0	14	18.3	24	28	0	21.1	66	83	- 25	30	10	9	0	0	0.5	16	14.8	3	6	9	15	7	5.3	
MOBILE	64	1007.5	1015.4	33.9	23.9	28.8	0.7	37.2	8	21.1	24+	30	0	21.7	71	132	-114	50	15	15	0	0	0.4	22	11.2	16	14	2	22	7	6.1	
MONTGOMERY	59	1008.1	1015.3	33.9	22.8	28.2	0.5	38.9	14	18.9	24	23	0	22.2	75	66	- 72	33	8	8	0	0	0.5	27	14.3	NW	15	4	19	8	5.9	71
ALASKA												B																				
ANCHORAGE PRK STRIP	26			18.3	10.6	14.6	0.7	23.3	20	5.6	1	6	0			21	- 26	6	11		0	0										
ANCHORAGE	35	1010.5	1015.2	18.3	10.6	14.4		23.9	24	3.9	1	9	0	8.9	70	18		5	9	1	0	0	1.2	20	9.4	16	11+	7	5	19	7.1	45
ANNETTE	34	1012.9	1017.0	19.4	11.7	15.5	1.4	28.9	23	8.3	10	11	0	10.6	77	70	- 83	30	9	0	0	0	1.0	27	10.3	14	31	8	5	18	6.6	
BARROW	7	1012.5	1013.2	6.1	0.0	3.0	-0.9	15.0	15	- 2.2	2	0	18	2.2	96	51	31	17	14	0	T	T	0.9	9	10.7	13	15	1	4	26	8.8	
BARTER ISLAND	12	1011.5	1013.4	8.9	1.7	5.1	-0.1	16.7	21	- 2.8	27	0	10	2.8	87	41	19	18	9	0	T	0	0.7	3	10.7	9	15	2	2	27	8.6	
BETHEL	38	1008.1	1013.6	15.6	8.3	11.8	-0.8	28.3	24	4.4	3	6	0	8.9	85	61	9	31	15	1	0	0	2.2	20	12.5	18	12	2	5	24	8.6	
COLD BAY	29	1010.5	1014.6	11.7	7.2	9.2	-0.6	17.2	20	4.4	12	0	0	7.2	89	118	71	31	21	0	0	0	3.6	18	22.4	15	3	0	3	28	9.5	
FAIRBANKS	133	997.3	1014.1	22.8	11.1	16.9	1.6	28.3	21+	6.7	29+	22	0	6.1	52	21	- 26	8	10	2	0	0	0.8	25	12.5	27	17	3	12	16	7.3	
JUNEAU	4	1015.9	1016.8	18.9	8.3	13.4	0.5	27.2	25+	3.3	10	7	0	10.0	83	99	- 15	37	12	0	0	0	0.9	2	9.8	11	31+	1	8	22	8.3	35
KING SALMON	13	1012.5	1014.6	15.6	7.2	11.4	-1.3	25.6	25+	0.6	9	6	0	8.3	85	62	10	14	14	1	0	0	3.0	18	21.9	8	1	2	8	21	8.1	
KOTZEBUE	3	1011.2	1011.6	15.0	8.3	11.6	0.1	24.4	26	2.2	10	2	0	7.8	81	32	- 5	10	17	0	0	T	1.6	19	13.0	31	31+	1	5	25	8.7	
MC GRATH	106	1001.4	1013.9	18.3	7.8	13.0	-1.8	27.2	24	1.7	19	9	0	7.8	72	14	- 48	5	13	1	0	0	1.3	20	13.9	19	12	6	4	21	7.6	
NOME	4	1010.2	1011.0	12.8	6.7	9.6	-0.2	24.4	25	2.8	19+	2	0	7.8	86	68	10	16	14	0	0	0	1.7	18	14.3	21	13	5	4	22	8.1	30
ST. PAUL ISLAND	7	1011.2	1012.0	9.4	5.6	7.5	0.0	12.8	20	2.2	20	0	0	6.1	93	36	- 21	12	14	0	0	0	1.7	18	11.6	24	12	0	3	28	9.5	
SHEMYA	37	1007.8	1011.4	8.9	5.0	7.1	-0.9	12.2	30	2.8	1	0	0	6.1	96	47	- 7	19	13	0	0	0	1.5	23	15.6	1	3	0	0	31	9.9	
YAKUTAT	9	1015.9	1017.0	14.4	7.8	11.1	-1.2	18.9	23	3.9	10	0	0	9.4	91	76	-138	20	12	0	0	0			7.6	16	30+	0	4	27	9.2	
ARIZONA																																
FLAGSTAFF	2131	791.1	1014.9	27.8	10.6	19.1	0.5	31.1	6	5.6	1	0	0	7.8	56	41	- 17	17	12	15	0	0	1.3	22	9.4	24	7	7	12	12	5.9	
PHOENIX	340	970.2	1007.9	41.7	26.7	33.9	1.8	45.0	6	20.0	6	31	0	14.4	34	2	- 17	1	3	4	0	0	1.2	27	21.0Y	SE	24	17	10	4	3.7	82
TUCSON	788	923.8	1009.2	36.7	22.8	29.6	-0.6	40.6	6	18.9	1	30	0	14.4	45	65	13	27	9	10	0	0	1.0	23	17.9	E	15	6	18	7	5.5	80
WINSLOW	1492	852.4	1011.8	35.0	17.8	26.3	-0.4	39.4	6	13.3	3+	30	0	10.6	45	34	8	17	10	14	0	0	1.7	22	23.2	29	24	6	21	4	5.3	
YUMA	59	1000.7	1007.8	40.6	26.7	33.8	0.0	45.0	6	22.2	4	31	0	14.4	35	5	- 1	3	4	2	0	0	2.4	20	13.4	E	25	18	7	6	3.8	79
ARKANSAS																																
FORT SMITH	136	997.6	1013.7	35.6	22.8	29.1	0.8	40.6	15	20.0	3	26	0	21.1	67	34	- 38	13	4	3	0	0	0.8	11	11.6	NE	16	10	12	9	5.7	67
LITTLE ROCK	78	1005.4	1014.7	35.0	22.8	29.0	1.3	40.6	15	19.4	22+	25	0	22.2	71	90	5	24	9	6	0	0	1.0	18	14.8	W	4	11	14	6	4.8	71
TEXARKANA	113	1001.7	1014.3	34.4	23.3	28.9	0.8	38.3	19	20.6	26	27	0	22.8	74	142	44	41	6	8	0	0	1.2	19				16	7	8	4.8	
CALIFORNIA																																
BAKERSFIELD	151	994.2	1011.5	35.6	19.4	27.4	-1.6	41.1	25+	15.0	12	28	0	8.3	33	T		T	0	0	0	0	2.1	33	8.0	31	11	27	0	4	1.4	
BISHOP	1252			36.1	12.8	24.2	-0.6	40.0	29+	7.8	14	30	0			T	- 3	T	0		0	0						23	4	4	2.2	
BLUE CANYON	1609			23.3	12.8	18.2	-1.8	28.9	28	7.8	14	0	0			1	- 2	1	1		0	0			10.3	17	1	27	3	1	1.2	
EUREKA U	13			16.1	11.1	13.7	0.2	18.3	18	8.3	3	0	0			6	4	4	6		0	0			10.3	NW	24	7	5	19	7.0	54
FRESNO	100	999.7	1011.3	35.6	15.6	25.7	-1.7	42.2	23	12.2	3	26	0	10.6	43	1	1	1	1	0	0	0	2.7	29	10.3	NW	11	26	3	2	1.3	94
LONG BEACH	10	1011.5	1012.9	29.4	16.7	23.1	1.1	32.8	17	13.3	13	3	0	13.3	62	T	0	T	0	0	0	0	1.4	25	7.6	28	16+	21	8	2	2.7	
LOS ANGELES	30	1009.1	1012.7	23.9	16.1	20.1	-0.5	26.1	26+	14.4	15+	0	0	14.4	74	T	0	T	1	2	0	0	2.9	26	10.3Y	W	11+	17	10	4	3.6	
LOS ANGELES U	82			28.9	17.8	23.6	0.8	32.8	18	16.1	13	1	0			T	0	T	0		0	0			7.6	W	10	20	9	2	2.5	75
MT SHASTA R	1080			27.8	8.9	18.3	-1.7	36.1	29	3.9	2	6	0			1	- 7	1	1		0	0										
OAKLAND	2	1014.2	1014.6	20.6	13.9	17.3	-0.6	30.0	31	11.7	4	0	0	12.2	74	4	4	4	1	0	0	0	3.8	28	11.2	27	2	15	10	6	4.1	
RED BLUFF	104	998.6	1011.2	33.9	16.7	25.3	-3.4	41.1	22	12.2	12+	19	0	6.7	34	T	- 1	T	0	0	0	0	1.7	18	17.0	N	1	25	3	3	1.5	96
SACRAMENTO	5	1011.2	1012.0	32.2	13.3	22.7	-1.4	38.9	22	11.7	28+	18	0	11.1	56	3	3	2	2	0	0	0	3.1	21	13.0	SW	1	29	0	2	1.1	96
SANDBERG R	1377			28.3	16.7	22.4	-1.1	32.8	23+	10.0	10	3	0			T	- 1	T	0		0	0			13.0	21	11	25	3	3	1.8	
SAN DIEGO	4	1011.5	1012.6	23.3	17.8	20.7	-0.5	25.6	24+	15.6	13	0	0	16.1	79	T		T	0	1	0	0	1.9	28	10.3	NW	11	19	8	4	3.6	74
SAN FRANCISCO	2	1014.2	1014.9	20.0	11.7	15.8	-1.2	30.6	31	10.0	20+	0	0	10.6	76	1	1	1	1	0	0	0	4.9	29	13.4	W	17	17	8	6	3.4	
SAN FRANCISCO U	16			17.8	11.7	14.6	-0.3	26.1	31	9.4	6+	0	0			2	1	1	2		0	0			13.4	W	1					73
SANTA CATALINA	478			26.1	16.1	21.1	0.7	32.2	23+	12.8	2+	2	0			T	- 1	T	0	1	0	0						23	6	2	2.1	
SANTA MARIA	72			22.2	10.6	16.2	-0.6	26.7	3	7.2	9+	0	0			4	3	4	1		0	0						20	8	3	3.2	
STOCKTON	7	1011.9	1012.9	32.8	14.4	23.7	-2.0	40.0	22	12.2	15+	19	0	9.4	47	4	3	4	1	1	0	0	4.1	29	11.6	25	1	28	1	2	1.2	
COLORADO																																
ALAMOSA	2297			28.9	10.6	19.7	1.4	32.2	6	5.6	2	1	0			20	- 7	9	7		0	0						5	23	3	5.1	
COLORADO SPRINGS	1873	814.1	1012.8	31.1	15.6	23.3	1.9	35.6	4	12.8	24+	15	0	10.6	53	74	14	17	20	23	0	0	0.8	3	17.0	36	18	6	18	7	5.5	
DENVER	1610	837.8	1011.0	33.3	16.7	24.9	2.2	36.7	16+	12.8	3	22	0	11.1	49	26	- 12	10	8	12	0	0	1.1	15	15.2	E	13	7	20	4	5.2	68
GRAND JUNCTION	1480	852.0	1009.9	35.0	19.4	27.2	1.5	38.3	6	13.9	2	29	0	7.8	33	8	- 7	7	6	6	0	0	0.9	13	17.0	NE	20	11	16	4	4.6	76
PUEBLO	1428	856.1	1010.7	35.0	18.3	26.6	1.9	38.9	5+	15.0	15	24	0	12.2	48	43	- 4	28	5	9	0	0	0.5	3	21.9	NW	27	9	17	5	5.4	77

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

JULY 1966

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	°C.	C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1013.2	1013.8	30.0	20.0	25.0	1.8	37.8	2	13.9	21	8	0	16.1	60	35	- 60	17	5	4	0	0	2.1	24	10.7	21	13	9	13	9	5.3	
HARTFORD	52	1006.4	1012.9	31.7	16.7	24.3	1.3	38.9	3	10.0	21	16	0	15.6	62	101	9	45	5	6	0	0	1.2	25	16.1	NW	19	8	14	9	5.9	81
NEW HAVEN	2			28.3	17.8	23.1	0.9	36.1	3	11.7	21	4	0			41	- 46	25	8		0	0			8.9	SW	28+	7	17	7	5.4	83
DELAWARE																																
WILMINGTON	24	1011.5	1014.4	31.1	18.9	25.1	0.7	38.9	4+	12.2	21	13	0	16.1	61	78	- 29	34	8	11	0	0	1.0	26	10.7	30	8	13	11	7	4.6	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1011.9	1014.1	32.8	21.7	27.2	1.5	38.3	3	15.6	21	20	0	17.2	57	24	- 82	12	7	4	0	0	0.8	21	13.4	NW	14	13	10	8	5.0	69
FLORIDA																																
APALACHICOLA U	4			31.7	24.4	27.8	0.3	33.9	13	21.7	1	12	0			271	70	119	16	18	0	0			11.2	E	22+	8	15	8	5.7	64
DAYTONA BEACH	9	1014.6	1015.9	31.7	23.3	27.6	0.8	34.4	15+	21.7	20	15	0	22.2	78	180	9	54	13	11	0	0	0.8	16	13.0	13	21	2	14	15	7.3	
FORT MYERS	5	1015.2	1015.7	32.2	23.9	28.1	0.2	33.3	28+	21.7	10	23	0	23.3	80	209	- 22	40	18	18	0	0	0.1	20	15.6	25	31+	1	16	14	7.1	
JACKSONVILLE	6	1014.2	1015.4	33.3	22.8	28.0	-0.1	36.1	16+	20.6	23	20	0	21.7	75	282	87	256	14	7	0	0	0.8	22	16.5	W	30	3	16	12	6.7	66
KEY WEST	1	1014.6	1015.3	31.1	25.6	28.3	-0.2	31.7	29+	21.7	10	0	0	23.9	76	143	37	41	15	14	0	0	1.7	13	13.9	SE	10	3	16	12	6.7	72
LAKELAND U	65			32.2	22.8	27.4	-0.1	33.9	17	20.6	7	14	0			129	- 82	24	16		0	0						1	17	13	6.7	56
MIAMI	2	1015.2	1015.4	30.6	23.9	27.3	-0.4	34.4	19+	21.7	22	9	0	23.3	83	216	44	58	19	19	0	0	1.3	13	9.8	33	31	1	14	16	7.7	
ORLANDO	33	1011.5	1015.7	32.2	23.3	27.9	-0.1	33.9	16+	22.2	28+	22	0			171	- 32	39	13	12	0	0	0.6	23	10.7	20	25+	2	13	16	7.4	
PENSACOLA	34	1011.5	1015.6	32.2	23.3	28.0	0.4	36.1	8	21.7	31+	17	0	22.8	77	80	-123	28	18		0	0	0.8	21	25.0	E	14					51
TALLAHASSEE	17	1013.2	1015.5	33.9	22.2	28.1	0.7	37.8	8	19.4	3	27	0	21.7	74	166	- 38	79	14	14	0	0	0.4	31	10.7	5	13	1	18	12	6.6	
TAMPA	6	1015.2	1015.6	31.7	23.3	27.6	0.1	33.3	17+	21.7	8	14	0	21.7	73	194	- 25	67	12	15	0	0	0.8	24	10.3	15	11	2	15	14	7.1	64
WEST PALM BEACH	5	1014.9	1015.7	31.1	23.9	27.5	-0.6	33.9	21	21.7	7	10	0	23.3	82	208	39	47	16	16	0	0	1.4	15	19.7	17	1	4	5	22	7.6	
GEORGIA																																
ATHENS	244	987.5	1015.8	32.8	20.6	26.6	0.1	38.3	14	15.6	31+	21	0	20.6	75	64	- 63	21	7	11	0	0	0.5	1	10.3	36	7+	7	15	9	5.8	
ATLANTA	308	979.7	1015.7	31.1	20.6	25.7	-0.4	35.6	12	16.7	23	12	0	20.0	76	84	- 36	24	12	8	0	0	0.6	36	23.2	N	15	9	12	10	5.7	63
AUGUSTA	44	1009.5	1014.8	33.3	20.6	27.0	-0.1	37.2	11	15.6	23	22	0	20.6	74	87	- 27	32	10	11	0	0	0.2	3	13.0	31	3	8	12	11	5.9	
COLUMBUS	117			33.9	22.2	27.9	0.6	38.9	14	18.3	24	24	0	21.7	75	130	- 20	52	11		0	0	0.7	3	13.0	32	19	5	16	10	6.1	
MACON	108	1002.7	1015.6	33.9	21.1	27.3	-0.4	38.3	12	16.7	23	24	0	20.6	72	81	- 62	34	12	14	0	0	0.7	1	15.2	N	6	10	10	11	5.8	75
ROME	194			33.3	19.4	26.4	0.3	38.3	15+	15.0	24	21	0			59	- 65	19	10		0	0										
SAVANNAH	14	1013.5	1015.2	32.2	22.2	27.2	-0.2	35.6	12	16.1	23	17	0	22.8	81	200	33	77	16	13	0	0	0.6	19	13.9	SW	30	7	15	9	5.6	62
HAWAII																																
HILO	9	1015.6	1016.6	28.9	21.1	24.8	0.9	30.0	29	20.0	23+	0	0	21.1	85	337	87	114	26	1	0	0	0.3	19	7.2	E	13	0	9	22	8.4	29
HONOLULU	2	1015.2	1015.8	31.1	23.3	27.1	1.1	32.2	20+	21.7	13	2	0	18.3	62	11		10	4	0	0	0	5.5	6	13.0	E	2	5	17	9	6.2	71
KAHULUI	15	1013.2	1015.6	30.0	21.7	26.1	0.3	33.9	25	18.3	20	1	0			9	- 2	6	4	1	0	0	6.8	6	15.2	NE	16	5	20	6	5.6	71
LIHUE	31	1012.2	1017.2	28.3	22.8	25.6	0.3	29.4	23+	21.1	30+	0	0	20.0	75	50		32	14	1	0	0	5.9	7	10.7	E	17	0	17	14	7.4	69
IDAHO																																
BOISE	865	912.6	1010.4	32.8	13.3	22.9	-1.1	36.7	24+	6.1	3	22	0	4.4	33	2	- 4	2	1	1	0	0	1.5	30	13.4	SE	31	26	4	1	1.5	95
IDAHO FALLS 42NW R	1460			33.3	8.9	20.9	0.3	37.2	30	0.6	4	23	0			8	- 4	5	4													
IDAHO FALLS 46W R	1503			31.1	9.4	20.3	-0.2	36.1	30	3.3	4	17	0			6		6	1		0	0	2.2	22	14.3	W	2					
LEWISTON	431			31.1	14.4	22.7	-0.6	36.7	29+	7.8	4	14	0			7	- 4	4	5		0	0						21	6	4	2.7	
POCATELLO	1358	862.2	1011.0	32.8	11.7	22.3	-0.1	37.8	30	5.6	4	22	0	1.7	29	3	- 10	1	3	9	0	0	3.3	22	17.9	SW	23	17	11	3	3.2	81
ILLINOIS																																
CAIRO U	96			33.9	23.3	28.3	1.1	39.4	14+	16.7	22	19	0			67	- 14	29	10		0	0			11.6	N	6	10	11	10	5.0	70
CHICAGO O HARE	201	991.2	1015.3	30.6	16.7	23.6	1.0	36.1	10	8.9	22+	12	0	16.7	66	56	- 30	33	7	7	0	0	0.3	32	17.0	32	11	13	8	10	4.8	
CHICAGO MIDWAY	185	992.9		31.1	20.6	25.7	1.5	36.7	10	14.4	21	14	0	16.7	61	168	82	137	8	7	0	0	0.1	29	17.4	W	18	12	10	9	4.7	84
MOLINE	177	993.6	1014.6	32.2	18.9	25.5	1.3	37.8	18	10.6	21	14	0	17.8	65	197	114	80	10	5	0	0	0.5	15	18.8	N	28	13	12	6	4.7	78
PEORIA	199	991.5	1015.1	32.2	19.4	25.8	1.3	38.9	13+	13.9	22+	17	0	17.2	61	93	3	68	6	4	0	0	0.8	11	13.4	NE	11+	15	6	10	4.5	76
ROCKFORD	221	988.5	1014.9	30.6	17.8	24.1	0.7	36.7	18+	10.0	21	12	0	17.8	69	40	- 65	22	5	7	0	0	0.1	22	13.0	36	11	13	11	7	4.8	
SPRINGFIELD	179	992.9	1014.5	34.4	20.0	27.1	1.6	41.1	13+	12.2	21	19	0	17.8	61	24	- 64	17	4	7	0	0	0.4	17	17.0	NW	5	13	10	8	4.6	79
INDIANA																																
EVANSVILLE	116	1001.4	1015.0	34.4	20.6	27.7	1.7	40.0	13	10.0	22	26	0	19.4	66	50	- 35	29	6	5	0	0	0.3	27	18.8	E	6	12	13	6	4.6	75
FORT WAYNE	241	985.8	1015.3	29.4	17.2	23.2	-0.2	34.4	3+	10.6	22+	5	0	15.6	66	123	37	66	9	6	0	0	0.4	30	19.2	N	12	11	8	12	5.3	75
INDIANAPOLIS	241	986.8	1015.2	32.8	20.0	26.2	2.2	37.2	13+	11.7	21	19	0	16.7	59	69	- 20	24	11	9	0	0	0.0		18.8	NW	11	8	16	7	5.2	70
SOUTH BEND	236	987.8	1015.3	28.3	17.2	22.7	-0.4	34.4	12+	10.0	22+	5	0	16.1	67	112	24	40	9	9	0	0	0.5	29	13.0	33	18	12	10	9	4.9	
IOWA																																
BURLINGTON	211			31.7	20.0	25.9	1.1	38.3	18+	15.0	30+	15	0	18.9	66	73	- 13		7	5	0	0	0.2	9	9.4	2	28	15	9	7	4.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max. 32.2 °C or above	No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	980.7	1014.6	31.1	20.6	25.9	1.3	37.8	10	13.9	21	14	0	18.9	67	62	- 16	31	9	7	0	0	1.7	14	24.1	NW	5	14	11	6	4.3	79
DUBUQUE	322			28.9	17.2	23.2	0.6	33.9	11+	11.1	20	8	0			75	- 14	42	9		0	0						11	12	8	4.9	
SIOUX CITY	334	974.6	1013.5	30.6	20.6	25.6	0.3	36.1	10	14.4	21	14	0	21.1	77	74	- 5	28	5	5	0	0	2.5	15	15.6	NW	8	13	11	7	4.6	78
WATERLOO	265	983.4	1014.6	30.6	17.8	24.3	1.1	37.2	11	12.8	30	9	0	18.3	74	154	58	106	9	7	0	0	1.3	15	17.9	36	5	13	13	5	4.2	
KANSAS																																
CONCORDIA	448	960.7	1011.9	35.6	21.7	28.6	1.7	42.2	18	16.1	21	24	0	18.3	60	53	- 19	12	8	10	0	0	3.2	14	18.8	NW	7	14	10	7	4.4	71
DODGE CITY	787	923.5	1011.2	36.1	22.2	29.0	2.2	40.6	5	19.4	7	27	0	17.2	54	38	- 21	27	5	8	0	0	4.0	15	17.9	S	6	12	9	10	5.1	89
GOODLAND	1111	888.6	1011.7	34.4	18.9	26.4	1.7	39.4	26+	16.1	7	22	0	16.1	60	57	- 10	15	8	12	0	0	3.1	14	17.0	28	8+	10	15	6	5.1	
TOPEKA	267	982.1	1013.0	34.4	22.2	28.4	1.8	40.6	18	16.1	31	23	0	19.4	62	19	- 72	10	4	6	0	0	1.8	16	14.3	N	5	16	4	11	4.4	79
WICHITA	403	965.8	1012.2	35.6	23.3	29.4	2.2	40.0	18+	20.6	21+	24	0	20.0	61	45	- 47	31	8	6	0	0	3.4	16	15.2	N	7	13	8	10	4.8	66
KENTUCKY																																
COVINGTON	265	984.8	1015.5	32.2	20.0	26.0	1.9	36.1	13+	12.8	21	16	0	17.8	63	103	11	29	9	11	0	0	0.1	1	15.6	32	14+	8	12	11	5.5	
LEXINGTON	294	981.0	1015.7	31.7	18.9	25.2	0.0	36.7	13	11.7	21	15	0	18.3	69	146	45	44	11	11	0	0	0.4	17	16.5	29	14	8	12	11	5.5	
LOUISVILLE	145	997.6	1014.9	33.3	21.1	27.3	1.9	38.3	13	13.9	22	21	0	18.9	63	54	- 31	22	10	6	0	0	0.3	28	26.8	NW	6	9	13	9	5.4	80
LOUISIANA																																
ALEXANDRIA	28	1010.8	1014.8	34.4	21.7	28.2	0.3	37.8	20	20.0	6+	29	0	22.8	78	105	- 28	44	9	9	0	0	0.6	18	7.6	4	30+	6	17	8	6.0	
BATON ROUGE	20	1012.5	1015.4	33.3	23.3	28.3	0.1	35.0	20+	21.1	4+	27	0	21.7	73	161	2	69	12	17	0	0	0.2	23	13.4	8	2	4	16	11	6.3	
LAKE CHARLES	3	1013.9	1015.0	33.3	24.4	28.9	0.9	36.1	15	22.2	2+	26	0	23.3	77	124	- 61	76	8	10	0	0	0.8	19	9.8	12	31	7	13	11	6.1	
NEW ORLEANS	1	1014.2	1014.9	33.3	22.8	27.9	0.3	36.1	29+	19.4	3	25	0	22.2	75	239	69	109	13	13	0	0	0.4	23	10.7	18	23	5	15	11	6.3	
SHREVEPORT	77	1005.1	1014.1	35.0	23.9	29.4	0.7	38.3	15	21.1	1	28	0	22.2	70	15	- 81	8	7	5	0	0	1.8	17	13.4	8	20	12	12	7	5.3	71
MAINE																																
CARIBOU	190			23.9	11.7	17.8	-0.2	28.9	18+	6.7	6	0	0			83	- 20	26	12		0	0						2	14	15	7.0	
PORTLAND	14	1009.8	1012.1	26.7	13.3	19.8	-0.2	33.9	13+	8.3	22+	2	0	13.9	71	24	- 48	15	9	3	0	0	1.3	24	10.7	W	13	6	14	11	6.1	61
MARYLAND																																
BALTIMORE	45	1009.1	1014.6	33.3	18.9	26.1	1.2	38.9	3	11.7	22+	20	0	15.6	56	38	- 70	28	7	3	0	0	0.9	25	13.4	W	27	13	13	5	4.5	77
MASSACHUSETTS																																
BLUE HILL OBS R	192			28.3	16.7	22.4	0.8	35.0	3	11.7	21	4	0			107	24	54	7		0	0			17.4	NW	19					73
BOSTON	5	1011.9	1012.8	28.9	18.9	23.8	0.7	36.1	3	15.0	21	5	0	14.4	59	82	8	23	7	7	0	0	2.2	24	15.6	SW	10	10	11	10	5.4	77
NANTUCKET	13	1013.2	1013.7	24.4	15.0	19.7	-0.3	31.1	4	11.1	24+	0	0	15.6	80	12	- 56	7	3	3	0	0	2.1	22	11.6	S	19	9	11	11	5.5	66
PITTSFIELD	357			27.8	12.2	20.0	0.1	35.0	3	4.4	16	4	0			163	38	65	9		0	0										
WORCESTER	301	977.3	1013.6	27.2	15.6	21.5	0.5	33.9	3	10.6	21	3	0	12.8	60	96	3	37	8	7	0	0	2.5	27	12.1	33	10	8	14	9	5.3	
MICHIGAN																																
ALPENA	210	989.5	1014.2	28.9	11.7	20.3	1.4	36.7	2	5.0	5	9	0	11.7	60	23	- 50	14	4	8	0	0	0.8	29	11.6	NW	10	12	11	8	4.8	75
DETROIT	189	992.2	1014.6	30.0	18.3	24.2	0.7	37.2	3	10.0	21	12	0	15.6	59	56	- 16	31	4	3	0	0										
DETROIT M WAYNE CO	193	991.2	1014.8	28.9	17.2	23.1	0.3	36.7	3	10.6	21	6	0	16.7	68	133	65	81	6	4	0	0	0.9	27	14.8	NW	9	11	12	8	4.7	66
DETROIT WILLOW RUN	217	987.8	1015.4	29.4	15.6	22.5	-0.9	36.7	3	8.9	21	8	0	14.4	63	126	58	68	6	3	0	0	0.9	27	13.0	16	9	12	11	8	4.8	
FLINT	235	987.5	1015.0	28.3	14.4	21.4	0.2	34.4	3+	7.8	30+	5	0	14.4	66	38	- 36	14	7	4	0	0	1.2	26	17.9	33	12	10	12	9	5.2	
GRAND RAPIDS	239	986.5	1015.0	30.6	16.1	23.1	0.7	36.1	3+	10.0	22+	10	0	15.6	65	50	- 20	18	6	5	0	0	1.2	26	13.0	SW	11	12	9	10	4.6	67
HOUGHTON LAKE	350	974.3	1015.5	28.9	12.8	20.6		35.6	2	5.0	16	6	0	13.3	63	44		27	7	6	0	0	1.4	28	14.3	32	25	14	10	7	4.3	
LANSING	256	983.7	1015.0	30.6	15.0	22.7	0.7	37.2	3	6.7	21	10	0	14.4	60	40	- 25	16	6	2	0	0	1.2	28	15.6	NW	12	11	11	9	5.1	71
MARQUETTE U	206			26.1	16.1	21.1	1.8	33.9	18	9.4	15	2	0			46	- 36	15	8	5	0	0			15.6	S	9	14	9	8	4.7	75
MUSKEGON	191	992.6	1015.1	28.9	16.7	22.8	1.0	35.0	2	10.6	31+	4	0	15.6	64	57	- 4	21	7	5	0	0	1.2	26	10.3	31	12+	14	6	11	4.5	
SAULT STE MARIE	220	988.2	1014.2	26.1	12.8	19.5	1.4	34.4	2+	6.1	8	3	0	12.8	69	31	- 31	12	8	7	0	0	1.6	29	12.5	SW	9	12	9	10	5.2	76
MINNESOTA																																
DULUTH	435	964.4	1015.0	26.1	14.4	20.0	1.4	32.2	12	5.6	20	1	0	14.4	72	156	66	47	12	11	0	0	1.1	22	22.4	W	9	11	10	10	5.5	67
INTERNATIONAL FALLS	359	971.2	1013.8	27.8	13.9	20.8	2.2	34.4	1	7.8	29	4	0	16.1	75	242	153	124	10	11	0	0	1.2	22	11.2	31	2	8	14	9	5.5	
MINNEAPOLIS	254	984.8	1014.4	31.1	18.9	24.9	2.5	37.2	11+	12.2	21	15	0	16.7	63	63	- 20	25	7	8	0	0	1.2	19	25.0	NE	10	14	13	4	4.0	78
ROCHESTER	395	968.5	1015.3	27.8	16.7	22.2	-0.2	34.4	11	9.4	20	4	0	16.7	74	77	- 17	43	7	6	0	0	1.7	20	14.3	3	10	16	10	5	4.0	
ST CLOUD	315	976.6	1013.8	30.0	17.2	23.6	1.9	36.1	10	11.1	20	12	0		68	89	6	35	8		0	0						13	12	6	4.4	
MISSISSIPPI																																
JACKSON	94	1003.4	1015.0	34.4	21.7	28.0	0.1	38.3	15	18.3	25	27	0	21.7	73	80	- 41	37	7	7	0	0	0.8	15	13.9	NW	20	10	17	4	4.9	71
MERIDIAN	88	1004.4	1015.4	34.4	21.1	27.7	0.2	38.9	15	17.8	24	28	0	21.7	75	74	- 84	29	8	8	0	0	0.1	1	13.4	26	2	8	17	6	5.3	
VICKSBURG U	71			33.3	23.3	28.4	0.7	36.7	15	21.1	5+	24	0			21	- 78	6	10		0	0			11.6	NE	31					82

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	C.	C.	°C.	C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	986.5	1013.9	33.3	22.2	27.6	1.7	38.9	14	15.6	21	16	0	18.9	62	104	17	47	7	6	0	0	1.3	15	20.1	N	29	16	6	9	4.6	83
KANSAS CITY	226	987.1	1013.2	33.3	23.9	28.6	1.1	38.9	18	18.9	31+	19	0	20.6	64	23	- 58	10	7	5	0	0	1.4	15	15.2	NW	5	15	4	12	4.8	77
SAINT JOSEPH	247			33.9	21.1	27.4	1.1	37.8	18	14.4	31	23	0	20.6	71	25	- 57	12	7	5	0	0	1.4	15	11.2	30	5	16	9	6	4.0	
ST LOUIS	163	994.9	1014.7	34.4	22.2	28.3	2.7	41.1	13+	13.9	22	22	0	18.3	58	32	- 52	9	8	6	0	0	0.5	17	14.3	N	28+	10	11	10	5.4	77
SPRINGFIELD	386	970.2	1014.5	34.4	20.6	27.6	1.6	38.3	11	16.7	23+	25	0	19.4	67	133	34	44	5	8	0	0	1.7	17	13.4	NW	7	13	12	6	4.8	72
MONTANA																																
BILLINGS	1087	889.9	1010.7	33.3	16.1	24.6	0.8	39.4	16	12.8	5+	19	0	8.9	43	37	14	23	5	7	0	0	0.7	3	19.2	W	19	16	13	2	3.4	86
GLASGOW	696			28.9	15.0	22.0	0.5	37.8	16	10.6	23+	11	0			80	46	21	12		0	0						12	11	8	4.9	
GREAT FALLS	1116	887.6	1011.9	30.0	12.2	21.1	0.3	35.6	19	7.8	26+	9	0	7.8	48	46	13	20	7	9	T	0	0.4	31	17.0	SW	7	19	10	2	3.3	87
HAVRE	787			30.0	13.3	21.6	0.4	36.7	19	8.3	28+	8	0			43	11	18	6		0	0			18.8	SW	7	18	9	4	3.6	85
HELENA	1167	879.8	1011.9	31.1	12.8	21.9	1.7	37.2	15	6.7	4	12	0	5.6	39	8	- 18	5	4	9	0	0	1.6	31	19.7	SW	8	17	12	2	3.0	85
KALISPELL	904	910.3	1013.2	27.2	8.9	18.0	-0.7	33.3	30	2.8	26+	2	0	9.4	61	9	- 17	8	4	9	0	0	0.2	11	10.7	14	10	17	10	4	3.6	
MILES CITY	801	920.1	1010.6	33.9	17.8	25.7	1.7	42.2	16	12.8	28+	21	0	11.7	47	41	7		11	8	0		1.6	7								
MISSOULA	972	903.2	1013.1	31.1	10.0	20.6	1.2	37.2	30	5.0	4	16	0	6.1	45	18	- 4	8	4	7	0	0	1.9	33	12.1	SW	8	19	9	3	2.9	85
NEBRASKA																																
GRAND ISLAND	561	948.2	1012.7	34.4	20.0	27.2	2.1	40.6	12+	16.1	30+	21	0	18.9	67	88	24	33	12	8	0	0	2.8	15	14.3	6	26	12	14	5	4.6	
LINCOLN U	351			32.8	22.2	27.4	0.7	40.6	12	16.1	24	18	0			67	- 16	27	7		0	0			15.6	N	26	12	13	6	4.9	70
NORFOLK	471			31.7	20.0	25.9	0.9	40.6	10	14.4	30+	18	0			55	- 22	19	8		0	0						9	15	7	4.9	
NORTH PLATTE	846	916.7	1011.8	32.2	18.9	25.3	0.8	37.8	10	14.4	7+	16	0	18.3	69	85	21	29	9	10	0	0	2.9	14	17.9	N	28	11	10	10	5.2	69
OMAHA	298	979.0	1013.5	31.7	21.1	26.3	0.5	37.2	12	15.6	30	15	0	20.0	70	119	34	48	7	6	0	0	2.3	15	16.1	N	5	14	12	5	4.3	74
SCOTTSBLUFF	1206	879.1	1011.2	33.9	17.2	25.3	1.6	38.3	11+	12.8	9	24	0	15.0	61	85	48	29	9	10	0	0	2.2	10	17.4	27	13	17	10	4	3.9	
VALENTINE	789			33.9	18.3	26.2	2.1	42.2	10	14.4	23	23	0			43	- 15	26	8		0	0			18.8	E	11	10	14	7	4.9	77
NEVADA																																
ELKO	1539	844.2	1010.9	33.3	8.9	21.2	0.3	37.8	29	1.1	3	24	0	- 1.1	25	18	7	13	3	2	0	0	1.4	22	10.3	16	30+	24	4	3	2.4	
ELY	1906	810.0	1009.9	31.1	10.0	20.3	0.6	33.9	29+	2.8	3	13	0	0.0	28	4	- 12	3	2	3	0	0	4.2	20	15.6	S	30	16	10	5	3.3	87
LAS VEGAS	659	934.3	1008.3	40.0	23.9	31.8	-0.2	43.9	18	18.9	13+	31	0	3.9	21	8	- 5	8	1	2	0	0	3.0	21	22.8	SE	30	16	10	5	3.5	89
RENO	1342	865.2	1012.3	31.7	6.1	18.7	-1.1	37.8	29	1.7	3	14	0	2.2	36	T	- 7	T	0	0	0	0	1.5	27	13.9	NW	13	27	1	3	1.6	95
WINNEMUCCA	1310	866.2	1011.0	32.8	9.4	21.1	-0.6	38.3	29	2.2	3	19	0	- 3.9	20	1	- 6	T	2	0	0	0	1.6	27	13.4	SW	9	26	3	2	1.6	90
NEW HAMPSHIRE																																
CONCORD	104	1000.3	1012.8	31.1	13.3	22.3	1.4	38.9	3	6.1	21	13	0	15.0	65	58	- 28	26	9	5	0	0	1.1	29	10.3	N	12	9	14	8	5.5	76
MT WASHINGTON OBS	1909			12.8	5.6	8.9	-0.6	18.3	3	- 0.6	27	0	2			143	- 27	24	17	3	0	0			34.9Y	W	10	3	7	21	7.9	36
NEW JERSEY																																
ATLANTIC CITY	20	1012.2	1014.7	30.6	17.8	24.0	0.1	40.0	3	10.6	21	11	0	17.2	68	66	- 29	26	9	8	0	0	1.0	22	13.0	33	7	9	14	8	5.1	71
ATLANTIC CITY U	3			28.3	21.1	24.8	1.3	37.2	4	14.4	21	7	0			69	- 29	28	6						13.9	SSW	19					
NEWARK	2	1012.9	1013.9	32.2	20.6	26.4	1.3	40.6	3	15.6	22	14	0	15.6	54	23	- 71	11	5	3	0	0	1.6	24	13.4	30	26	11	14	6	4.8	
TRENTON U	17			31.7	20.0	25.7	1.3	38.9	3	14.4	21	13	0			33	- 73	16	7		0	0			11.6	NW	19	13	14	4	4.4	76
NEW MEXICO																																
ALBUQUERQUE	1619	839.5	1010.9	34.4	18.9	26.6	0.7	37.2	26+	15.6	2	27	0	11.1	43	41	11	28	7	7	0	0	0.4	13	20.1	SE	15	10	14	7	5.2	83
CLAYTON	1515			32.8	17.2	24.9	1.3	37.2	5	13.3	2	20	0			97	38	34	12		0	0						12	10	9	4.9	
RATON	1944			31.1	13.9	22.6	1.6	35.6	5	10.0	6	11	0			117	56	41	16		0	0						4	14	13	6.4	
ROSWELL	1102			38.3	20.0	29.1	3.2	41.1	3	16.7	13+	31	0			4	- 41	2	3	7	0	0			13.9	SW	12	14	11	6	4.4	
SILVER CITY	1638			33.3	17.8	25.6	0.6	36.7	6	15.6	14+	26	0			38	- 15	10	12		0	0						7	23	1	5.1	
NEW YORK																																
ALBANY	84	1003.1	1013.4	30.0	15.0	22.3	0.1	36.7	2	8.3	21+	8	0	14.4	63	99	10	57	7	6	0	0	1.2	25	13.0	SW	8	6	16	9	5.9	75
BINGHAMTON	485	957.0	1014.5	28.3	15.6	21.8	1.6	35.0	3	8.3	21	5	0	12.8	60	37	- 57	15	5	5	0	0	2.0	28	12.1	NW	20	6	16	9	5.9	81
BUFFALO	215	989.2	1014.4	27.8	16.1	21.9	0.9	34.4	2	10.6	31+	3	0	15.0	66	125	60	40	8	6	0	0	2.7	25	14.3	SW	6	9	14	8	5.5	70
NEW YORK U	40	1010.5	1013.7	32.2	20.6	26.5	1.6	39.4	3	16.1	21	16	0	14.4	53	32	- 62	14	6	3	0	0	0.9	24	11.6	N	8	16	13	2	3.8	81
J.F. KENNEDY	4	1013.2	1013.9	30.6	19.4	25.0	0.6	40.0	3	15.0	22+	8	0	16.1	63	18	- 85	9	5	5	0	0	1.8	22	12.5	20	19+	11	14	6	4.8	
NEW YORK LA GUARDIA	3	1011.9	1013.8	31.7	22.2	27.1	2.2	41.7	3	18.3	21	12	0	15.0	51	28	- 66	13	6	5	0	0	1.3	24	11.6	SW	28	10	14	7	5.2	
ROCHESTER	167	994.9	1014.7	29.4	16.1	22.8	0.8	36.7	3	10.0	16	10	0	14.4	61	70	- 2	53	5	4	0	0	2.2	26	13.9	W	28+	11	13	7	5.0	72
SYRACUSE	125	998.6	1013.4	28.3	15.0	21.7	-0.6	35.6	3	9.4	21	5	0	13.3	59	53	- 25	24	7	5	0	0	1.9	28	11.6	W	10	12	11	8	5.1	75
NORTH CAROLINA																																
ASHEVILLE	652	941.8	1016.5	27.8	15.6	21.7	-0.7	32.2	14	10.0	23	1	0	17.8	83	82	- 66	21	13	9	0	0	1.3	36	19.2	35	19	5	12	14	6.6	67
CAPE HATTERAS R	2	1014.6	1014.9	28.9	22.2	25.6	0.1	33.3	5	14.4	19	1	0	21.7	80	55	-101	42	7	8	0	0	1.0	20	11.2	WSW	30+	4	15	12	6.5	74
CHARLOTTE	224	988.2	1015.1	32.8	20.6	26.4	0.2	37.2	28+	13.9	31	21	0	17.2	61	47	- 77	22	10	5	0	0	0.3	1	14.3	NE	19	8	13	10	5.7	75

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point		Total	Departure from normal	Greatest in 24 hours	No of days		Snow, Sleet		Resultant speed	Resultant direction	Fastest mile (1 6 kilometers)			Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
												Max 32.2 °C or above	Min 0 °C or lower						25 mm or more	With thunderstorms	Total	Maximum depth on ground			Speed	Direction	Date					
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	984.4	1015.4	32.8	19.4	26.1	0.9	37.8	14	13.9	31	20	0	20.0	72	51	-71	30	6	6	0	0	0.4	30	15.2	NW	4	7	12	12	5.7	68
RALEIGH	132	999.3	1014.7	32.2	20.0	26.2	0.7	36.1	14+	13.3	23	20	0	18.9	68	23	-116	11	4	6	0	0	0.2	20	10.7	33	14	8	18	5	5.0	65
WILMINGTON	9	1013.5	1015.0	32.2	22.2	27.2	0.5	35.6	5	17.2	22	18	0	21.7	77	384	189	143	12	9	0	0	0.7	19	18.8	SW	9	2	18	11	6.6	68
NORTH DAKOTA																																
BISMARCK	502	953.9	1012.4	30.0	15.0	22.6	0.5	35.6	30+	8.9	28	11	0	15.6	68	108	53	36	12	14	0	0	1.5	10	15.6	N	31	9	15	7	5.1	67
FARGO	273	981.0	1013.1	30.0	16.7	23.2	1.3	35.0	17	11.1	28	10	0	16.1	67	102	28	49	12	13	0	0	1.1	15	19.2	NW	8	12	11	8	5.0	69
WILLISTON	579			30.6	15.0	22.8	0.9	41.7	16	10.0	28	12	0			49	1	15	10		0	0			28.6	NW	1	10	11	10	5.4	64
OHIO																																
AKRON	368	971.9	1015.5	29.4	16.7	23.1	0.5	33.9	3+	9.4	21	5	0	16.1	68	72	-24	22	14	6	0	0	0.8	30	9.8	33	19	8	14	9	5.4	
CINCINNATI OBS	232			32.2	19.4	25.9	1.0	37.2	13	12.8	21	18	0			49	-42	15	11		0	0			14.8	NW	13					68
CLEVELAND	237	986.8	1015.3	28.9	16.7	22.6	0.7	35.6	3	7.8	21	6	0	15.6	66	99	15	49	7	4	0	0	0.7	26	11.6	E	24	10	10	11	5.3	70
COLUMBUS	247	986.1	1015.7	30.6	18.3	24.2	0.4	36.1	3+	10.0	22+	10	0	16.7	66	150	50	65	10	7	0	0	0.1	6	14.3	NE	10+	8	14	9	5.7	66
DAYTON	305	980.0	1015.5	31.7	18.9	25.3	1.3	37.2	2	11.1	21	18	0	17.8	66	100	11	34	12	8	0	0	0.4	27	17.4	NW	9	9	11	11	5.5	77
MANSFIELD	395			28.3	16.1	22.2	0.2	33.9	3+	10.0	21	2	0			97	9	60	9	7	0	0						9	12	10	5.3	
TOLEDO	206	990.9	1015.5	30.0	17.2	23.4	0.8	35.6	3	9.4	21	8	0	16.1	67	95	29	39	6	5	0	0	0.8	26	14.3	W	9	12	10	9	4.8	71
YOUNGSTOWN	359	973.6	1015.5	29.4	15.0	22.4	1.1	36.1	3	8.3	22	8	0	13.9	61	64	-46	34	9	6	0	0	0.6	29	10.3	27	25	10	9	12	5.1	
OKLAHOMA																																
OKLAHOMA CITY	390	967.5	1012.4	37.8	22.8	30.2	2.2	42.2	19	20.0	3+	29	0	20.0	60	60		37	9	8	0	0	3.4	16	12.5	E	15	14	8	9	4.9	66
TULSA.	198	989.5	1013.0	37.2	24.4	30.7	2.8	41.1	19+	21.1	3	29	0	20.6	60	51	-24	27	6	3	0	0	3.4	18	12.1	SE	2	11	11	9	4.9	63
OREGON																																
ASTORIA	2	1016.9	1017.8	19.4	11.1	15.3	-0.6	22.8	26	6.7	21	0	0	12.2	85	14	-19	8	8	0	0	0	2.4	29	9.4	31	29+	3	13	15	6.9	
BURNS U	1265	872.7	1013.0	28.3	10.0	19.2	-1.7	34.4	30+	1.1	3	5	0	2.8	37	6	-3	4	4		0	0	1.7	30				23	5	3	2.3	
EUGENE	109	1003.1	1016.4	27.8	11.1	19.3	0.1	35.0	29	7.2	25	5	0	10.6	63	11	5	11	2	1	0	0	1.3	31	9.8	36	20	16	6	9	4.1	
MEACHAM	1234	877.4	1014.2	22.2	8.9	15.4	-2.1	29.4	29	4.4	25+	0	0	3.9	51	38	25	25	5		0	0	1.6	30				19	6	6	3.3	
MEDFORD	396	967.8	1014.8	30.0	11.1	20.4	-1.8	37.8	29	6.1	3	10	0	8.3	52	41	36	27	5	3	0	0	1.6	31	9.4	24	9	18	7	6	3.2	
PENDLETON	452	961.4	1014.0	29.4	13.9	21.7	-1.4	37.2	29	10.6	26+	11	0	6.1	42	20	14	10	5	1	0	0	2.0	27	12.5	26	14	19	7	5	3.0	
PORTLAND	6	1014.9	1016.2	25.0	13.3	19.1	-0.4	31.7	29	11.1	21+	0	0	12.2	68	30	20	23	6	0	0	0	2.2	31	9.8	NW	20	12	7	12	5.2	59
SALEM	60	1009.1	1016.3	27.2	10.0	18.4	-0.5	35.6	29	6.1	25+	5	0	11.1	66	13	5	9	3	1	0	0	1.3	32	9.8	36	20	15	5	11	4.6	
SEXTON SUMMIT R	1169	884.5	1014.7	22.2	8.9	15.4	-2.1	28.3	29+	2.8	2+	0	0			24	16	11	4		0	0			13.4	18	9	17	7	7	3.2	
PACIFIC AREA																																
CANTON ISLAND	2			31.1	25.6	28.3	-0.3	31.7	31+	23.3	22	0	0			132	66	58	18		0	0						5	10	16	7.2	
ENIWETOK	4	1008.5	1009.2	31.7	26.1	28.7	0.4	32.2	30+	23.9	10+	5	0	25.0	79	97	-67	40	19		0	0	5.3	8								
TAGUAC GUAM R	110			30.6	23.3	27.0	0.6	33.9	28+	21.7	12	2	0			171	-57	34	24		0	0			9.8	SE	20					56
JOHNSTON	2	1012.2	1012.9	29.4	25.6	27.6	0.3	30.6	31	23.9	7	0	0	22.2	74	32	-1	9	14	0	0	0	6.4	9	13.4	E	29	3	19	9	6.0	63
KOROR R	29	1005.1	1008.9	30.6	23.9	27.3	0.1	32.2	18+	22.8	30+	4	0	24.4	87	187	-39	42	23	0	0	0	3.5	8	14.3	9	16	1	8	22	8.4	
KWAJALEIN	2	1008.1	1008.8	30.6	25.6	28.0	0.4	31.7	1	23.3	16	0	0	24.4	82	601	216	104	29	3	0	0	1.2	26	10.3	NW	9	0	0	31	9.9	54
MAJURO	3	1008.5	1009.0	30.0	25.0	27.7	0.9	31.7	1	23.3	20+	0	0	23.9	81	379	61	110	23	3	0	0	2.8	8	11.6	E	4	0	10	21	8.3	63
MARCUS ISLAND	6			31.7	25.6	28.5	0.4	32.8	15+	21.7	21	16	0			162	-17	62	23		0	0			11.6	SE	26	4	14	13	6.8	
PAGO PAGO	4	1011.5	1011.6	28.9	23.9	26.4		30.0	31+	20.6	6	0	0	23.3	83	163		79	16	0	0	0	5.2	10	12.5	SE	15	5	12	14	6.7	
PONAPE R	37	1003.1	1008.6	31.1	22.8	26.9	0.4	32.2	21+	21.7	10	2	0	23.9	89	615	203	89	30	7	0	0	1.2	12	7.6	E	20	0	2	29	9.1	52
TRUK MOEN ISLAND	2	1008.1	1008.5	30.6	23.9	27.3	0.3	31.7	25+	22.8	28+	0	0	24.4	86	511	198	144	25	2	0	0	0.9	11	17.0	SW	30	0	1	30	9.4	71
WAKE	3	1012.2	1012.5	31.1	25.6	28.3	0.5	31.7	31+	23.3	25	0	0	23.9	78	43	-74	12	20	3	0	0	4.6	6	8.9	12	24+	3	13	15	6.7	
YAP R	19	1006.4	1008.4	30.6	23.9	27.3	-0.2	32.2	20+	22.2	27	3	0	24.4	87	457	107	89	28	2	0	0	0.3	12	8.9	S	8	0	0	31	9.7	45
PENNSYLVANIA																																
ALLENTOWN	118	1000.7	1014.4	32.8	17.2	25.0	1.6	40.6	3	9.4	21	20	0	14.4	57	49	-74	24	7	7	0	0	1.3	26	11.6	36	4	11	12	8	4.9	
ERIE	223	988.8	1015.1	27.2	16.7	22.1	0.4	33.3	3	10.0	21+	1	0	15.6	68	53	-40	28	5	7	0	0	1.1	26	11.2	30	6	12	13	6	4.4	
HARRISBURG	103	1001.7	1014.3	33.9	19.4	26.6	2.1	41.7	3	11.7	21	23	0	14.4	51	21	-69	10	7	7	0	0	0.9	28	11.2	N	26	10	12	9	5.2	83
PHILADELPHIA	2	1013.2	1014.2	32.2	18.9	25.5	1.3	40.0	3	10.6	21	17	0	16.1	60	60	-46	27	9	4	0	0	1.0	25	13.0	NW	10	10	13	8	5.1	69
PITTSBURGH	347	972.2	1015.4	31.1	17.8	24.2	1.9	36.7	3	7.8	21	12	0	16.1	65	69	-30	30	12	7	0	0	1.2	28	18.8	30	28	6	16	9	5.8	61
READING U	81			32.2	20.0	26.1	1.1	39.4	3	13.3	21	16	0			60	-48	21	8		0	0			17.0	NW	10	12	12	7	4.7	74
SCRANTON	283	981.0	1014.8	31.1	16.7	23.9	1.4	38.3	3	8.9	21	9	0	13.9	58	48	-74	21	9	7	0	0	1.1	24	13.9	W	27	13	9	9	5.0	75
WILLIAMSPORT	160	995.9	1014.6	30.0	15.0	22.3	-0.8	37.8	3	6.7	21	7	0	15.6	69	99	-7	56	13	10	0	0	1.3	28	8.9	32	29+	10	14	7	4.9	
RHODE ISLAND																																
BLOCK ISLAND	34			25.0	17.2	21.2	0.3	30.0	3	12.8	21	0	0			30	-38	20	7		0	0						13	11	7	5.0	
PROVIDENCE	16	1010.8	1013.3	28.9	16.7	22.6	0.3	35.6	3	10.6	21	4	0	14.4	63	70	-4	31	8	8	0	0	2.0	23	11.2	32	19	11	12	8	5.2	73

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1013.2	1014.9	31.1	21.7	26.4	-0.6	34.4	12	15.6	23	13	0	21.7	77	292	96	129	18	11	0	0	0.5	20	17.4Y	NW	9	4	16	11	6.3	65
CHARLESTON U	3			31.1	23.3	27.2	-0.3	36.1	12	18.9	31	13	0			221	23	91	15		0	0			17.0	E	1					
COLUMBIA	66	1006.8	1014.6	33.9	21.1	27.6	0.0	39.4	29	16.1	23	25	0	20.0	69	73	- 82	36	8	6	0	0	0.2	1	15.6	1	15	7	16	8	5.8	61
GNVLE SPARTANBURG	292	981.7	1015.5	31.1	19.4	25.5	-0.6	36.7	28	15.0	23	13	0	18.9	70	76	- 42	20	10	9	0	0	0.5	1	23.2	NE	15	9	8	14	5.9	67
SOUTH DAKOTA																																
ABERDEEN	395	966.5	1012.3	31.7	17.8	24.7	1.6	43.3	10	11.7	7	16	0	16.7	65	118	55	38	7	7	0	0	1.8	13	25.9	20	31	11	16	4	4.8	
HURON	391	966.5	1011.8	33.3	18.3	25.7	1.8	44.4	10	11.7	7	20	0	17.8	66	108	62	31	7	9	0	0	3.1	14	20.1	W	11	10	14	7	4.7	81
RAPID CITY	964	903.5	1011.4	32.8	16.7	24.8	1.6	39.4	16+	11.7	29	17	0	14.4	58	100	55	34	11	14	0	0	1.3	12	20.1	W	26	12	15	4	4.2	69
SIOUX FALLS	432	963.1	1013.3	32.8	18.9	25.9	2.4	41.1	10	12.8	7	20	0	17.2	61	39	- 33	22	7	8	0	0	2.7	16	20.6	31	4	11	14	6	4.4	
TENNESSEE																																
BRISTOL	459	963.4	1016.7	30.0	18.3	24.1	-0.3	33.9	27+	15.0	22+	6	0	18.3	74	158	17	38	13	11	0	0	0.0	15	11.6	30	19	9	7	15	6.6	
CHATTANOOGA	203	991.2	1015.4	31.7	20.0	26.1	-1.0	36.7	15+	16.7	24+	15	0	20.6	77	115	- 15	27	11	11	0	0	0.1	8	17.0	NE	15	7	13	11	5.9	67
KNOXVILLE	299	981.7	1016.1	31.7	20.6	26.3	0.5	36.7	14	17.8	21+	18	0	20.0	74	138	16	61	11	9	0	0	0.4	26	13.0	NW	15	7	11	13	6.3	66
MEMPHIS	78	1005.1	1015.0	35.0	23.9	29.3	1.9	38.9	15	18.3	22	28	0	21.1	65	55	- 35	41	7	7	0	0	1.0	19	13.0	W	29	14	8	9	4.9	71
NASHVILLE	180	993.9	1015.1	34.4	21.7	27.9	1.2	39.4	14+	17.2	31	21	0	20.6	70	69	- 26	33	9	12	0	0	0.8	20	22.4	NW	7	7	16	8	5.6	72
OAK RIDGE	276			32.2	19.4	25.8	0.7	37.8	13	15.6	25	18	0			65	- 86	19	13		0	0						8	12	11	6.3	
TEXAS																																
ABILENE	537	952.3	1011.8	36.1	25.0	30.5	2.1	39.4	29+	21.1	1	31	0	17.2	48	3	- 55	2	3	1	0	0	4.1	17	12.1	N	24	13	9	9	4.9	76
AMARILLO	1098	891.0	1010.0	35.6	21.1	28.3	1.3	38.9	22+	18.9	13	30	0	15.6	50	35	- 25	13	7	10	0	0	4.5	19	15.2	W	24	18	8	5	4.0	74
AUSTIN	182	991.9	1013.3	35.6	23.3	29.3	0.1	38.3	31	20.6	2	30	0	20.6	64	12	- 43	12	2	3	0	0	3.2	18	10.3	SE	5	9	20	2	4.7	74
BROWNSVILLE	5	1012.5	1013.0	33.3	23.9	28.5	-0.4	34.4	31+	19.4	1	28	0	23.3	77	40	- 3	27	6	3	0	0	4.2	14	10.7	SE	29+	9	18	4	4.8	84
CORPUS CHRISTI	12	1011.9	1013.5	33.9	23.9	28.7	-0.3	36.1	31+	21.1	1	29	0	23.9	80	31	- 28	14	6	2	0	0	3.7	15	11.2	SE	29	3	22	6	5.5	71
DALLAS	147	995.9	1012.9	35.0	25.6	30.4	1.1	38.3	31	22.8	2	29	0	21.7	63	35	- 14	20	3	6	0	0	3.4	17	9.8	W	24	15	8	8	4.6	70
DEL RIO	313	976.3	1011.4	36.7	24.4	30.5	0.4	38.9	31	20.6	1	31	0	18.9	53	1	- 32	1	1	0	0	0	4.5	13	7.6	13	6	16	10	5	3.9	
EL PASO	1194	880.8	1008.6	35.6	22.2	28.7	0.9	38.9	4	19.4	27+	31	0	15.0	47	30	- 3	16	5	8	0	0	0.9	11	30.4	NE	27	18	11	2	3.5	95
FORT WORTH	164	992.9	1012.9	35.0	25.0	30.2	0.5	37.2	31+	22.2	2+	31	0	21.7	63	83	38	41	4	4	0	0	2.8	17	11.6	20	7	14	9	8	4.7	
GALVESTON U	2			31.1	26.1	28.6	0.2	32.8	26	21.7	5	2	0			32	- 90	24	4		0	0			17.0	W	5					70
HOUSTON U	12			33.3	25.0	29.2	0.4	35.6	26+	22.2	2+	23	0			100	- 31	26	10		0	0										
HOUSTON	15	1012.2	1014.3	33.9	24.4	29.1	0.7	36.1	31+	21.1	1	27	0	22.8	74	37	- 72	26	7	10	0	0	2.3	17	10.3	19	5	5	16	10	6.1	72
LUBBOCK	992	903.2	1010.8	36.7	22.8	29.7	3.3	39.4	3	20.6	14+	31	0	15.6	45	14	- 37	8	4	4	0	0	3.4	17	14.3	13	10	13	13	5	4.2	
MIDLAND	869	915.0	1010.3	36.1	21.7	28.9	0.7	38.3	31+	18.9	2+	30	0	15.6	47	4	- 43	3	3	3	0	0	3.4	15	13.9	4	10	13	11	7	4.6	
PORT ARTHUR	5	1013.9	1014.7	33.9	23.9	29.1	1.3	36.1	21	21.7	2	28	0	23.9	80	101	- 52	39	16	14	0	0	1.6	20	18.3	SE	1	6	19	6	5.7	73
SAN ANGELO	580	946.5	1011.0	37.2	23.9	30.6	1.2	39.4	22	19.4	1	31	0	17.2	49	2	- 34	2	2	3	0	0	3.4	17	11.2	18	8	13	12	6	4.7	
SAN ANTONIO	240	986.1	1013.4	35.0	23.3	29.0	0.1	37.2	31	19.4	11+	30	0	21.1	67	2	- 52	2	2	0	0	0	3.4	16	13.0	SE	5	8	21	2	4.6	78
VICTORIA	32	1009.8	1014.0	33.3	23.9	28.8	0.3	37.2	31	22.2	5+	28	0	23.3	77	131	39	101	8	6	0	0	2.7	15	15.6Y	SSW	6	1	21	9	6.0	
WACO	152	995.6	1013.3	37.2	25.6	31.4	1.8	40.6	31	21.7	2	31	0	19.4	52	12	- 39	12	1	1	0	0	4.0	17	9.4	35	24+	16	9	6	3.9	
WICHITA FALLS	303	976.3	1011.8	38.3	23.9	31.2	1.4	41.1	31+	21.7	10+	31	0	19.4	54	80	29	69	6	4	0	0	4.2	16	15.6	12	30	10	11	10	5.1	
UTAH																																
MILFORD	1533			34.4	13.3	23.8	0.6	38.3	28+	5.6	13	29	0			4	- 14	2	3		0	0						12	11	8	4.5	
SALT LAKE CITY	1286	870.0	1009.7	35.6	17.8	26.7	1.8	38.9	19	9.4	4+	29	0	6.1	31	8	- 6	6	4	8	0	0	2.6	13	17.0	SW	24	10	17	4	4.6	88
WENDOVER	1291			34.4	19.4	27.0	0.7	37.2	19	13.3	3	27	0			11	3	10	3		0	0						22	6	3	2.7	
VERMONT																																
BURLINGTON	101	1000.0	1012.2	27.8	13.9	20.9	0.3	36.7	3	7.2	21	3	0	13.3	65	49	- 49	14	11	9	0	0	0.8	21	11.6	NW	28	7	15	9	5.7	82
VIRGINIA																																
LYNCHBURG	279			32.8	18.3	25.5	0.9	37.2	14	13.9	31	18	0			75	- 31	51	6	7	0	0			11.2	NE	15	7	14	10	5.3	73
NORFOLK	7	1013.5	1014.7	31.1	20.6	25.6	-0.4	36.1	13	14.4	22	15	0	19.4	72	108	- 42	94	2	4	0	0	0.6	15	15.2	NE	30	9	14	8	5.6	75
RICHMOND	49	1009.1	1014.9	31.7	17.8	24.7	-0.9	36.7	28	12.8	21	17	0	18.3	72	103	- 39	57	5	5	0	0	0.3	19	15.2	N	15	10	12	9	5.6	71
ROANOKE	350	974.3	1015.2	32.8	18.3	25.5	0.7	37.8	14	12.2	31	21	0	15.6	57	76	- 32	69	4	6	0	0	0.7	29	10.3	29	4	7	15	9	5.5	
WASHINGTON																																
OLYMPIA	59	1009.8	1017.1	23.3	8.9	16.1	-1.7	30.6	29	4.4	21+	0	0	10.0	69	34	15	18	7	2	0	0	0.8	23	10.7	22	24	6	12	13	6.3	
SEATTLE TACOMA	122	1000.7	1016.9	21.7	12.2	16.7	-1.6	28.9	28	10.6	21+	0	0	10.6	72	34	14	16	7	1	0	0	0.6	28	7.6	22	24+	8	9	14	6.2	60
SPOKANE	718	930.6	1013.0	28.3	12.2	20.1	-1.3	34.4	30	8.3	4+	6	0	6.1	45	24	14	15	6	4	0	0	1.6	22	13.0	SW	12	15	12	4	3.7	78
STAMPEDE PASS R	1206			16.7	7.8	12.1	-1.4	23.3	29	3.3	20	0	0			75	38	28	13		0	0						9	8	14	6.2	
TATOOSH ISLAND R	31	1014.2	1017.5	14.4	11.1	12.8	-0.2	16.7	17+	9.4	21	0	0	11.1	92	34	- 26	14	15	0	0	0	2.5	20	11.2	5	2	2	7	22	8.2	24
WALLA WALLA U	289			29.4	15.6	22.5	-1.9	36.7	29	10.6	2	11	0			45	40	24	4		0	0			9.4	NW	14	18	9	4	2.9	83
YAKIMA	321	975.3	1013.1	28.3	11.1	19.8	-1.9	35.0	29	7.2	25+	6	0	9.4	53	18	15	14	5	3	0	0	1.2	28	9.8	21	18	22	3	6	3.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days: 25 mm or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile (1.6 kilometers): Direction	Fastest mile (1.6 kilometers): Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	4	1014.2	1016.4	31.1	25.0	27.8	0.9	33.3	1	23.3	24+	3	0	23.3	78	107	- 52	14	21	6	0	0	3.9	9	12.1	NE	6	3	19	9	6.6	71
SWAN ISLAND	9			30.0	25.6	27.8	-0.2	31.7	23	21.7	9	0	0			153	47	45	15	7	0	0						2	14	15	7.4	
WEST VIRGINIA																																
BECKLEY	763	930.2	1016.0	27.8	16.1	21.8		32.2	14	8.3	21	1	0	15.6	70	93		45	10	10	0	0	0.8	22	11.2	30	14	5	9	17	6.7	
CHARLESTON	286	981.7	1015.2	31.7	18.3	25.2	1.3	36.1	3+	10.0	22+	16	0	17.8	68	75	- 69	23	10	9	0	0	0.7	21	13.0	28	14	3	14	14	6.6	
ELKINS	600	946.8	1016.8	28.9	13.3	21.1	-0.1	33.9	2	5.0	22	4	0	15.0	76	82	- 57	45	10	8	0	0	0.6	27	13.0	32	14	6	13	12	6.4	
HUNTINGTON	252	985.8	1015.4	31.1	18.3	24.7	0.7	35.6	2	11.7	22	11	0	18.9	76	162	47	76	12	9	0	0	0.6	20	11.6	32	13	4	14	13	6.5	
PARKERSBURG U	187			30.6	18.9	24.6	0.3	36.7	3	11.7	22	11	0			117	12	52	11		0	0			21.0	W	14					61
WISCONSIN																																
GREEN BAY	208	989.8	1014.9	28.3	14.4	21.6	0.2	36.1	3	7.2	16	6	0	14.4	66	106	38	51	7	6	0	0	1.1	26	13.0	NW	10	12	12	7	4.7	70
LA CROSSE	198	990.9	1014.8	31.1	17.2	24.1	0.8	36.7	11+	9.4	20	12	0	18.3	73	117	22	48	8	7	0	0	1.3	16	20.6	36	10	18	5	8	4.1	
MADISON	262	984.4	1015.4	29.4	14.4	21.7	0.0	36.1	10	5.0	21	7	0	16.7	73	82	- 9	42	11	9	0	0	0.6	28	17.0	NW	10	14	10	7	4.5	80
MILWAUKEE	205	991.2	1016.2	28.9	17.8	23.1	2.7	36.1	3	10.6	21	8	0	16.1	68	84	9	32	11	6	0	0	0.4	27	16.5	W	10	14	11	6	4.2	79
WYOMING																																
CASPER	1627	838.5	1011.0	33.9	13.9	23.8	1.8	37.2	30+	9.4	29	25	0	5.0	36	12	- 14	6	5	2	0	0	1.7	24	15.6	30	26	14	10	7	4.6	
CHEYENNE	1867	815.4	1013.1	32.2	15.0	23.6	2.5	35.0	16+	11.1	2	18	0	9.4	50	86	40	43	8	12	0	0	1.1	23	20.1	SE	22	9	17	5	5.0	66
LANDER	1696	830.0	1011.0	32.8	15.0	23.7	2.3	35.6	16+	10.0	2	19	0	6.1	36	7	- 12	4	4	5	0	0	1.8	25	21.0	SW	9	7	17	7	5.1	68
SHERIDAN	1208	878.1	1011.4	32.2	12.8	22.5	0.7	39.4	16	7.2	29	16	0			7	- 23	4	4	4	0	0	0.4	27	15.6	NW	3	14	10	7	4.5	77

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	0	0	0
HUNTSVILLE	0	0	0
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	214	214	
ANNETTE	161	161	242
BARROW	850	850	803
BARTER ISLAND	730	730	735
BETHEL	365	365	319
COLD BAY	500	500	474
FAIRBANKS	92	92	171
JUNEAU	265	265	301
KING SALMON	381	381	313
KOTZEBUE	372	372	381
MC GRATH	290	290	208
NOME	480	480	481
ST. PAUL ISLAND	599	599	605
SHEMYA	623	623	577
YAKUTAT	396	396	338
ARIZONA			
FLAGSTAFF	14	14	46
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	0	0	0
YUMA	0	0	0
ARKANSAS			
FORT SMITH	0	0	0
LITTLE ROCK	0	0	0
TEXARKANA	0	0	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	0	0	0
BLUE CANYON	82	82	34
EUREKA U	254	254	270
FRESNO	0	0	0
LONG BEACH	0	0	0
LOS ANGELES	0	0	19
LOS ANGELES U	0	0	0
MT SHASTA R	69	69	25
OAKLAND	64	64	53
RED BLUFF	0	0	0
SACRAMENTO	1	1	0
SANDBERG U	5	5	0
SAN DIEGO	0	0	6
SAN FRANCISCO	135	135	81
SAN FRANCISCO U	205	205	192
SANTA CATALINA	7	7	16
SANTA MARIA	113	113	99
STOCKTON	0	0	0
COLORADO			
ALAMOSA	8	8	65
COLORADO SPRINGS	0	0	9
DENVER	0	0	6
GRAND JUNCTION	0	0	0
PUEBLO	0	0	0
CONNECTICUT			
BRIDGEPORT	0	0	0
HARTFORD	0	0	0
NEW HAVEN	0	0	0
DELAWARE			
WILMINGTON	0	0	0
DIST.OF COLUMBIA			
WASH NATL AP	0	0	0
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	0	0	0
ATLANTA	0	0	0
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	0	0	0
SAVANNAH	0	0	0
IDAHO			
BOISE	7	7	0
IDAHO FALLS 42NW R	12	12	16
IDAHO FALLS 46W R	11	11	16
LEWISTON	18	18	0
POCATELLO	2	2	0
ILLINOIS			
CAIRO U	0	0	0
CHICAGO O HARE	1	1	0
CHICAGO MIDWAY	0	0	0
MOLINE	0	0	0
PEORIA	0	0	0
ROCKFORD	0	0	6
SPRINGFIELD	0	0	0
INDIANA			
EVANSVILLE	0	0	0
FORT WAYNE	1	1	0
INDIANAPOLIS	0	0	0
SOUTH BEND	4	4	0
IOWA			
BURLINGTON	0	0	0
DES MOINES	0	0	0
DUBUQUE	2	2	12
SIOUX CITY	0	0	0
WATERLOO	0	0	12
KANSAS			
CONCORDIA	0	0	0
DODGE CITY	0	0	0
GOODLAND	0	0	0
TOPEKA	0	0	0
WICHITA	0	0	0
KENTUCKY			
COVINGTON	0	0	0
LEXINGTON	0	0	0
LOUISVILLE	0	0	0
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	64	64	78
PORTLAND	19	19	12
MARYLAND			
BALTIMORE	0	0	0
MASSACHUSETTS			
BLUE HILL OBS R	1	1	0
BOSTON	0	0	0
NANTUCKET	8	8	12
PITTSFIELD	26	26	25
WORCESTER	4	4	6
MICHIGAN			
ALPENA	27	27	68
DETROIT	0	0	0
DETROIT M WAYNE CO	0	0	0
DETROIT WILLOW RUN	2	2	0
FLINT	13	13	16
GRAND RAPIDS	0	0	8
HOUGHTON LAKE	19	19	
LANSING	4	4	6
MARQUETTE U	24	24	59
MUSKEGON	1	1	12
SAULT STE MARIE	35	35	96
MINNESOTA			
DULUTH	36	36	71
INTERNATIONAL FALLS	9	9	71
MINNEAPOLIS	0	0	22
ROCHESTER	5	5	25
ST CLOUD	1	1	28
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	0	0	0
VICKSBURG U	0	0	0
MISSOURI			
COLUMBIA	0	0	0
KANSAS CITY	0	0	0
ST JOSEPH	0	0	0
ST LOUIS	0	0	0
SPRINGFIELD	0	0	0
MONTANA			
BILLINGS	0	0	6
GLASGOW	5	5	31
GREAT FALLS	7	7	28
HAVRE	3	3	28
HELENA	8	8	31
KALISPELL	68	68	50
MILES CITY	0	0	6
MISSOULA	23	23	34
NEBRASKA			
GRAND ISLAND	0	0	0
LINCOLN U	0	0	0
NORFOLK	0	0	9
NORTH PLATTE	0	0	0
OMAHA	0	0	0
SCOTTSBLUFF	0	0	0
VALENTINE	0	0	9
NEVADA			
ELKO	8	8	9
ELY	9	9	28
LAS VEGAS	0	0	0
RENO	45	45	43
WINNEMUCCA	12	12	0
NEW HAMPSHIRE			
CONCORD	6	6	6
MT WASHINGTON OBS	515	515	493
NEW JERSEY			
ATLANTIC CITY	0	0	0
ATLANTIC CITY U	0	0	0
NEWARK	0	0	0
TRENTON U	0	0	0
NEW MEXICO			
ALBUQUERQUE	0	0	0
CLAYTON	0	0	0
RATON	0	0	9
ROSWELL	0	0	0
SILVER CITY	0	0	0
NEW YORK			
ALBANY	3	3	0
BINGHAMTON	8	8	22
BUFFALO	7	7	19
NEW YORK U	0	0	0
J.F. KENNEDY	0	0	0
NEW YORK LA GUARDIA	0	0	0
ROCHESTER	0	0	9
SYRACUSE	6	6	6
NORTH CAROLINA			
ASHEVILLE	1	1	0
CAPE HATTERAS R	0	0	0
CHARLOTTE	0	0	0
GREENSBORO	0	0	0
RALEIGH	0	0	0
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	4	4	34
FARGO	0	0	28
WILLISTON	0	0	31
OHIO			
AKRON	3	3	0
CINCINNATI OBS	0	0	0
CLEVELAND	6	6	9
COLUMBUS	1	1	0
DAYTON	0	0	0
MANSFIELD	7	7	9
TOLEDO	1	1	0
YOUNGSTOWN	5	5	6
OKLAHOMA			
OKLAHOMA CITY	0	0	0
TULSA	0	0	0
OREGON			
ASTORIA	160	160	146
BURNS U	45	45	12
EUGENE	25	25	34
MEACHAM	174	174	84
MEDFORD	26	26	0
PENDLETON	19	19	0
PORTLAND	27	27	25
SALEM	44	44	37
SEXTON SUMMIT R	180	180	81
PENNSYLVANIA			
ALLENTOWN	0	0	0
ERIE	5	5	0
HARRISBURG	0	0	0
PHILADELPHIA	0	0	0
PITTSBURGH	2	2	0
PITTSBURGH U	0	0	0
READING U	0	0	0
SCRANTON	1	1	0
WILLIAMSPORT	5	5	0
RHODE ISLAND			
BLOCK ISLAND	0	0	0
PROVIDENCE	1	1	0
SOUTH CAROLINA			
CHARLESTON	0	0	0
CHARLESTON U	0	0	0
COLUMBIA	0	0	0
GNVLE-SPARTANBURG	0	0	0
SOUTH DAKOTA			
ABERDEEN	0	0	25
HURON	0	0	9
RAPID CITY	0	0	22
SIOUX FALLS	0	0	19
TENNESSEE			
BRISTOL	0	0	0
CHATTANOOGA	0	0	0
KNOXVILLE	0	0	0
MEMPHIS	0	0	0
NASHVILLE	0	0	0
OAK RIDGE	0	0	0
TEXAS			
ABILENE	0	0	0
AMARILLO	0	0	0
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	
DALLAS	0	0	
DEL RIO	0	0	0
EL PASO	0	0	0
FORT WORTH	0	0	0
GALVESTON U	0	0	0
HOUSTON U	0	0	
HOUSTON	0		
LUBBOCK	0	0	0
MIDLAND	0	0	
PORT ARTHUR	0	0	0
SAN ANGELO	0	0	
SAN ANTONIO	0	0	
VICTORIA	0	0	
WACO	0	0	0
WICHITA FALLS	0	0	0
UTAH			
MILFORD	0	0	
SALT LAKE CITY	0	0	
WENDOVER	0	0	0
VERMONT			
BURLINGTON	17	17	28
VIRGINIA			
LYNCHBURG	0	0	0
NORFOLK	0	0	0
RICHMOND	0	0	0
ROANOKE	0	0	0
WASHINGTON			
OLYMPIA	129	129	68
SEATTLE TACOMA	95	95	56
SPOKANE	30	30	9
STAMPEDE PASS R	346	346	273
TATOOSH ISLAND R	301	301	295
WALLA WALLA U	18	18	0
YAKIMA	30	30	0
WEST VIRGINIA			
BECKLEY	5	5	
CHARLESTON	0	0	0
ELKINS	15	15	9
HUNTINGTON	0	0	0
PARKERSBURG U	0	0	0
WISCONSIN			
GREEN BAY	10	10	28
LA CROSSE	1	1	12
MADISON	11	11	25
MILWAUKEE	4	4	43
WYOMING			
CASPER	0	0	6
CHEYENNE	0	0	19
LANDER	2	2	6
SHERIDAN	0	0	25

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

JULY 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama	1	1	0	0	4					0	0	5	0	1	0	5	0												
Alaska N																													
Arizona	2	2	0	0	4	0	0	0	4	0	1	5	0	1	4	0	0												
Arkansas						0	0	4	0	0	0	°4	C	1	0	0	0												
California	1	1	0	0	0					3	0	0	0	0	0	4	0												
Colorado	3	3	0	0	0	0	0	4	6	0	0	4	5													0	1	°4	C
Connecticut								3	4			5	4			5	0												
Delaware *																													
Florida										0	1	4	0	3	0	?	0									0	0	5	0
Georgia	5	4	0	5	5					0	18	5	0	0	0	3	0												
Hawaii																										0	2	°5	C
Idaho								4	5						1	2													
Illinois	1	1	0	0	5	0	0	3	5	0	1	5	4	2	0	4	0												
Indiana	6	4	0	0	4	0	0	4	4	1	12	5	4	1	2	5	0												
Iowa	5	3	0	0	5	0	0	5	5	0	4	6	6	0	1	4	0									0	0	5	5
Kansas	2	1	0	1	4	0	0	5	5	0	0	5	4	0	1	4	0									0	0	R 4	0
Kentucky	1	1	0	0			?	?	6		11	6	?		?	5													4
Louisiana	2	2	0	0	?					0	0	?	?	2	9	0	0												
Maine	1	1	0	0	3																								
Maryland						0	0	0	3	0	0	3	0	0	0	5	0												
Massachusetts						0	0	0	4	0	0	5	3	0	0	6	0												
Michigan	2	2	0	0	4					2	1	5	0	0	0	5	0												
Minnesota	13	6	0	4	5	0	0	4	5	0	0	6	5	0	0	4	2									0	0	4	4
Mississippi	2	2	0	0	5					1	0	5	?	1	0	0	0												
Missouri														0	0	5	0												
Montana	2	2	0	0	3	0	0	6	6	0	0	4	0	0	0	0	6												
Nebraska	1	1	0	0	4	0	0	4	6	0	0	5	4	0	1	4	0									2	0	0	0
Nevada *																													
New Hampshire	3	3	0	0	3	0	0	0	3																	0	3	2	0
New Jersey									2			2				2													
New Mexico	1	1	0	0	2	0	0	°?	C																				
New York									5		2	6	4	1	1	5													
North Carolina						0	0	5	6	0	2	5	4	1	4	5	0									0	0	4	4
North Dakota	12	6	0	0	5	0	0	7	6	0	10	4	4													4	0	5	5
Ohio	1	1	0	0	4					1	14	6		8	1	6										0	0	°7	C
Oklahoma	1	1	0	0	0					0	0	4	0	0	0	4	0												
Oregon						0	0	2	4	0	0	3	3	0	5	4	3									0	0	H 4	H 4
Pacific Area *																													
Pennsylvania										0	0	5	0	2	0	6	0									0	0	0	3
Puerto Rico *																													
Rhode Island								0	4			3	0			4	0												
South Carolina						0	0	2	4	1	2	5	2	0	1	3	0												
South Dakota	12	10	3	10	6	0	0	4	5	1	3	4	3																
Tennessee	1	1	0	0	4	0	0	4	5	0	5	6	4	1	10	6	3												
Texas	3	2	0	0	0									0	0	4	0									0	0	4	0
Utah *																													
Vermont						0	0	4	5	0	0	5	0	0	0	5	0												
U. S. Virgin Is. *																													
Virginia														2	1	0	0												
Washington N																													
West Virginia										0	0	4	0	0	4	4	0											3	
Wisconsin	13	3	0	10	6	0	0	0	5	0	4	6	6	2	0	6	0												
Wyoming	2	2	0	0	5	0	0	°4	C																				

° Includes crop damage
C Crop damage
R Rain
H Heavy rain
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:

1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

FLOOD STAGE DATA

(All dates in July unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From—	To—	Stage	Date
ST. LAWRENCE DRAINAGE	*Ft.*			*Ft.*	
Lake Erie					
Sandusky: Upper Sandusky, Ohio	13	14	14	13.2	14
ATLANTIC SLOPE DRAINAGE					
Satilla: Atkinson, Ga.	13	1	3	13.8	2
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Turkey: Garber, Iowa	17	14	16	21.0	14
Missouri Basin					
James: Stratford, S. Dak.	14	Mar. 25	14	16.75	Apr. 11
Missouri Basin	*Ft.*			*Ft.*	
Moniteau Creek: Fayette, Mo.	16	29	29	16.5	29
Ohio Basin					
Scioto: LaRue, Ohio	11	13	15	13.35	13
White Basin					
Cache: Patterson, Ark.	7	30	1/	7.3R	31
WEST GULF OF MEXICO DRAINAGE					
Trinity: Moss Bluff, Texas	4	Jun. 20			

* Provisional
1/ Continued at end of month
R Highest stage of record

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

JULY 1966

Elmer R. Nelson, Office of Hydrology

Flooding reported during July in the conterminous United States was mostly minor.

ST. LAWRENCE DRAINAGE

Lake Erie.--Minor flooding occurred on the Sandusky River at Upper Sandusky, Ohio, on the 14th. The small acreage flooded was planted in corn and soybeans and was well enough advanced to survive the high water without damage. This flooding was due to an intense storm early on the morning of the 12th which deposited 4.4 inches over the basin. Most of this rain occurred between the hours of 2 a.m. and 7 a.m.

ATLANTIC SLOPE DRAINAGE

The Satilla River at Atkinson, Ga., was out of its banks on July 1-3. It crested on the 2d, nearly 1 foot above flood stage. No damages were reported.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Heavy rains, which totaled as much as 5 inches on the 13th and 14th, caused the Turkey River at Garber, Iowa, to exceed flood stage from the 14th to the 16th. The crest on the 14th was 4 feet above flood stage. Approximately 9,000 acres were flooded. The total damage to crops, fences, and roads was estimated at $160,000. No urban damage was reported.

Missouri Basin.--The James River at Stratford, S. Dak., continued in flood from March 25 to July 14. It crested on April 11 at a stage of 16.75 feet, nearly 3 feet above flood stage. Damage from the flooding occurred in March, April, and the first half of May. There was no additional damage during July in the Stratford area.

The brief minor flooding on Moniteau Creek at Fayette, Mo., on the 29th was due to heavy afternoon thundershowers. There probably was some brief unreported local flooding on small streams near the heaviest rains.

Ohio Basin.--Minor flooding occurred on the Scioto River at La Rue, Ohio, from the 13-15th. This flooding was due to scattered thunderstorms from the 8th to the 14th. The heaviest rainfall occurred on the morning of the 12th. Stage forecasts and flood warnings were beneficial to several communities where the intensity of rainfall was so great as to generate concern for residential areas near the river. Stage forecasts for the lower Scioto were helpful to state highway projects involving bridge and highway construction.

White Basin.--Moderate to heavy rains over portions of the Cache River Basin on July 15-16, 19-20, 23-24, and again on the 29th, caused a slight overflow on the Cache River at Patterson, Ark. The river rose rather abruptly on the 28-29th, exceeding flood stage on the 30th. It was still rising at the end of the month. This small overflow did not cause any damage in July.

WEST GULF OF MEXICO DRAINAGE

Heavy rainfall on June 16-20 caused a slow rise along the lower Trinity. This rise continued downstream during the remainder of June, causing overflow at Moss Bluff, Tex., beginning on June 20 and continuing into July. No additional damage resulted from flooding during July.

Heavy rains up to 7 inches during the early morning of the 7th caused flash flooding on the extreme upper Frio River and tributaries in Texas. Flood warnings were issued in time so that vacationers and other persons could be evacuated from low-lying areas along the Frio River. Flooding occurred downstream, which closed low water crossings for 2 days. Heavily traveled highway U. S. 90 was closed for several hours at a low water crossing. Damages were confined largely to fences, road-washing, and loss of some livestock.

RAWINSONDE DATA

Average monthly values

JULY 1966

ALBANY, N. Y.
1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	86	18.2	82	204	3.5
1000	31	122			209	3.3
950	31	564	18.8	56	286	9.1
900	31	1,025	16.2	57	294	12.6
850	31	1,510	13.3	57	295	15.2
800	31	2,018	10.2	49	293	17.3
750	31	2,553	7.4	44	292	18.8
700	31	3,118	4.7	39	288	21.6
650	31	3,718	1.3	39	288	23.5
600	31	4,359	- 2.3	39	290	25.1
550	31	5,039	- 6.2	35	286	27.4
500	31	5,786	-11.1	30	286	29.9
450	31	6,584	-16.1	27	286	32.1
400	31	7,465	-22.3	27	285	33.6
350	31	8,433	-29.3	29	285	35.9
300	31	9,516	-37.3	27	284	40.6
250	31	10,753	-45.7		282	45.1
200	31	12,212	-53.4		288	50.1
175	31	13,066	-55.3		292	45.6
150	31	14,046	-57.0		293	35.4
125	31	15,194	-58.9		286	28.2
100	31	16,594	-58.6		293	16.3
80	31	18,002	-56.6		327	6.0
70	31	18,850	-55.5		17	3.5
60	30	19,840	-54.0		65	6.8
50	29	21,016	-52.2		89	11.7
40	29	22,466	-50.3		90	13.4
30	27	24,350	-47.8		88	17.3
25	27	25,558	-46.0		84	17.3
20	26	27,049	-43.7		86	20.0
15	17	28,997	-40.9		90	22.7
10						

ALBUQUERQUE, N. MEX.
840 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,619	20.1	62	92	2.9
1000	31	80				
950	31	531				
900	31	1,012				
850	31	1,513				
800	31	2,039	20.5	45	164	.8
750	31	2,592	17.6	45	224	3.3
700	31	3,180	13.4	49	256	4.7
650	31	3,795	8.6	57	261	4.7
600	31	4,456	3.5	62	237	3.1
550	31	5,151	- 1.6	65	194	2.1
500	31	5,908	- 6.4	62	202	2.1
450	31	6,720	-10.8	50	204	4.5
400	31	7,624	-16.4	41	214	5.2
350	31	8,615	-23.2	40	207	6.2
300	31	9,725	-31.5	36	216	7.8
250	31	10,989	-41.6	37	212	9.9
200	31	12,465	-53.0		208	13.6
175	30	13,314	-59.1		209	14.2
150	30	14,266	-65.4		208	12.6
125	30	15,358	-71.4		199	9.9
100	28	16,668	-71.6		156	5.6
80	27	18,005	-65.0		109	8.2
70	26	18,827	-61.7		94	11.5
60	26	19,786	-59.0		89	15.9
50	26	20,937	-55.8		94	20.2
40	24	22,363	-53.1		91	21.6
30	22	24,226	-49.8		86	24.5
25	21	25,426	-47.7		88	27.6
20	21	26,906	-45.2		90	28.9
15	13	28,838	-42.3			
10						

AMARILLO, TEXAS
891 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,095	21.8	68	176	8.2
1000	30	81				
950	30	533				
900	30	1,016				
850	30	1,511	23.1	54	212	17.7
800	30	2,038	20.1	55	225	14.0
750	30	2,592	16.3	58	247	9.1
700	30	3,175	12.0	63	274	5.1
650	30	3,789	7.4	65	311	1.7
600	30	4,447	2.9	67	17	1.4
550	30	5,141	- 1.7	64	1	2.3
500	30	5,900	- 5.8	53	1	2.9
450	30	6,715	-10.1	43	340	2.7
400	30	7,619	-15.9	37	320	3.7
350	30	8,612	-22.9	36	325	4.5
300	30	9,724	-31.0	34	335	4.1
250	30	10,991	-40.9	45	348	4.9
200	30	12,471	-52.5		1	5.6
175	30	13,322	-58.9		21	3.9
150	30	14,274	-65.6		33	3.1
125	30	15,365	-71.4		18	4.7
100	29	16,674	-72.5		75	7.4
80	29	18,010	-65.1		92	11.1
70	29	18,829	-62.0		89	13.8
60	28	19,787	-59.1		90	16.3
50	28	20,938	-56.1		93	20.6
40	27	22,365	-53.4		93	22.7
30	27	24,230	-50.1		87	25.8
25	27	25,426	-48.2		87	28.0
20	24	26,902	-46.0		83	31.7
15	15	28,820	-42.3			
10						

ANCHORAGE, ALASKA
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	29	11.9	78	178	4.9
1000	31	134	12.5	74	179	6.4
950	31	564	10.7	71	181	7.0
900	31	1,013	8.3	73	175	6.6
850	31	1,483	5.5	79	169	7.4
800	31	1,976	2.9	73	175	7.[illegible]
750	31	2,494	.6	68	178	7.8
700	31	3,047	- 3.0	64	195	8.5
650	31	3,626	- 6.1	59	207	10.5
600	31	4,253	- 9.5	58	216	12.6
550	31	4,917	-13.3	50	222	14.2
500	31	5,640	-17.9	45	226	15.7
450	31	6,417	-23.2	46	230	18.3
400	31	7,273	-29.3	43	236	22.0
350	31	8,212	-36.2	43	237	25.6
300	31	9,265	-43.8		240	28.9
250	31	10,469	-50.8		243	31.7
200	31	11,915	-50.5		242	24.5
175	31	12,790	-48.6		245	19.0
150	30	13,805	-48.7		251	15.5
125	30	15,002	-48.6		248	10.9
100	30	16,468	-48.6		238	7.0
80	30	17,937	-48.2		218	3.3
70	30	18,816	-48.1		183	1.9
60	30	19,833	-47.9		104	3.1
50	30	21,036	-47.5		92	4.9
40	29	22,511	-46.5		99	7.6
30	28	24,422	-45.1		84	9.7
25	27	25,646	-43.5		86	14.8
20	25	27,160	-41.5		94	17.3
15	25	29,123	-38.6		91	19.2
10	16	31,942	-33.8		90	22.5

* ANNETTE, ALASKA
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	37	12.4	88	278	1.7
1000	31	146	12.5	85	315	2.7
950	31	577	11.1	80	334	4.5
900	31	1,027	9.1	76	331	4.1
850	31	1,500	7.5	69	312	4.5
800	31	1,998	5.3	60	309	4.1
750	31	2,521	2.6	59	312	5.6
700	31	3,079	- .4	54	309	7.0
650	31	3,666	- 3.5	45	307	8.4
600	31	4,298	- 7.1	41	318	10.5
550	31	4,966	-11.5	43	320	11.5
500	31	5,697	-15.9	37	322	13.0
450	31	6,478	-21.4	39	317	14.2
400	31	7,345	-27.5	38	319	16.1
350	31	8,290	-34.7	38	328	18.6
300	31	9,347	-43.1	36	328	21.2
250	31	10,551	-51.9		333	22.9
200	31	11,984	-53.7		326	16.5
175	31	12,845	-51.7		315	12.2
150	31	13,847	-50.9		310	8.5
125	31	15,035	-50.6		295	5.6
100	31	16,489	-50.5		278	3.1
80	30	17,942	-50.7		73	1.7
70	29	18,814	-50.8		82	3.1
60	29	19,819	-50.6		85	4.7
50	29	21,008	-50.2		84	8.2
40	29	22,469	-49.0		87	10.5
30	26	24,364	-47.2		81	13.[illegible]
25	26	25,574	-45.8		87	15.0
20	24	27,071	-43.2		84	17.9
15	24	29,024	-39.6		87	21.0
10	17	31,822	-34.3		85	23.9

ATHENS, GA.
988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	21.2	94	330	1.7
1000	31	139				
950	31	585	22.9	71	338	5.2
900	31	1,057	20.8	67	356	5.4
850	31	1,550	17.9	65	360	5.1
800	31	2,067	14.7	61	1	5.2
750	31	2,604	11.4	57	336	5.1
700	31	3,183	8.3	51	331	7.4
650	31	3,787	4.8	44	341	6.8
600	31	4,441	1.0	40	340	7.6
550	31	5,131	- 2.6	36	335	6.0
500	31	5,886	- 6.7	34	331	7.2
450	31	6,696	-11.5	28	337	9.1
400	31	7,595	-17.5	29	343	11.5
350	31	8,582	-24.4	28	348	12.8
300	31	9,686	-32.7	27	351	15.0
250	31	10,944	-42.5		349	17.3
200	31	12,415	-53.4		351	20.4
175	31	13,263	-58.9		352	22.7
150	31	14,219	-63.9		356	20.0
125	31	15,323	-68.5		2	16.7
100	30	16,655	-68.1		36	10.7
80	30	18,010	-63.7		60	12.6
70	30	18,834	-60.8		71	14.8
60	30	19,800	-58.0		78	18.6
50	30	20,957	-55.2		87	23.3
40	30	22,390	-52.8		91	27.0
30	30	24,262	-49.1		91	27.6
25	29	25,466	-46.5		93	29.3
20	28	26,953	-44.5		87	30.7
15	19	28,890	-42.5		88	35.4
10						
7						

* BARROW, ALASKA
1012 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	1.5	98	102	2.5
1000	31	106	1.9	95	125	2.1
950	31	523	4.2	79	213	4.7
900	31	962	3.0	78	247	8.7
850	31	1,424	1.3	78	236	11.7
800	31	1,910	- .8	72	234	11.5
750	31	2,422	- 3.4	71	229	14.4
700	31	2,967	- 6.1	67	232	14.4
650	31	3,539	- 9.1	62	233	14.6
600	31	4,160	-12.7	57	232	16.3
550	31	4,814	-16.8	58	235	17.1
500	31	5,529	-21.4	55	245	18.6
450	31	6,295	-26.6	52	247	18.6
400	31	7,140	-32.7	48	253	20.6
350	31	8,067	-39.5	46	254	22.1
300	31	9,107	-46.3		252	24.3
250	31	10,306	-49.4		256	23.9
200	31	11,788	-44.2		253	16.3
175	31	12,684	-43.6		249	13.0
150	31	13,721	-43.6		257	8.9
125	31	14,946	-43.7		258	8.5
100	31	16,444	-43.9		252	4.9
80	31	17,942	-43.7		233	1.2
70	31	18,838	-43.6		165	.8
60	31	19,874	-43.5		121	1.7
50	31	21,100	-43.5		100	4.5
40	31	22,602	-42.9		82	6.2
30	31	24,546	-41.9		88	9.7
25	31	25,783	-40.9		87	11.5
20	31	27,304	-39.5		89	12.4
15	29	29,285	-36.4		89	13.8
10	24	32,119	-31.4		87	15.0
7	10	34,656	-27.1		78	15.0

BARTER IS., ALASKA
1012 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	15	3.4	91	85	1.2
1000	30	110	4.9	91	175	.4
950	30	536	7.8	73	275	4.9
900	30	977	6.8	67	275	7.8
850	30	1,446	4.4	68	266	8.0
800	30	1,937	1.2	70	261	8.9
750	30	2,454	- 2.1	71	249	9.9
700	30	3,000	- 5.4	69	247	10.5
650	30	3,575	- 8.8	63	243	10.7
600	30	4,195	-12.3	52	240	12.2
550	30	4,850	-16.4	48	244	13.2
500	30	5,567	-21.0	47	245	16.3
450	30	6,334	-26.2	41	243	16.3
400	30	7,180	-32.3	33	245	18.1
350	30	8,109	-39.0	32	243	21.0
300	30	9,151	-45.5		242	22.0
250	30	10,354	-49.6		239	25.4
200	30	11,826	-45.0		244	18.6
175	30	12,721	-44.4		246	14.0
150	30	13,754	-44.3		252	10.5
125	30	14,975	-44.6		259	8.9
100	30	16,469	-44.3		254	5.4
80	30	17,964	-44.2		249	2.7
70	30	18,858	-44.2		214	2.3
60	30	19,891	-44.1		126	2.5
50	30	21,115	-43.9		85	3.5
40	30	22,615	-43.3		79	6.2
30	30	24,558	-41.9		84	11.3
25	29	25,798	-40.7		90	11.3
20	29	27,322	-39.3		93	12.0
15	29	29,304	-36.9		92	13.8
10	18	32,132	-33.0		86	17.3
7						

BETHEL, ALASKA
1009 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	39	9.7	93	203	3.9
1000	31	112	10.2	86	192	4.7
950	31	537	8.1	82	180	10.3
900	31	983	5.8	81	182	11.7
850	31	1,450	3.8	81	184	9.9
800	31	1,941	1.4	80	183	10.3
750	31	2,456	- 1.2	77	184	10.3
700	31	3,006	- 3.8	68	192	10.1
650	31	3,585	- 6.5	65	199	9.9
600	31	4,212	- 9.8	52	205	9.9
550	31	4,874	-14.1	53	209	10.9
500	31	5,595	-18.[illegible]	45	208	12.2
450	31	6,368	-24.2	40	212	12.2
400	31	7,221	-30.3	39	214	12.8
350	30	8,149	-37.4	34	218	14.2
300	30	9,198	-44.2		224	18.1
250	30	10,403	-50.2		228	18.6
200	30	11,862	-48.7		233	16.1
175	30	12,744	-47.0		230	14.0
150	30	13,765	-47.3		230	12.6
125	30	14,970	-47.6		224	10.3
100	30	16,444	-47.7		217	6.0
80	30	17,915	-48.0		183	3.3
70	30	18,795	-48.1		143	3.1
60	30	19,810	-48.0		127	4.7
50	30	21,012	-47.8		106	6.[illegible]
40	30	22,485	-47.3		93	9.1
30	29	24,388	-46.1		95	11.3
25	29	25,602	-44.9		86	14.8
20	29	27,098	-43.2		92	16.5
15	26	29,053	-40.4		93	17.7
10	14	31,811	-36.6		90	21.2
7	5	34,314	-32.8			

BISMARCK, N. DAK.
954 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	505	16.2	86	104	2.3
1000	31	102				
950	31	542	17.0	83	117	3.7
900	31	1,009	20.5	62	188	[illegible].0
850	31	1,502	18.7	53	216	7.6
800	31	2,021	16.2	46	230	8.7
750	31	2,560	12.7	44	250	9.9
700	31	3,142	8.7	45	266	12.6
650	31	3,744	4.3	45	272	15.5
600	31	4,398	- .1	43	275	20.2
550	31	5,077	- 5.1	47	278	25.1
500	31	5,830	- 9.9	38	278	28.7
450	31	6,625	-15.2	37	276	29.9
400	31	7,516	-21.1	35	273	35.5
350	31	[illegible],489	-27.9	30	274	43.7
300	31	9,577	-36.0	31	272	47.4
250	31	10,819	-44.9		270	55.9
200	31	12,281	-53.2		271	65.1
175	30	13,137	-56.5		269	62.9
150	30	14,107	-59.[illegible]		270	53.8
125	30	15,239	-61.7		272	36.3
100	30	16,621	-60.8		271	16.5
80	30	18,018	-57.5		283	5.6
70	29	18,862	-56.0		328	1.2
60	29	19,846	-54.6		71	4.7
50	29	21,017	-52.9		82	9.3
40	29	22,463	-50.2		87	10.7
30	29	24,352	-47.7		87	13.2
25	28	25,557	-46.0		85	14.2
20	28	27,047	-44.4		82	14.0
15	19	28,987	-41.6		93	17.5
10	5	31,713	-38.5			
7						

BOISE, IDAHO
913 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	868	15.3	49	168	3.1
1000	31	85				
950	31	529				
900	31	993	17.9	42	227	1.7
850	31	1,484	19.8	31	314	7.0
800	31	2,003	17.0	30	311	7.0
750	31	2,548	13.4	30	270	6.0
700	31	3,125	9.3	32	234	9.7
650	31	3,734	4.8	34	224	16.5
600	31	4,382	- .1	35	223	23.5
550	31	5,066	- 5.5	39	223	30.1
500	31	5,813	-11.0	36	220	31.5
450	31	6,614	-16.7	34	224	33.8
400	31	7,489	-23.0	32	225	35.9
350	31	8,454	-30.3	32	225	41.8
300	31	9,533	-38.0	28	227	49.9
250	31	10,767	-46.6		225	58.3
200	31	12,223	-53.3		226	61.8
175	31	13,079	-55.1		227	57.3
150	31	14,058	-57.5		229	48.8
125	31	15,204	-59.5		232	32.2
100	31	16,597	-60.6		219	16.3
80	31	17,992	-58.3		198	7.6
70	31	18,835	-56.7		157	4.5
60	31	19,815	-55.1		105	5.1
50	31	20,982	-53.7		98	8.5
40	31	22,422	-51.6		94	11.3
30	30	24,304	-48.7		88	13.0
25	28	25,508	-46.6		87	14.8
20	24	26,992	-44.5		88	16.9
15	18	28,938	-41.9		84	19.2
10	6	31,685	-36.2			
7						
5						

* BOOTHVILLE, LA.
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1	25.9	90	228	2.1
1000	31	131	26.1	86	235	2.9
950	31	584	23.2	83	242	4.7
900	31	1,054	20.5	76	224	4.5
850	31	1,546	17.8	71	190	3.7
800	31	2,063	14.8	67	160	3.9
750	31	2,605	11.7	66	126	2.9
700	31	3,182	8.7	55	110	2.7
650	31	3,789	5.0	53	99	2.7
600	31	4,441	1.3	51	75	3.3
550	31	5,133	- 2.5	48	63	3.3
500	31	5,888	- 6.4	42	56	5.2
450	31	6,704	-11.2	35	60	7.4
400	31	7,600	-17.1	31	47	8.5
350	31	8,588	-23.9	27	38	9.7
300	31	9,695	-32.3	27	41	10.7
250	31	10,954	-42.2		42	11.5
200	31	12,426	-53.4		48	14.4
175	31	13,273	-59.4		47	15.7
150	31	14,224	-65.2		50	17.9
125	31	15,319	-70.1		48	21.8
100	30	16,638	-70.9		66	20.4
80	30	17,975	-65.6		78	20.2
70	30	18,791	-62.8		79	21.6
60	30	19,747	-59.6		80	25.8
50	30	20,894	-56.7		87	31.5
40	30	22,317	-54.1		91	34.4
30	30	24,174	-50.8		92	35.2
25	30	25,367	-48.1		89	35.7
20	30	26,844	-45.8		84	37.5
15	28	28,778	-42.3		84	42.0
10	19	31,541	-38.0		88	49.7
7	5	34,007	-33.3			
5						

* BROWNSVILLE, TEXAS
1012 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	7	24.3	94	134	3.7
1000	31	112	25.1	91	145	9.3
950	31	569	22.8	88	164	16.5
900	31	1,035	20.4	74	169	16.5
850	31	1,528	18.0	64	166	14.2
800	31	2,045	15.1	60	158	10.3
750	31	2,589	12.3	52	144	8.5
700	31	3,166	9.2	48	131	7.6
650	31	3,777	5.7	46	119	6.4
600	31	4,427	1.9	45	114	5.4
550	31	5,118	- 2.0	42	98	6.2
500	31	5,877	- 6.5	43	86	8.7
450	31	6,689	-11.5	39	82	11.5
400	31	7,587	-17.6	37	77	11.5
350	31	8,573	-24.5	32	71	12.4
300	31	9,677	-32.7	26	70	13.0
250	31	10,936	-42.4		70	13.8
200	31	12,407	-54.0		74	20.0
175	31	13,252	-60.3		73	20.4
150	31	14,199	-66.4		74	21.2
125	31	15,285	-72.3		71	22.7
100	31	16,592	-72.7		73	25.4
80	31	17,918	-67.5		86	24.7
70	31	18,727	-64.6		86	27.0
60	31	19,675	-61.5		84	31.3
50	31	20,813	-58.6		86	35.5
40	31	22,223	-56.0		89	39.6
30	30	24,070	-52.4		91	41.2
25	30	25,253	-50.6		89	42.2
20	30	26,721	-46.3		88	45.5
15	29	28,650	-42.6		86	46.4
10	19	31,401	-40.1		88	49.5
7						
5						

BUFFALO, N. Y.
990 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	218	18.0	82	220	4.5
1000	31	127				
950	31	567	19.6	58	271	5.4
900	31	1,032	17.0	55	294	9.5
850	31	1,518	13.8	56	299	13.2
800	31	2,027	10.7	56	296	15.3
750	31	2,562	7.9	49	296	19.4
700	31	3,128	4.9	41	296	21.4
650	31	3,729	1.6	36	295	22.1
600	31	4,370	- 2.0	32	297	23.1
550	31	5,053	- 6.0	31	301	26.0
500	31	5,798	-10.5	29	298	29.7
450	31	6,597	-15.6	30	298	33.0
400	31	7,480	-22.0	31	301	33.6
350	31	8,449	-28.6	29	301	37.3
300	31	9,534	-36.8	28	305	42.9
250	31	10,772	-45.5		305	47.2
200	31	12,234	-52.7		304	51.1
175	31	13,092	-54.9		306	48.4
150	31	14,070	-57.7		303	39.0
125	31	15,214	-59.9		301	29.7
100	30	16,607	-58.5		305	17.9
80	29	18,014	-56.9		327	10.3
70	29	18,861	-55.5		8	6.2
60	28	19,851	-53.7		48	7.0
50	28	21,027	-51.9		75	9.1
40	27	22,481	-50.2		82	12.6
30	27	24,371	-47.3		85	15.9
25	26	25,582	-45.6		86	17.1
20	23	27,069	-43.2		84	19.6
15	17	29,021	-40.2		88	16.9
10	8	31,806	-36.8			
7						
5						

*CANTON IS., PACIFIC AREA
+ 1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	29.8	70	99	11.1
1000	31	78	28.5	69	98	11.7
950	31	520	23.5	72	95	15.0
900	31	1,002	20.5	69	94	17.5
850	31	1,494	18.2	60	92	19.0
800	31	2,012	15.7	53	90	16.9
750	31	2,555	13.4	46	89	16.9
700	31	3,136	10.6	39	85	17.7
650	31	3,746	7.4	37	86	16.7
600	31	4,405	3.6	37	89	18.1
550	31	5,101	- .3	35	84	18.5
500	31	5,864	- 4.2	29	82	17.1
450	31	6,682	- 9.2	25	85	16.9
400	30	7,591	-14.9	26	95	15.2
350	30	8,587	-22.0	27	96	14.4
300	30	9,703	-30.3	26	87	13.4
250	30	10,972	-40.8		78	9.3
200	30	12,451	-53.1		77	6.6
175	30	13,298	-60.2		81	5.4
150	29	14,241	-67.8		60	3.7
125	29	15,317	-75.6		86	4.7
100	29	16,591	-78.6		103	12.4
80	29	17,886	-71.0		101	12.4
70	29	18,685	-66.3		91	4.3
60	29	19,627	-62.2		294	7.6
50	29	20,765	-58.4		273	14.4
40	29	22,177	-55.7		270	22.7
30	29	24,032	-50.8		272	33.8
25	28	25,226	-48.4		270	36.3
20	27	26,704	-45.9		269	35.7
15	26	28,629	-43.2		270	26.8
10	21	31,367	-40.6		73	2.5
7	18	33,824	-35.2		75	19.2
5	[illegible]	36,233	-30.1			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	23.8	90	226	1.9
1000	31	125	23.7	85	221	3.1
950	31	570	21.6	77	257	6.2
900	31	1,041	19.1	71	270	5.2
850	31	1,531	16.4	66	273	5.1
800	31	2,045	13.6	59	276	6.2
750	31	2,582	10.5	57	276	6.6
700	31	3,159	7.4	55	271	8.2
650	31	3,762	4.0	50	277	7.[illegible]
600	31	4,413	.7	41	278	10.7
550	31	5,096	- 3.2	36	276	9.9
500	31	5,856	- 7.5	33	280	12.4
450	31	6,664	-12.5	29	285	14.4
400	31	7,560	-18.4	32	282	14.8
350	31	8,543	-25.3	34	282	16.9
300	31	9,645	-33.2	31	288	17.7
250	31	10,901	-42.8		296	20.0
200	30	12,368	-53.9		310	24.5
175	30	13,216	-59.0		314	22.0
150	30	14,172	-63.3		318	20.0
125	30	15,285	-66.2		324	15.2
100	30	16,639	-65.1		338	8.5
80	30	18,011	-61.4		47	7.6
70	30	18,842	-59.6		68	11.5
60	30	19,810	-57.4		81	16.1
50	30	20,968	-54.9		83	19.0
40	30	22,403	-52.1		88	24.9
30	30	24,280	-48.6		93	27.4
25	28	25,480	-46.7		90	27.6
20	26	26,964	-44.3		86	30.9
15	24	28,903	-41.7		87	34.2
10	9	31,661	-37.0			
7						
5						

* CARIBOU, ME.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	191	14.2	85	231	3.3
1000	31	91				
950	31	526	14.9	64	257	9.9
900	31	982	12.5	61	276	13.8
850	31	1,459	9.6	59	280	15.5
800	31	1,959	6.5	58	280	17.3
750	31	2,486	3.7	55	278	19.8
700	31	3,044	.8	52	276	22.1
650	31	3,635	- 1.8	49	275	24.9
600	31	4,270	- 5.5	46	274	26.4
550	31	4,942	- 9.6	44	273	27.8
500	31	5,677	-14.3	40	271	30.5
450	31	6,461	-19.6	39	270	33.4
400	31	7,333	-25.4	36	268	37.1
350	31	8,288	-32.4	32	269	38.1
300	31	9,357	-39.9	31	268	42.0
250	31	10,583	-46.9		270	44.3
200	30	12,049	-50.7		266	46.2
175	29	12,915	-50.3		270	36.1
150	29	13,919	-51.1		262	35.2
125	29	15,101	-52.4		271	24.7
100	29	16,538	-53.4		267	14.8
80	29	17,976	-52.4		256	4.9
70	29	18,839	-52.0		242	2.7
60	29	19,840	-50.7		106	5.1
50	29	21,028	-49.7		96	6.6
40	29	22,491	-48.5		103	10.9
30	29	24,392	-46.2		94	16.3
25	29	25,606	-44.8		93	17.9
20	29	27,104	-42.9		87	19.4
15	25	29,077	-39.4		87	24.5
10	19	31,893	-33.9		93	28.2
7						
5						

CHARLESTON, S. C.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	13	23.2	88	276	1.2
1000	31	129	23.3	85	286	1.6
950	31	580	22.3	77	279	3.1
900	31	1,048	20.1	73	288	2.7
850	31	1,540	17.1	73	295	3.7
800	31	2,056	14.1	67	297	4.1
750	31	2,596	11.1	61	308	5.1
700	31	3,172	7.7	54	307	5.6
650	31	3,777	4.4	53	317	6.6
600	31	4,428	1.0	50	313	5.4
550	31	5,121	- 2.6	43	313	6.0
500	30	5,876	- 6.5	34	317	7.8
450	30	6,667	-11.6	29	322	8.4
400	30	7,587	-17.9	27	321	8.2
350	30	8,572	-24.7	28	318	10.1
300	30	9,676	-32.9	26	322	11.1
250	30	10,933	-42.8		333	13.6
200	30	12,402	-53.9		342	17.9
175	30	13,249	-59.6		344	20.0
150	30	14,201	-64.4		353	20.2
125	30	15,304	-68.4		8	17.7
100	30	16,638	-68.3		30	10.7
80	30	17,992	-63.8		59	13.2
70	30	18,814	-61.3		69	15.9
60	30	19,775	-58.7		78	20.0
50	30	20,929	-55.4		89	26.2
40	30	22,362	-52.3		93	29.7
30	29	24,240	-48.9		93	29.7
25	28	25,445	-46.5		92	29.9
20	26	26,926	-44.8		89	30.1
15	18	28,853	-42.5		87	35.5
10						
7						
5						

CHIHUAHUA, MEXICO
857 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,428	20.5	68	314	1.0
1000	31	69				
950	31	516				
900	31	998				
850	31	1,499	20.9	62	321	1.0
800	31	2,024	20.[illegible]	50	157	1.6
750	31	2,575	16.3	53	132	4.5
700	31	3,158	11.8	60	113	4.9
650	31	3,772	[illegible].3	67	79	7.4
600	31	4,426	2.4	66	67	12.4
550	31	5,118	- 1.9	61	65	14.0
500	31	5,875	- 6.[illegible]	[illegible]	94	15.3
450	31	6,687	-10.[illegible]	41	[illegible]	15.2
400	31	7,589	-16.1	35	102	14.3
350	31	8,581	-23.[illegible]	34	93	12.8
300	31	9,670	-31.[illegible]	[illegible]	89	13.8
250	31	10,954	-41.4		83	15.7
200	31	12,432	-52.5		86	17.7
175	31	13,282	-58.7		89	17.7
150	31	14,235	-65.1		92	19.[illegible]
125	31	15,328	-71.[illegible]		94	20.[illegible]
100	31	16,639	-72.4		[illegible]	20.0
80	28	17,970	-67.1		89	21.4
70	26	18,782	-64.3		86	25.3
60	26	19,734	-59.0		89	27.2
50	25	20,879	-58.0		92	31.1
40	23	22,295	-55.7		96	34.4
30	21	24,148	-51.4		90	40.2
25	17	25,333	-48.8		89	36.9
20	15	26,805	-46.9		87	37.9
15	8	28,719	-43.7			
10						
7						
5						

* COLD BAY, ALASKA
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	7.9	90	[illegible]	[illegible]
1000	31	116	7.7	91	180	9.1
950	31	538	7.2	[illegible]	166	[illegible]
900	31	982	6.0	87	206	7.6
850	31	1,451	4.9	[illegible]	[illegible]	7.[illegible]
800	31	1,945	3.2	[illegible]	[illegible]	10.1
750	31	2,463	1.3	65	[illegible]	11.8
700	31	3,020	- 1.4	61	[illegible]	15.2
650	31	3,602	- 4.1	51	231	16.1
600	31	4,235	- 7.5	45	233	19.8
550	31	4,901	-11.3	44	233	22.[illegible]
500	31	[illegible]	-16.0	[illegible]	[illegible]	[illegible]
450	31	6,411	-21.6	39	237	23.7
400	31	7,276	-27.[illegible]	[illegible]	237	26.6
350	31	8,221	-35.0	40	241	29.[illegible]
300	31	[illegible]	-42.8		245	33.4
250	31	10,488	-50.0		245	35.7
200	31	[illegible]	-50.7		[illegible]	28.0
175	31	[illegible]	-49.2		247	20.[illegible]
150	31	13,823	-49.2		[illegible]	15.[illegible]
125	31	[illegible]	-49.7		[illegible]	11.[illegible]
100	31	16,477	-47.6		230	7.6
80	31	17,[illegible]	-49.4		[illegible]	3.9
70	31	[illegible]	-49.[illegible]		[illegible]	1.7
60	31	19,821	-49.4		104	[illegible].9
50	30	21,015	-49.3		105	4.7
40	30	[illegible]	-48.7		100	[illegible].8
30	30	24,377	-47.1		[illegible]	10.1
25	[illegible]	[illegible]	-45.7		[illegible]	11.1
20	28	[illegible]	-43.4		[illegible]	13.6
15	25	[illegible]	-40.[illegible]		87	16.1
10	19	31,841	-36.1		[illegible]	22.1
7	13	[illegible]	-33.0			
5	5	36,677	-31.1			

COLUMBIA, MO.
987 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	238	22.6	76	136	3.5
1000	31	119				
950	31	570	24.1	64	209	7.0
900	31	1,041	21.8	63	238	8.4
850	31	1,535	18.7	64	247	8.5
800	31	2,054	15.5	63	253	7.4
750	31	2,594	12.4	56	253	6.0
700	31	3,174	8.9	52	256	4.5
650	31	3,781	5.4	44	273	3.7
600	31	4,434	1.9	39	289	5.6
550	31	5,125	- 1.8	34	298	4.7
500	31	5,883	- 6.2	31	313	6.2
450	31	6,695	-11.8	29	305	[illegible].4
400	31	7,592	-17.8	31	316	12.0
350	31	[illegible],578	-24.6	27	316	18.1
300	31	9,683	-33.5	26	314	22.1
250	31	10,944	-41.9		318	27.0
200	31	12,420	-52.7		320	32.8
175	31	13,271	-58.2		323	34.8
150	31	14,228	-64.0		327	32.8
125	31	15,330	-68.7		330	25.4
100	31	16,662	-68.5		339	11.8
80	31	18,016	-63.5		25	[illegible].0
70	31	18,841	-60.7		56	10.1
60	31	19,805	-58.1		76	12.6
50	31	20,962	-55.0		82	15.2
40	31	22,397	-52.2		88	17.5
30	30	24,271	-49.2		89	19.8
25	26	25,478	-47.6		88	21.0
20	24	26,959	-45.6		83	24.5
15	20	28,886	-42.5		84	29.5
10	6	31,653	-37.7			

DAYTON, OHIO
981 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	297	19.3	85	113	.8
1000	31	133				
950	31	580	21.7	66	250	4.7
900	31	1,046	19.5	62	290	7.4
850	31	1,537	16.2	61	300	9.5
800	31	2,050	13.2	60	300	12.0
750	31	2,586	10.1	53	295	13.0
700	31	3,162	7.2	45	294	13.6
650	31	3,767	3.9	37	303	14.4
600	31	4,415	.4	33	304	16.3
550	31	5,102	- 3.7	31	309	15.2
500	31	5,855	- 8.2	29	306	18.1
450	31	6,664	-13.3	25	310	22.0
400	31	7,555	-19.3	24	309	24.7
350	31	8,534	-26.4	22	308	29.1
300	31	9,631	-34.4	25	310	34.8
250	30	10,878	-43.6		314	43.7
200	30	12,346	-53.4		318	47.4
175	30	13,198	-57.3		317	43.3
150	30	14,162	-62.0		317	39.6
125	30	15,279	-65.4		320	32.6
100	30	16,637	-64.4		320	19.4
80	29	18,009	-61.0		355	9.9
70	29	18,842	-59.0		42	9.5
60	29	19,814	-56.3		66	10.5
50	29	20,978	-53.8		80	13.6
40	29	22,420	-51.4		84	16.7
30	29	24,300	-48.5		84	19.4
25	27	25,507	-46.8		83	20.8
20	26	26,993	-44.[illegible]		86	23.9
15	16	28,931	-42.1		81	25.8
10						

DEL RIO, TEXAS
977 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	314	25.4	75	120	7.8
1000	31	104				
950	31	561	23.9	79	137	13.8
900	31	1,030	21.2	83	165	19.6
850	31	1,526	19.1	76	161	15.0
800	31	2,046	16.1	72	145	12.4
750	31	2,592	13.4	60	130	9.9
700	31	3,173	10.3	51	114	8.7
650	31	3,784	7.0	45	90	8.0
600	31	4,441	3.1	42	75	7.0
550	31	5,131	- 1.2	40	79	7.2
500	31	5,895	- 5.9	38	88	8.2
450	31	6,704	-10.6	31	84	9.5
400	31	7,612	-16.5	31	73	12.0
350	31	8,603	-23.2	28	70	14.8
300	31	9,713	-31.2	28	67	16.5
250	31	10,979	-41.1	23	66	17.7
200	31	12,457	-52.6		70	18.8
175	31	13,307	-58.9		73	21.4
150	31	14,257	-65.6		72	21.8
125	31	15,349	-71.7		72	21.0
100	31	16,655	-73.3		77	23.1
80	31	17,983	-66.0		86	22.5
70	31	18,795	-63.5		85	22.0
60	31	19,748	-60.1		81	23.9
50	31	20,892	-58.2		84	28.6
40	29	22,306	-55.4		90	36.9
30	29	24,158	-50.7		90	39.4
25	27	25,346	-48.2		86	38.3
20	27	26,825	-45.5		85	38.5
15	17	28,758	-42.5		86	42.0
10						

DENVER, COLO.
839 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,611	17.6	69	201	4.1
1000	31	81				
950	31	530				
900	31	1,006				
850	31	1,501				
800	31	2,023	20.[illegible]	49	248	5.6
750	31	2,576	18.0	43	251	4.3
700	31	3,166	14.1	43	251	4.5
650	31	3,784	9.5	43	272	5.4
600	31	4,445	4.3	49	270	7.0
550	31	5,138	- 1.4	56	260	6.8
500	31	5,899	- 6.5	54	260	9.1
450	31	6,715	-11.4	47	261	11.5
400	31	7,611	-16.5	40	260	15.9
350	31	8,601	-23.6	36	251	20.6
300	31	9,709	-31.8	35	251	25.8
250	31	10,972	-41.5	22	247	32.6
200	31	12,449	-52.7		247	35.4
175	31	13,300	-58.5		246	35.2
150	31	14,255	-64.5		247	31.1
125	31	15,354	-69.6		249	23.1
100	31	16,679	-68.9		240	9.1
80	31	18,034	-62.1		152	4.5
70	31	18,864	-59.5		104	6.8
60	30	19,834	-57.0		84	10.5
50	30	20,997	-54.0		87	14.0
40	30	22,435	-52.2		82	16.3
30	30	24,310	-49.5		92	19.2
25	30	25,511	-47.4		87	21.2
20	28	26,998	-44.7		82	24.9
15	23	28,944	-42.0		85	24.5
10	11	31,711	-38.0			

DODGE CITY, KANS.
924 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	792	[illegible]	75	147	6.6
1000	31	92				
950	31	544				
900	31	1,018	22.8	70	[illegible]	14.8
850	31	1,516	22.1	59	201	15.5
800	31	2,041	19.2	56	[illegible]	10.5
750	31	2,591	15.3	58	238	8.2
700	31	3,174	11.2	59	237	4.5
650	31	3,782	7.2	54	251	2.9
600	31	4,443	2.9	51	300	3.5
550	31	[illegible]	- 1.6	50	306	4.3
500	31	5,895	- 5.6	43	310	4.5
450	31	6,707	-10.4	37	283	4.3
400	31	7,613	-16.3	36	292	7.6
350	31	8,604	-23.2	35	[illegible]	9.1
300	31	9,714	-31.4	34	303	11.3
250	31	10,978	-41.5		304	13.8
200	31	12,454	-53.2		292	13.[illegible]
175	31	13,301	-59.7		281	14.4
150	31	14,251	-65.7		288	16.7
125	30	15,341	-71.9		305	14.0
100	30	16,649	-72.0		338	4.5
80	30	17,983	-65.7		76	4.7
70	30	18,801	-61.7		82	9.5
60	30	19,761	-59.0		83	14.0
50	30	20,911	-56.3		91	17.1
40	29	22,339	-53.6		94	18.5
30	29	24,199	-50.6		90	20.0
25	28	25,390	-48.6		88	23.3
20	25	26,860	-46.5		88	26.4
15	23	28,704	-43.4		84	29.7
10	14	31,511	-39.5			

EL PASO, TEXAS
882 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,193	22.8	64	16	1.2
1000	30	79				
950	30	531				
900	30	1,012				
850	30	1,514	23.7	44	133	2.5
800	30	2,042	21.2	41	140	2.9
750	30	2,594	17.4	44	171	2.3
700	30	3,183	12.9	51	102	1.7
650	30	3,795	7.8	58	69	5.1
600	30	4,457	2.8	59	75	8.7
550	30	5,151	- 2.2	56	91	9.3
500	30	5,906	- 6.8	49	101	9.5
450	30	6,722	-11.0	36	105	9.5
400	30	7,620	-16.5	33	113	8.4
350	30	8,611	-23.4	34	107	8.4
300	30	9,722	-31.5	29	103	9.7
250	30	10,987	-41.6		105	9.1
200	30	12,465	-53.3		107	10.3
175	30	13,313	-59.5		102	10.9
150	30	14,263	-66.1		113	12.4
125	30	15,352	-72.3		115	12.4
100	30	16,658	-72.4		105	13.2
80	30	17,991	-66.5		94	15.7
70	30	18,805	-63.0		91	19.0
60	29	19,763	-59.9		88	22.0
50	29	20,909	-57.1		89	26.0
40	29	22,332	-53.9		94	28.2
30	29	24,192	-50.6		86	30.3
25	28	25,386	-48.3		85	33.0
20	28	26,865	-45.8		85	36.1
15	20	28,791	-41.9		88	39.2
10	9	31,571	-37.1			
7						
5						

ELY, NEV.
810 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,908	12.7	41	194	7.4
1000	31	92				
950	31	539				
900	31	1,010				
850	31	1,498				
800	31	2,014	16.9	34	190	8.2
750	31	2,564	16.1	30	189	10.9
700	31	3,146	11.8	32	218	15.3
650	31	3,762	7.2	35	211	18.3
600	31	4,414	1.8	42	202	18.8
550	31	5,100	- 3.4	44	198	19.4
500	31	5,855	- 8.6	39	204	23.3
450	31	6,663	-13.5	27	216	24.7
400	31	7,551	-19.9	25	223	28.0
350	31	8,527	-27.1	27	223	35.2
300	31	9,620	-35.5	26	220	43.1
250	31	10,865	-44.4		218	56.3
200	31	12,329	-53.4		218	66.0
175	31	13,179	-58.2		218	63.1
150	31	14,140	-62.2		219	55.4
125	30	15,255	-65.7		223	34.6
100	30	16,608	-66.1		206	15.5
80	30	17,979	-61.3		142	7.0
70	30	18,810	-59.3		113	8.2
60	30	19,779	-57.4		99	9.7
50	30	20,936	-55.5		94	13.2
40	30	22,366	-53.2		85	16.5
30	30	24,231	-50.3		83	19.8
25	30	25,427	-48.1		85	22.9
20	28	26,907	-45.3		93	23.7
15	27	28,840	-42.5		89	24.9
10	24	31,601	-37.2		88	29.7
7	14	34,049	-33.3		98	31.7
5	10	36,426	-28.9			

* FAIRBANKS, ALASKA
998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	135	13.2	63	316	2.5
1000	31	118			344	2.1
950	31	546	12.8	55	263	5.1
900	31	1,003	9.9	56	244	7.0
850	31	1,475	6.4	62	233	8.9
800	31	1,970	2.9	65	226	9.7
750	31	2,488	- .4	68	222	10.1
700	31	3,039	- 3.7	67	228	11.3
650	31	3,616	- 7.0	65	228	11.7
600	31	4,241	-10.7	54	235	12.8
550	31	4,900	-14.5	51	235	13.8
500	31	5,622	-19.1	46	238	16.3
450	31	6,372	-24.4	44	240	18.5
400	31	7,246	-30.6	45	241	22.0
350	31	8,181	-37.5	42	242	24.3
300	31	9,227	-45.1		244	28.0
250	31	10,426	-51.4		247	27.6
200	31	11,878	-49.2		249	22.1
175	31	12,759	-47.2		255	15.9
150	30	13,779	-47.0		253	14.6
125	30	14,986	-47.1		253	10.3
100	30	16,464	-46.8		244	5.8
80	30	17,942	-46.6		235	1.7
70	30	18,827	-46.5		122	1.6
60	30	19,850	-46.4		99	4.7
50	29	21,062	-46.1		91	7.4
40	29	22,547	-45.4		91	9.7
30	26	24,468	-43.8		79	13.8
25	25	25,694	-42.4		82	16.3
20	24	27,219	-40.5		87	16.9
15	21	29,173	-37.5		88	18.6
10	19	32,015	-32.7		87	19.6
7	11	34,549	-28.1			
5						

FLINT, MICH.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	234	17.1	84	242	1.9
1000	31	130				
950	31	573	20.0	59	289	6.2
900	31	1,037	17.7	57	304	9.1
850	31	1,524	14.8	53	299	9.9
800	31	2,039	12.0	47	297	13.0
750	31	2,571	9.[illegible]	43	[illegible]	15.[illegible]
700	31	3,142	6.4	38	292	17.5
650	31	3,744	3.[illegible]	[illegible]	296	19.2
600	31	4,392	- .[illegible]	35	296	21.6
550	31	5,075	- 4.7	37	298	23.7
500	31	5,826	- 9.[illegible]	34	300	25.[illegible]
450	31	6,628	-14.8	31	301	27.2
400	31	7,514	-20.[illegible]	[illegible]	301	30.1
350	31	8,487	-27.8	28	305	36.1
300	31	9,576	-35.[illegible]	28	306	41.4
250	31	10,820	-44.5		307	49.9
200	31	12,284	-52.9		311	57.7
175	31	13,138	-56.2		312	54.6
150	31	14,110	-59.2		314	43.[illegible]
125	30	15,248	-62.[illegible]		[illegible]	31.[illegible]
100	29	16,624	-61.3		306	19.4
80	29	18,018	-58.4		[illegible]	10.1
70	29	18,860	-56.[illegible]		[illegible]	8.2
60	28	19,841	-55.0		42	8.2
50	[illegible]	21,011	-53.[illegible]		71	10.3
40	28	22,458	-50.4		83	14.0
30	28	24,347	-47.4		86	17.[illegible]
25	27	25,534	-45.7		89	18.1
20	21	27,040	-43.7		84	19.0
15	8	29,048	-39.2			
10						
7						
5						

FORT WORTH, TEXAS
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	18[illegible]	24.8	83	[illegible]	4.1
1000	31	121				
950	31	577	24.8	70	206	17.1
900	31	1,046	22.6	64	202	15.5
850	31	1,542	19.3	64	188	10.7
800	31	2,062	16.0	63	180	6.8
750	31	2,607	12.7	61	164	3.5
700	31	3,185	9.2	62	124	[illegible].7
650	31	3,793	[illegible]	63	70	[illegible].9
600	31	4,447	1.8	57	[illegible]	4.[illegible]
550	31	5,144	- 2.1	56	67	3.5
500	31	[illegible]	- 6.2	49	60	4.1
450	31	6,713	-10.6	36	43	4.9
400	31	[illegible]	-16.5	32	50	7.[illegible]
350	31	8,604	-23.1	29	57	8.5
300	31	9,715	-31.5	27	44	11.3
250	31	[illegible]	-41.[illegible]	19	34	14.8
200	30	[illegible]	-52.9		[illegible]	18.3
175	30	[illegible]	-59.2		34	18.8
150	30	[illegible]	-6[illegible]		40	18.[illegible]
125	30	15,346	-71.4		51	16.[illegible]
100	29	16,657	-71.7		68	16.[illegible]
80	29	17,992	-65.4		81	15.7
70	27	18,812	-62.4		[illegible]	16.9
60	[illegible]	19,769	-59.6		86	19.2
50	28	20,917	-56.6		[illegible]	22.9
40	28	22,339	-53.8		93	25.3
30	26	24,198	[illegible]		91	29.[illegible]
25	24	25,398	-47.8		[illegible]	30.1
20	18	26,876	-45.7		[illegible]	32.[illegible]
15	8	28,799	-42.7			
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

GLASGOW, MONT.
932 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	696	16.2	76	66	6.6
1000	31	93				
950	31	534				
900	31	998	19.4	51	98	7.8
850	31	1,490	18.4	43	159	2.9
800	31	2,007	15.4	44	245	7.2
750	31	2,545	11.8	45	255	10.5
700	31	3,124	7.8	49	260	15.7
650	31	3,724	3.4	46	260	18.5
600	31	4,375	- 1.3	50	257	22.7
550	31	5,051	- 6.4	53	255	29.7
500	31	5,801	-11.4	56	257	32.8
450	31	6,592	-16.8	42	255	33.6
400	31	7,475	-23.1	34	254	39.0
350	31	8,439	-30.2	31	254	46.0
300	31	9,518	-38.1	27	253	54.6
250	31	10,750	-46.6		253	62.0
200	31	12,205	-53.3		254	69.5
175	31	13,062	-54.7		256	63.1
150	31	14,044	-56.4		258	52.4
125	31	15,197	-58.1		257	34.8
100	31	16,598	-58.6		261	17.1
80	31	18,007	-56.4		251	6.0
70	31	18,856	-55.1		216	1.9
60	31	19,842	-53.9		96	2.9
50	31	21,017	-52.2		84	4.7
40	31	22,467	-50.1		86	7.2
30	30	24,355	-47.9		87	11.7
25	30	25,562	-46.3		91	13.2
20	30	27,052	-43.9		92	14.8
15	29	28,997	-40.6		93	16.9
10	21	31,768	-36.7		90	17.9
7	17	34,256	-32.4		94	18.5
5	14	36,636	-28.3			

* GRAND JUNCTION, COLO.
852 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,474	21.3	46	122	6.4
1000	31	61				
950	31	512				
900	31	998				
850	31	1,498	21.4	46	123	6.0
800	31	2,024	20.9	38	142	8.4
750	31	2,575	17.8	38	191	6.4
700	31	3,165	13.5	44	237	8.0
650	31	3,780	8.6	50	235	8.7
600	31	4,441	3.3	55	220	11.3
550	31	5,127	- 2.2	62	226	14.2
500	31	5,891	- 7.0	55	226	15.9
450	31	6,701	-11.7	50	233	16.9
400	31	7,600	-17.3	36	234	22.3
350	31	8,588	-24.3	41	233	27.8
300	31	9,693	-32.4	36	233	34.6
250	31	10,953	-41.9	28	231	42.5
200	31	12,427	-53.0		231	43.9
175	30	13,280	-59.0		232	42.2
150	30	14,233	-65.0		231	39.4
125	29	15,331	-70.0		230	27.8
100	29	16,653	-69.9		218	12.0
80	29	18,005	-62.6		141	5.6
70	29	18,834	-59.8		103	8.2
60	29	19,803	-57.6		87	12.6
50	29	20,961	-55.0		90	15.3
40	29	22,394	-52.7		84	18.1
30	29	24,263	-49.8		87	22.1
25	29	25,460	-48.0		90	23.9
20	29	26,939	-45.6		89	26.4
15	28	28,870	-42.3		85	27.2
10	22	31,636	-37.0		88	33.2
7	6	34,142	-33.3			

* GREAT FALLS, MONT.
887 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,123	13.5	71	241	3.7
1000	31	93				
950	31	534				
900	31	1,000				
850	31	1,484	16.7	46	241	3.3
800	31	1,998	14.3	44	222	3.7
750	31	2,535	10.9	44	221	8.2
700	31	3,113	7.2	41	229	13.6
650	31	3,714	3.0	41	236	17.5
600	31	4,361	- 1.9	45	240	23.7
550	31	5,041	- 7.2	45	241	29.9
500	31	5,783	-12.6	39	241	34.4
450	31	6,573	-18.1	37	243	36.1
400	31	7,451	-24.1	32	241	40.4
350	31	8,412	-30.9	30	241	42.9
300	31	9,489	-38.5	28	239	52.1
250	31	10,721	-46.8		238	62.4
200	31	12,178	-52.7		238	66.4
175	31	13,039	-53.6		241	62.2
150	31	14,026	-55.4		241	49.0
125	31	15,186	-56.3		243	31.1
100	30	16,597	-57.9		237	16.9
80	29	18,008	-55.9		206	5.2
70	29	18,860	-54.3		151	2.7
60	29	19,848	-53.6		116	3.1
50	29	21,023	-52.1		112	4.3
40	29	22,472	-50.4		90	9.3
30	29	24,360	-47.3		85	14.4
25	29	25,569	-45.9		88	16.3
20	29	27,061	-43.4		85	16.7
15	25	29,008	-40.0		86	20.6
10	21	31,804	-34.4		88	24.7
7	9	34,313	-30.1			

GREEN BAY, WIS.
990 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	210	15.9	84	280	1.9
1000	31	126				
950	31	567	19.7	66	285	6.6
900	31	1,031	17.6	62	291	9.3
850	31	1,518	15.0	59	291	12.0
800	31	2,030	12.4	52	290	14.8
750	31	2,568	9.7	47	288	16.5
700	31	3,139	6.6	43	290	18.3
650	31	3,742	3.2	40	292	19.8
600	31	4,388	- .7	41	295	23.5
550	31	5,071	- 4.9	38	293	25.4
500	31	5,821	- 9.7	38	295	26.4
450	31	6,621	-15.0	34	298	29.3
400	31	7,507	-21.1	33	298	32.8
350	31	8,480	-28.0	34	302	35.5
300	31	9,569	-35.9	34	304	42.3
250	31	10,814	-44.2		305	52.1
200	31	12,282	-52.9		306	60.6
175	30	13,136	-56.1		307	59.1
150	30	14,109	-59.0		307	45.1
125	30	15,245	-61.5		305	31.9
100	29	16,626	-60.7		307	21.0
80	29	18,024	-58.0		327	12.4
70	28	18,864	-57.0		359	8.5
60	28	19,847	-54.8		46	8.2
50	28	21,018	-52.7		75	11.3
40	28	22,468	-50.1		80	13.4
30	27	24,357	-47.5		85	16.5
25	27	25,568	-45.4		89	17.5
20	26	27,062	-43.2		89	19.2
15	16	29,026	-40.4		92	20.0

GREENSBORO, N. C.
984 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	273	21.2	91	324	1.7
1000	31	137				
950	31	586	21.9	67	344	4.9
900	31	1,052	20.0	59	356	6.4
850	31	1,543	17.1	56	349	6.8
800	31	2,058	13.7	57	320	5.6
750	31	2,600	10.7	53	312	6.6
700	31	3,172	8.1	42	307	9.3
650	31	3,780	4.8	41	306	9.5
600	31	4,430	1.0	43	308	10.3
550	31	5,123	- 2.5	35	309	10.7
500	31	5,877	- 6.8	31	303	12.2
450	31	6,693	-12.1	27	309	13.8
400	31	7,583	-18.1	28	305	14.6
350	31	8,568	-24.9	28	311	16.7
300	31	9,671	-32.9	26	321	18.3
250	31	10,929	-42.8		324	23.7
200	31	12,400	-53.3		322	27.2
175	31	13,250	-58.3		330	26.6
150	31	14,209	-62.9		333	26.0
125	31	15,321	-66.5		340	17.9
100	31	16,670	-66.2		352	9.5
80	31	18,036	-62.2		40	8.5
70	31	18,864	-59.8		65	11.1
60	31	19,835	-56.9		78	14.4
50	31	20,997	-54.5		86	17.9
40	31	22,434	-51.9		92	22.5
30	29	24,314	-48.2		94	22.7
25	28	25,519	-46.3		92	24.7
20	28	27,010	-43.9		92	28.0
15	22	28,954	-41.1		92	31.7

GUAM, MARIANA IS.
997 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	111	25.3	94	100	4.9
1000	31	89				
950	31	545	24.1	89	92	13.0
900	31	1,014	21.4	82	94	13.8
850	31	1,509	18.7	79	93	13.8
800	31	2,029	16.0	74	92	13.0
750	31	2,574	13.4	64	93	13.8
700	31	3,154	10.3	60	94	14.2
650	31	3,765	6.8	56	92	13.4
600	31	4,421	2.8	57	91	14.4
550	31	5,120	- 1.3	53	88	14.0
500	31	5,875	- 5.9	57	89	13.4
450	31	6,690	-10.7	52	89	13.2
400	31	7,591	-16.2	46	82	9.7
350	31	8,583	-22.9	42	83	6.8
300	31	9,694	-31.2	35	72	3.3
250	31	10,959	-41.4		306	2.9
200	31	12,433	-53.7		265	4.7
175	31	13,277	-60.8		251	5.6
150	31	14,219	-68.2		241	5.6
125	30	15,294	-75.7		135	2.9
100	27	16,572	-77.8		88	15.7
80	24	17,867	-71.8		84	26.4
70	23	18,660	-68.3		87	32.1
60	22	19,590	-65.0		88	35.4
50	22	20,713	-60.4		84	35.2
40	22	22,116	-56.7		87	32.8
30	21	23,953	-52.6		87	32.6
25	21	25,137	-50.1		86	30.7
20	19	26,605	-47.6		83	32.8
15	14	28,511	-45.2		86	39.6
10	6	31,204	-43.9			

HILO, HAWAII
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	21.5	88	227	4.3
1000	31	144	21.9	83	246	3.3
950	31	593	18.6	91	73	4.9
900	31	1,051	15.5	91	82	7.6
850	31	1,535	12.7	90	89	7.8
800	31	2,043	10.1	74	96	8.9
750	31	2,590	9.8	39	93	8.7
700	31	3,152	8.7	33	97	6.4
650	31	3,765	6.2	24	103	5.6
600	31	4,414	2.4	25	137	3.5
550	31	5,106	- 1.7	24	162	2.7
500	31	5,864	- 6.7	23	213	5.2
450	31	6,679	-12.2	26	231	8.0
400	31	7,569	-18.3	23	240	11.8
350	31	8,553	-25.1	23	247	18.6
300	31	9,654	-33.4	25	247	25.6
250	31	10,908	-43.4		256	34.8
200	31	12,371	-55.2		255	42.5
175	31	13,211	-61.3		261	44.1
150	31	14,153	-67.3		260	39.8
125	31	15,239	-72.1		253	25.4
100	31	16,549	-72.4		175	6.2
80	31	17,873	-68.7		93	20.8
70	31	18,677	-66.1		92	28.7
60	31	19,618	-62.7		68	33.4
50	30	20,748	-60.7		88	40.2
40	30	22,147	-57.1		91	40.8
30	30	23,986	-53.0		89	42.9
25	30	25,168	-50.4		69	44.9
20	28	26,636	-47.5		93	44.7
15	20	28,557	-44.6		93	43.1

HUNTINGTON, W. VA.
988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	18.9	95	166	1.2
1000	31	187				
950	31	582	21.5	71	269	3.1
900	31	1,050	19.6	66	293	5.4
850	31	1,540	16.3	70	301	8.0
800	31	2,054	13.2	66	306	9.5
750	31	2,593	10.0	59	305	11.3
700	31	3,166	6.9	50	310	12.2
650	31	3,769	3.9	50	310	14.0
600	31	4,419	.3	47	308	14.8
550	31	5,105	- 3.5	42	305	15.0
500	31	5,860	- 7.8	35	306	15.9
450	31	6,671	-12.6	30	307	19.4
400	31	7,562	-18.7	29	310	21.2
350	31	8,543	-25.8	30	314	23.3
300	31	9,642	-33.9	29	315	26.2
250	31	10,895	-43.5		317	33.6
200	31	12,363	-53.4		320	36.9
175	31	13,213	-57.7		318	35.0
150	31	14,176	-62.1		320	30.7
125	31	15,291	-65.7		329	21.4
100	31	16,645	-64.9		337	13.6
80	31	18,019	-61.3		20	9.5
70	31	18,851	-59.0		53	10.3
60	31	19,825	-56.5		68	11.8
50	31	20,989	-53.8		82	15.2
40	31	22,451	-51.2		86	18.1
30	31	24,313	-48.5		87	21.2
25	30	25,516	-46.3		88	22.1
20	27	27,009	-43.8		88	25.1
15	21	28,939	-41.9		83	28.6
10	5	31,653	-40.5			

* INTERNAT. FALLS, MINN.
972 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	360	15.6	86	204	2.9
1000	31	113				
950	31	552	17.6	74	227	6.4
900	31	1,014	16.4	65	266	9.9
850	31	1,499	13.9	62	275	12.2
800	31	2,008	11.2	56	281	14.0
750	31	2,539	8.1	52	284	17.5
700	31	3,111	5.0	47	286	20.0
650	31	3,705	1.3	46	292	22.7
600	31	4,352	- 2.5	42	295	26.2
550	31	5,025	- 6.7	39	292	28.4
500	31	5,776	-11.2	35	292	30.1
450	31	6,570	-16.6	34	294	35.4
400	31	7,453	-22.6	33	291	40.6
350	31	8,419	-29.4	32	290	47.0
300	31	9,502	-37.5	34	288	54.6
250	31	10,736	-46.1		287	60.0
200	30	12,196	-52.6		287	65.3
175	30	13,054	-54.7		287	62.2
150	30	14,036	-56.8		289	50.5
125	30	15,187	-58.2		292	34.6
100	30	16,593	-57.6		293	22.1
80	30	18,007	-55.8		302	13.2
70	30	18,857	-55.0		328	8.9
60	30	19,847	-53.5		8	5.6
50	30	21,025	-51.9		61	7.0
40	30	22,477	-49.9		73	10.3
30	30	24,371	-47.0		79	12.2
25	29	25,584	-45.4		82	13.6
20	29	27,079	-43.5		85	15.2
15	26	29,021	-40.0		84	19.0
10	17	31,825	-34.6		90	24.3

JACKSON, MISS.
1004 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	94	23.4	91	219	1.7
1000	31	132	23.7	89	215	2.1
950	31	584	24.0	74	244	7.2
900	31	1,056	21.7	70	233	5.1
850	31	1,550	18.5	69	223	3.5
800	31	2,068	15.1	68	194	2.1
750	31	2,607	11.9	61	218	1.0
700	31	3,187	8.4	58	327	.4
650	31	3,794	4.9	56	21	1.4
600	31	4,446	1.4	46	23	2.1
550	31	5,135	- 2.2	39	25	3.3
500	31	5,894	- 6.3	38	43	5.8
450	31	6,706	-11.2	37	43	7.6
400	31	7,606	-16.8	31	29	9.3
350	31	8,594	-23.9	R30	30	11.3
300	31	9,702	-31.8	R28	24	11.7
250	31	10,963	-41.7	R22	18	14.4
200	31	12,437	-53.3		25	17.9
175	31	13,286	-59.0		30	17.3
150	31	14,238	-64.9		33	18.6
125	31	15,335	-70.1		36	19.0
100	31	16,654	-70.8		60	16.9
80	31	17,993	-65.4		72	16.5
70	31	18,811	-62.1		79	17.5
60	31	19,770	-59.2		81	21.0
50	31	20,918	-56.9		87	25.3
40	31	22,340	-53.5		91	28.9
30	31	24,204	-50.2		93	29.7
25	31	25,400	-48.2		88	32.1
20	30	26,874	-46.4		86	36.5
15	27	28,801	-42.8		84	41.0
10	9	31,587	-38.6			

* JACKSONVILLE, FLA.
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	24.0	92	256	2.5
1000	31	143	24.0	86	262	3.3
950	31	594	22.8	77	261	6.0
900	31	1,063	20.2	73	259	3.7
850	31	1,556	17.4	68	264	3.1
800	31	2,072	14.6	61	269	2.7
750	31	2,612	11.7	53	275	3.3
700	31	3,190	8.5	49	292	3.1
650	31	3,794	4.8	48	286	5.4
600	30	4,447	1.0	49	290	4.3
550	30	5,130	- 2.7	45	324	4.9
500	30	5,892	- 6.7	35	326	5.2
450	30	6,700	-11.2	25	335	5.8
400	30	7,602	-17.1	25	342	6.4
350	30	8,590	-23.9	24	343	7.4
300	30	9,697	-32.2	23	342	8.7
250	30	10,957	-42.1		337	9.9
200	30	12,430	-53.4		351	12.6
175	30	13,278	-59.5		357	14.6
150	30	14,231	-64.7		10	18.5
125	29	15,332	-69.4		29	19.2
100	29	16,660	-69.0		50	14.2
80	29	18,010	-64.1		69	17.3
70	29	18,832	-61.7		75	20.0
60	29	19,793	-59.1		80	26.8
50	29	20,942	-56.3		88	31.9
40	29	22,368	-53.4		92	34.8
30	29	24,233	-49.7		95	35.5
25	27	25,429	-47.4		91	34.6
20	26	26,905	-45.2		86	35.7
15	25	28,838	-42.1		83	42.9
10	10	31,603	-39.5			
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JOHN F. KENNEDY INT. ARPT.NY
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	5	21.7	71	311	3.3
1000	28	131	21.1	61	307	4.7
950	28	575	19.9	50	301	7.6
900	28	1,039	17.3	51	303	8.2
850	28	1,525	14.2	55	289	10.7
800	28	2,034	11.1	55	285	13.2
750	28	2,571	8.3	47	267	16.5
700	28	3,138	5.3	41	270	17.9
650	28	3,740	2.1	43	269	19.4
600	28	4,383	- 1.6	40	270	20.6
550	27	5,064	- 5.5	36	268	21.8
500	27	5,812	- 9.9	34	283	23.1
450	27	6,612	-15.3	31	278	25.8
400	27	7,498	-21.2	30	277	27.4
350	27	8,471	-28.0	28	276	31.9
300	27	9,560	-36.3	29	276	34.0
250	27	10,800	-45.5		260	37.7
200	26	12,261	-54.1		287	35.9
175	26	13,112	-56.6		291	34.4
150	26	14,085	-58.7		288	28.0
125	26	15,222	-61.3		287	22.3
100	25	16,608	-59.9		292	14.6
80	25	18,008	-57.8		336	5.1
70	25	18,852	-56.2		55	5.2
60	25	19,837	-54.1		83	8.4
50	24	21,012	-52.3		91	11.8
40	24	22,462	-50.3		93	15.5
30	24	24,351	-47.4		89	18.8
25	21	25,560	-45.4		89	21.4
20	17	27,062	-42.4		85	25.3
15	6	29,009	-39.1			

JOHNSTON IS., PACIFIC AREA
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	26.5	77	92	13.4
1000	31	121	25.4	79	90	15.3
950	31	569	21.5	86	88	18.6
900	31	1,039	18.6	80	89	20.0
850	31	1,529	15.8	75	87	17.5
800	31	2,043	13.9	65	84	14.2
750	31	2,581	11.6	54	84	10.3
700	31	3,160	9.2	39	92	7.0
650	31	3,768	6.2	34	104	4.9
600	31	4,422	2.4	29	120	2.5
550	31	5,112	- 1.8	29	189	2.9
500	31	5,871	- 6.5	25	239	4.7
450	31	6,681	-11.8	27	252	7.8
400	31	7,578	-17.8	26	262	13.0
350	30	8,564	-24.8	28	267	17.5
300	30	9,666	-33.1	27	260	24.3
250	30	10,921	-43.2		257	31.1
200	30	12,386	-54.6		254	38.7
175	30	13,229	-60.9		255	40.2
150	30	14,174	-67.3		263	37.3
125	29	15,256	-73.2		264	28.2
100	28	16,553	-74.1		316	3.1
80	28	17,868	-70.1		91	20.8
70	28	18,668	-66.5		88	29.5
60	26	19,609	-63.7		88	35.9
50	26	20,738	-60.3		86	37.9
40	26	22,139	-57.4		69	42.0
30	26	23,979	-52.7		89	39.2
25	26	25,164	-50.2		88	40.0
20	25	26,634	-47.8		88	42.3
15	15	28,534	-45.3		90	44.3
10	5	31,237	-42.5			

KEY WEST, FLORIDA
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	23	5	27.4	84	141	2.5
1000	23	130	26.2	85	138	3.5
950	23	585	22.4	87	141	5.6
900	23	1,050	19.9	75	124	6.0
850	23	1,542	17.2	73	140	4.9
800	23	2,057	14.4	68	158	5.6
750	23	2,600	11.5	63	157	4.1
700	23	3,174	8.6	55	157	5.2
650	23	3,763	5.1	51	157	3.9
600	23	4,432	1.2	52	153	5.2
550	23	5,119	- 2.5	51	102	3.1
500	23	5,878	- 6.9	44	62	4.3
450	23	6,690	-12.0	38	55	5.4
400	23	7,584	-17.8	32	51	8.4
350	23	8,570	-24.6	30	47	8.9
300	23	9,673	-33.2	27	49	13.6
250	23	10,929	-43.1		45	15.9
200	22	12,392	-55.4		46	25.4
175	22	13,232	-61.5		47	29.7
150	22	14,175	-67.3		48	39.6
125	22	15,262	-71.5		50	35.4
100	21	16,575	-70.3		56	28.9
80	21	17,914	-66.8		71	29.3
70	21	18,722	-65.2		76	39.4
60	21	19,668	-62.5		79	48.4
50	21	20,803	-59.3		87	54.2
40	21	22,214	-55.6		89	57.3
30	21	24,069	-50.6		94	55.8
25	18	25,260	-47.9		86	54.8
20	17	26,746	-45.1		83	56.1
15	14	28,681	-42.7		80	64.9
10	11	31,445	-39.0			
7	5	33,926	-35.9			

KING SALMON, ALASKA
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	15	8.6	92	164	6.0
1000	31	126	9.1	87	186	6.8
950	31	554	8.2	83	203	7.0
900	31	997	6.1	84	212	5.6
850	31	1,464	4.1	84	210	6.2
800	31	1,956	2.1	80	207	7.8
750	31	2,480	- .3	75	207	8.0
700	31	3,026	- 2.8	72	210	9.9
650	31	3,611	- 5.8	65	218	9.9
600	31	4,234	- 9.2	65	221	11.3
550	31	4,904	-13.2	59	225	13.0
500	31	5,623	-17.7	54	233	15.5
450	31	6,400	-23.1	52	238	16.9
400	30	7,266	-29.0	50	242	21.2
350	30	8,207	-35.7	42	244	23.1
300	30	9,263	-43.2		248	26.6
250	30	10,470	-50.3		243	29.9
200	30	11,919	-50.7		249	20.6
175	29	12,791	-48.5		250	16.7
150	29	13,805	-48.8		252	14.0
125	29	15,002	-49.0		250	9.3
100	27	16,465	-49.2		261	5.1
80	26	17,930	-49.1		237	1.9
70	26	18,806	-49.0		143	1.0
60	26	19,818	-48.8		99	2.7
50	26	21,017	-48.5		95	4.3
40	25	22,487	-48.0		84	8.5
30	24	24,385	-46.8		95	10.3
25	24	25,598	-45.4		88	11.3
20	23	27,091	-43.5		93	16.7
15	17	29,055	-40.3		93	17.9
10	7	31,876	-36.0			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

+ KOROR, CAROLINE IS. 1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	27.7	81	268	2.7
1000	31	82	27.0	80	262	2.9
950	31	531	23.3	78	269	4.3
900	31	1,006	20.6	76	266	3.9
850	31	1,499	17.9	74	268	2.7
800	31	2,017	15.2	70	222	.8
750	31	2,559	12.6	65	113	1.9
700	31	3,140	9.5	62	98	4.9
650	31	3,749	6.0	61	98	8.5
600	31	4,404	2.3	60	94	10.1
550	31	5,100	- 1.4	58	94	12.0
500	31	5,858	- 5.6	51	90	12.6
450	31	6,676	-10.2	45	92	12.2
400	31	7,578	-15.6	39	92	12.4
350	31	8,572	-22.4	34	86	12.8
300	31	9,685	-30.8	28	82	12.2
250	31	10,952	-41.1		85	13.4
200	31	12,427	-53.8		90	15.9
175	31	13,271	-60.9		76	17.3
150	31	14,212	-68.3		76	16.3
125	31	15,286	-75.2		76	19.6
100	31	16,565	-77.8		86	23.1
80	31	17,863	-71.4		82	25.3
70	31	18,658	-67.9		85	26.0
60	31	19,594	-63.6		92	24.1
50	30	20,722	-59.9		89	18.8
40	30	22,131	-55.9		87	16.9
30	30	23,975	-52.1		90	16.5
25	30	25,163	-49.5		103	15.3
20	30	26,633	-47.3		93	15.0
15	26	28,547	-45.1		97	19.0
10	21	31,258	-42.7		98	33.4
7	12	33,673	-40.1			

KOTZEBUE, ALASKA 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	10.1	86	171	2.5
1000	31	97	9.9	79	179	3.5
950	31	518	8.3	74	181	7.6
900	31	968	5.8	75	201	9.1
850	31	1,434	3.2	77	207	10.5
800	31	1,924	.2	79	209	10.5
750	31	2,440	- 2.6	73	208	10.9
700	31	2,984	- 5.3	63	212	11.3
650	31	3,558	- 8.3	62	214	11.1
600	31	4,181	-11.7	54	217	11.1
550	31	4,840	-15.9	51	219	10.7
500	31	5,555	-20.5	50	223	10.3
450	31	6,323	-25.7	47	225	11.3
400	31	7,171	-31.5	45	232	12.8
350	31	8,103	-38.3	48	235	14.4
300	31	9,147	-45.7		241	17.3
250	30	10,349	-50.3		242	16.7
200	30	11,811	-46.9		248	11.7
175	30	12,699	-45.7		250	8.9
150	30	13,727	-45.5		242	8.2
125	30	14,941	-46.0		244	4.9
100	30	16,426	-45.8		224	3.3
80	30	17,911	-45.7		163	2.1
70	29	18,801	-45.7		129	2.7
60	28	19,825	-45.6		110	3.7
50	28	21,041	-45.3		99	5.6
40	28	22,531	-44.9		90	7.6
30	27	24,458	-43.8		86	11.7
25	25	25,687	-42.5		85	13.0
20	25	27,200	-40.8		92	16.5
15	24	29,173	-38.3		90	16.3
10	18	31,990	-33.9		83	18.3
7	8	34,521	-30.6			

KWAJALEIN, MARSHALL IS. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	27.3	82	79	7.8
1000	31	89	26.7	83	81	8.7
950	31	542	23.6	88	86	12.2
900	31	1,014	20.9	83	87	12.8
850	31	1,508	18.2	82	90	13.2
800	31	2,026	15.7	79	92	13.4
750	31	2,573	13.2	71	92	14.2
700	31	3,152	10.0	67	92	14.4
650	31	3,764	6.4	67	88	15.0
600	31	4,417	2.9	60	86	14.6
550	31	5,117	- .9	58	86	14.6
500	31	5,874	- 5.4	49	86	14.6
450	31	6,691	-10.5	51	88	13.8
400	31	7,591	-16.1	45	92	12.4
350	31	8,582	-22.3	45	89	8.5
300	31	9,698	-30.9	39	100	5.4
250	31	10,964	-41.4	35	155	5.2
200	31	12,437	-53.9	27	179	5.6
175	31	13,278	-61.1	27	190	5.8
150	31	14,220	-68.9	29	196	2.9
125	30	15,288	-76.3		138	4.9
100	29	16,564	-79.2		104	9.7
80	25	17,849	-73.0		88	21.2
70	25	18,639	-68.9		91	21.4
60	24	19,573	-64.1		85	22.9
50	24	20,703	-60.1		87	22.9
40	24	22,103	-57.5		82	19.2
30	22	23,947	-52.4		71	17.5
25	21	25,127	-50.7		86	18.3
20	20	26,597	-46.9		83	17.7
15	19	28,504	-45.4		86	23.1
10	16	31,214	-43.2		89	36.1
7	6	33,674	-38.4			

LAKE CHARLES, LA. 1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	24.9	89	21	1.2
1000	31	131	25.7	88	244	1.9
950	31	584	23.0	83	220	7.0
900	31	1,053	20.3	78	193	6.6
850	31	1,546	17.4	73	[illegible]	6.2
800	31	2,062	14.3	74	152	5.6
750	31	2,603	11.5	66	136	6.0
700	31	3,181	8.4	[illegible]	138	5.2
650	31	3,786	5.0	57	132	4.1
600	31	4,439	1.4	[illegible]	[illegible]	4.7
550	31	5,131	- 2.3	53	85	6.6
500	31	5,888	- 6.4	43	74	7.6
450	31	6,701	-11.2	33	61	8.5
400	31	7,600	-17.1	32	61	9.9
350	31	8,588	-24.0	28	55	11.3
300	31	9,695	-32.1	28	47	13.4
250	31	10,956	-41.9		58	14.4
200	31	12,428	-53.5		[illegible]	17.5
175	31	13,276	-59.3		49	20.6
150	31	14,228	-65.1		52	22.0
125	31	15,323	-70.3		55	22.1
100	31	16,642	-71.5		67	20.4
80	30	17,977	-65.3		83	19.8
70	30	18,795	-62.5		83	21.0
60	30	19,752	-59.6		82	23.9
50	30	20,898	-56.8		88	28.4
40	30	22,319	-54.3		92	32.1
30	30	24,177	-50.3		89	35.0
25	30	25,371	-48.5		89	36.3
20	30	26,847	-45.8		86	38.9
15	24	28,776	-42.8		82	41.2
10	7	31,525	-37.1			

LANDER, WY. 830 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,670	17.1	47	238	[illegible]
1000	31	[illegible]				
950	31	518				
900	31	[illegible]				
850	31	1,472				
800	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
750	31	2,565	[illegible]	[illegible]	[illegible]	[illegible]
700	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
650	31	[illegible]	[illegible]	[illegible]	[illegible]	13.8
600	31	4,427	3.1	[illegible]	242	16.3
550	31	[illegible]	- 2.8	44	[illegible]	17.9
500	31	[illegible]	- 8.7	[illegible]	[illegible]	21.2
450	31	[illegible]	-13.6	[illegible]	235	22.9
400	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
350	31	8,546	-26.7	[illegible]	243	38.1
300	31	9,641	[illegible]	31	241	48.8
250	31	[illegible]	-43.5		[illegible]	60.2
200	31	[illegible]	-52.8		[illegible]	67.8
175	31	[illegible]	[illegible]		240	65.9
150	31	[illegible]	-61.8		[illegible]	53.6
125	31	[illegible]	-65.9		242	34.2
100	31	[illegible]	-64.9		[illegible]	15.9
80	31	[illegible]	[illegible]		[illegible]	[illegible]
70	31	18,864	-57.5		114	3.9
60	31	[illegible]	[illegible]		94	8.5
50	31	[illegible]	-53.7		95	11.7
40	31	22,449	-51.3		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		67	16.9
25	30	[illegible]	-46.0		84	18.6
20	29	[illegible]	-44.3		84	21.6
15	16	[illegible]	-41.9		[illegible]	[illegible]

LAS VEGAS, NEV. 935 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	660	26.0	27	214	6.8
1000	31	56				
950	31	513				
900	31	994	27.9	29	212	10.1
850	31	1,498	25.0	29	217	10.7
800	31	2,026	21.1	31	209	12.2
750	31	2,579	16.7	35	200	14.2
700	30	3,163	12.0	40	190	14.4
650	30	3,776	7.4	45	188	15.2
600	30	4,432	2.5	51	191	16.9
550	30	5,119	- 2.4	45	199	16.1
500	30	5,879	- 7.3	39	204	16.1
450	30	6,688	-12.5	31	211	19.4
400	30	7,582	-18.5	32	216	23.9
350	30	8,565	-25.4	32	217	30.7
300	30	9,664	-33.6	31	213	36.5
250	30	10,919	-42.7	34	209	44.5
200	30	12,391	-52.7		208	52.3
175	30	13,243	-57.9		208	49.9
150	30	14,201	-63.8		210	44.9
125	30	15,305	-68.2		211	30.9
100	30	16,643	-67.3		188	13.6
80	29	18,002	-62.2		145	10.7
70	29	18,830	-60.3		123	9.9
60	28	19,794	-57.7		105	12.6
50	28	20,951	-55.2		94	15.2
40	28	22,384	-52.6		90	19.4
30	27	24,252	-49.7		87	23.9
25	25	25,450	-47.7		92	26.6
20	25	26,932	-45.2		91	28.7
15	21	28,864	-41.7		89	29.5
10	7	31,647	-38.4			

*** LIHUE, HAWAII 1013 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	36	23.8	79	63	11.8
1000	31	152	23.1	80	65	13.2
950	31	591	19.5	90	72	16.3
900	31	1,062	16.0	90	75	16.1
850	31	1,546	12.8	86	77	15.3
800	31	2,054	11.1	56	83	15.0
750	31	2,592	11.1	32	93	12.8
700	31	3,166	8.9	27	105	8.9
650	31	3,769	5.6	28	120	5.8
600	31	4,425	1.4	28	140	4.5
550	31	5,112	- 3.1	28	200	4.9
500	31	5,867	- 8.1	31	219	7.8
450	31	6,673	-13.5	33	229	12.0
400	31	7,565	-19.6	27	235	17.5
350	31	8,542	-26.8	27	244	21.6
300	31	9,636	-35.1	30	250	29.3
250	31	10,881	-44.8		248	38.9
200	31	12,337	-55.7		249	48.6
175	31	13,175	-61.4		250	49.1
150	31	14,120	-65.9		252	43.9
125	31	15,216	-69.0		249	28.0
100	30	16,549	-68.8		192	5.8
80	30	17,888	-66.9		88	17.3
70	30	18,698	-64.7		86	24.9
60	29	19,645	-62.2		86	31.5
50	29	20,778	-59.4		90	38.5
40	29	22,183	-56.8		87	39.8
30	29	24,023	-52.8		88	43.9
25	28	25,203	-51.0		88	45.6
20	28	26,664	-48.0		89	43.5
15	28	28,575	-44.7		92	46.4
10	28	31,306	-41.2		68	50.1
7	22	33,750	-37.1		86	58.5
5	13	36,094	-33.8			

LITTLE ROCK, ARK. 1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	23.6	89	200	1.4
1000	31	129	24.1	85	208	2.3
950	31	585	24.7	69	229	8.0
900	31	1,054	21.7	69	231	7.8
850	31	1,549	18.2	74	238	6.4
800	31	2,067	14.9	73	233	5.1
750	31	2,606	11.9	65	236	3.9
700	31	3,187	8.8	57	220	3.1
650	31	3,792	5.2	60	206	1.7
600	31	4,447	1.9	51	324	.4
550	31	5,136	- 2.0	45	26	1.9
500	31	5,897	- 6.0	38	26	3.3
450	31	6,708	-10.8	32	20	4.7
400	31	7,612	-16.6	27	23	7.2
350	31	8,602	-23.4	26	11	9.3
300	31	9,711	-31.7	25	9	13.2
250	31	10,975	-41.4	26	6	17.1
200	31	12,453	-52.8		7	20.6
175	31	13,304	-58.7		5	22.1
150	31	14,258	-64.6		6	20.6
125	30	15,357	-69.9		12	17.1
100	30	16,679	-70.0		39	13.6
80	28	18,020	-64.8		70	14.2
70	28	18,840	-61.5		74	16.3
60	27	19,802	-58.6		79	17.9
50	27	20,955	-56.1		86	20.0
40	26	22,380	-53.6		89	22.9
30	25	24,245	-50.2		90	25.4
25	21	25,441	-48.3		89	27.6
20	18	26,914	-45.7		87	31.1
15	11	28,860	-42.7			

MCGRATH, ALASKA 1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	103	10.0	87	201	2.5
1000	31	116			204	2.3
950	31	542	10.9	71	199	5.4
900	31	994	8.1	74	195	8.2
850	31	1,464	5.1	77	196	10.1
800	31	1,957	2.1	75	199	11.8
750	31	2,470	- .7	70	197	12.2
700	31	3,024	- 3.6	62	200	13.0
650	31	3,602	- 6.5	60	209	11.7
600	31	4,229	- 9.8	57	213	14.0
550	31	4,891	-14.0	59	217	13.0
500	31	5,613	-18.6	53	217	13.0
450	31	6,382	-23.9	47	218	14.4
400	30	7,241	-30.2	43	226	13.6
350	30	8,177	-37.2	43	228	16.1
300	30	9,226	-44.1		232	17.7
250	30	10,432	-50.2		231	17.7
200	30	11,890	-48.6		231	16.5
175	30	12,773	-46.7		234	14.0
150	30	13,795	-46.8		231	11.5
125	30	15,003	-47.1		236	8.5
100	30	16,481	-47.0		228	4.5
80	30	17,957	-46.9		185	1.7
70	30	18,841	-46.8		122	1.9
60	29	19,863	-46.8		106	3.3
50	29	21,071	-46.6		98	5.2
40	29	22,552	-45.8		90	8.0
30	28	24,472	-44.4		86	12.0
25	27	25,698	-43.2		92	14.6
20	27	27,205	-41.6		91	15.7
15	26	29,164	-39.2		88	18.3
10	25	31,967	-34.4		86	20.2
7	12	34,460	-30.4			

+ MAJURO, MARSHALL IS. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	28.9	79	80	6.0
1000	31	88	27.6	74	88	6.6
950	31	534	24.5	72	[illegible]	9.5
900	31	1,012	[illegible]	67	[illegible]	11.5
850	31	1,506	18.4	64	101	[illegible]
800	31	2,024	15.9	61	100	12.2
750	31	2,570	[illegible]	58	95	[illegible]
700	31	3,148	10.1	53	92	13.8
650	31	3,759	6.6	51	92	14.8
600	31	4,415	3.0	47	88	[illegible]
550	31	[illegible]	- .8	44	88	15.3
500	31	[illegible]	- 4.9	39	89	[illegible]
450	31	6,692	- 9.7	37	92	15.5
400	31	7,595	[illegible]	34	92	14.6
350	31	8,592	-21.7	29	87	11.8
300	31	9,710	[illegible]	26	97	10.3
250	31	[illegible]	[illegible]	27	115	7.0
200	30	[illegible]	-53.0		149	6.8
175	30	13,309	-59.9		147	6.8
150	30	[illegible]	[illegible]		[illegible]	[illegible]
125	30	15,332	-75.1		104	7.8
100	30	16,609	-78.7		96	14.2
80	30	17,904	[illegible]		93	20.0
70	30	18,699	-67.6		93	20.2
60	29	19,635	-62.4		88	20.6
50	28	20,771	-58.7		94	16.7
40	28	[illegible]	[illegible]		[illegible]	[illegible]
30	28	[illegible]	-51.3		99	11.3
25	26	[illegible]	-48.7		112	11.1
20	25	26,704	-46.8		[illegible]	[illegible]
15	23	28,619	-44.2		93	12.8
10	11	[illegible]	-41.7			

+ MARCUS IS., N. PACIFIC 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	9	29.4	75	96	10.3
1000	31	121	27.6	74	95	11.7
950	31	573	23.0	74	97	13.8
900	31	1,043	20.3	67	105	13.8
850	31	1,535	17.7	62	105	12.2
800	31	2,052	15.1	55	102	11.5
750	31	2,595	12.5	47	103	12.0
700	31	3,173	9.4	44	102	12.0
650	31	3,780	5.7	40	97	11.8
600	31	4,435	1.9	39	98	11.7
550	31	5,127	- 2.3	41	100	10.1
500	31	5,883	- 6.6	38	89	8.7
450	31	6,693	-11.5	33	84	9.1
400	31	7,593	-17.2	29	78	9.9
350	31	8,581	-24.4	28	72	8.0
300	31	9,685	-32.7	27	61	8.5
250	31	10,943	-42.8		54	9.7
200	31	12,409	-54.7		55	13.8
175	31	13,251	-61.1		61	14.2
150	31	14,195	-66.6		58	15.2
125	31	15,288	-69.9		61	16.3
100	31	16,613	-70.0		66	20.2
80	31	17,952	-66.1		80	24.7
70	31	18,765	-63.9		84	29.1
60	31	19,714	-61.3		89	32.8
50	31	20,855	-58.1		90	35.4
40	30	22,270	-55.4		87	43.5
30	28	24,119	-51.8		92	47.0
25	26	25,306	-49.3		92	50.1
20	19	26,776	-45.8		94	45.6
15	11	28,702	-43.5			
10						
7						

*** MEDFORD, OREG. 969 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	401	12.6	74	267	1.0
1000	31	131				
950	31	572	14.5	63	272	2.1
900	31	1,023	13.4	61	286	2.3
850	31	1,503	11.5	59	196	.8
800	31	2,008	10.1	44	192	4.3
750	31	2,539	7.3	44	210	9.9
700	31	3,107	3.8	42	215	14.0
650	31	3,702	.5	31	221	15.3
600	31	4,345	- 3.2	29	225	17.5
550	31	5,023	- 7.6	27	227	21.6
500	31	5,763	-12.7	30	229	24.3
450	31	6,556	-18.5	32	230	26.8
400	31	7,428	-25.0	30	229	30.7
350	31	8,385	-32.2	27	229	34.6
300	31	9,456	-39.8	21	229	39.8
250	31	10,680	-47.8		227	43.5
200	31	12,137	-51.6		226	47.2
175	31	13,000	-53.4		228	43.5
150	31	13,990	-55.0		227	38.3
125	31	15,149	-56.9		227	27.0
100	31	16,558	-57.8		216	14.0
80	31	17,966	-57.5		169	5.2
70	31	18,809	-56.5		132	5.2
60	30	19,790	-55.6		110	7.0
50	30	20,956	-53.9		98	9.3
40	30	22,395	-52.0		90	12.2
30	30	24,270	-49.3		87	16.3
25	30	25,471	-47.2		84	19.0
20	29	26,955	-44.9		86	21.8
15	27	28,893	-41.9		87	23.3
10	26	31,672	-37.1		94	27.2
7	15	34,157	-31.9		92	30.9

MERIDA, MEXICO 1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	22.4	98	101	5.1
1000	31	133	24.1	95	112	8.9
950	31	588	22.9	80	129	14.8
900	31	1,055	20.8	66	129	14.0
850	31	1,547	18.3	58	126	11.7
800	31	2,065	15.5	54	129	10.7
750	31	2,603	12.6	47	132	9.7
700	31	3,186	9.4	48	129	8.7
650	31	3,792	5.8	49	125	9.3
600	31	4,448	1.9	47	118	9.5
550	31	5,131	- 2.1	42	103	8.5
500	31	5,897	- 6.6	40	89	8.4
450	31	6,704	-11.5	34	82	7.4
400	31	7,608	-17.2	35	77	7.0
350	31	8,595	-24.2	27	49	5.1
300	31	9,700	-32.3	27	26	1.9
250	31	10,959	-42.3		293	3.1
200	31	12,429	-54.1		325	4.9
175	29	13,272	-60.4		354	4.3
150	29	14,217	-66.9		33	6.6
125	28	15,300	-72.5		55	13.2
100	28	16,604	-72.2		69	20.8
80	28	17,931	-68.0		87	28.7
70	28	18,737	-65.4		86	30.3
60	28	19,683	-62.1		87	36.1
50	28	20,817	-59.0		92	43.1
40	27	22,226	-56.0		95	44.1
30	27	24,075	-51.2		94	42.2
25	27	25,268	-48.6		95	41.2
20	26	26,741	-45.8		88	40.6
15	22	28,671	-42.9		87	44.9

*** MIAMI, FLA. 1015 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	4	24.4	95	203	.4
1000	30	132	25.7	88	146	1.6
950	30	585	23.0	85	163	7.0
900	30	1,054	20.2	78	171	6.2
850	30	1,546	17.3	75	174	5.1
800	30	2,063	14.3	73	170	4.7
750	30	2,603	11.6	62	180	3.9
700	30	3,182	8.4	56	178	3.7
650	30	3,790	5.0	55	185	3.9
600	30	4,440	1.2	54	204	3.7
550	30	5,129	- 2.8	48	216	2.3
500	30	5,886	- 7.1	42	257	2.9
450	30	6,692	-12.0	38	295	2.3
400	30	7,593	-17.8	36	25	2.7
350	29	8,579	-24.6	33	32	5.4
300	29	9,683	-33.0	30	35	6.6
250	29	10,939	-43.1		39	11.5
200	28	12,405	-54.9		37	13.6
175	27	13,246	-61.3		37	16.7
150	27	14,189	-67.2		40	20.4
125	27	15,275	-71.6		50	20.8
100	26	16,595	-70.2		60	18.1
80	26	17,934	-66.2		75	20.8
70	25	18,749	-64.0		79	26.6
60	24	19,698	-61.2		84	34.6
50	24	20,837	-58.3		89	39.2
40	22	22,248	-55.7		96	44.9
30	21	24,097	-51.9		96	42.9
25	21	25,286	-48.8		95	41.6
20	21	26,764	-45.5		89	41.4
15	14	28,693	-41.9		86	44.9
10	9	31,462	-39.6			

*** MIDLAND, TEXAS 915 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	874	23.1	62	165	6.0
1000	31	90				
950	31	540				
900	31	1,019	23.6	58	170	12.0
850	31	1,518	21.7	56	186	[illegible]
800	31	2,042	19.1	51	158	10.1
750	31	2,591	15.5	52	113	7.6
700	31	3,175	11.7	51	86	9.5
650	31	3,787	7.6	54	77	8.5
600	31	4,446	3.2	51	71	8.2
550	31	5,139	- 1.3	54	74	7.6
500	31	[illegible]	- 6.1	52	75	7.2
450	31	6,714	-10.3	38	73	8.4
400	31	7,619	-15.9	33	73	9.5
350	31	8,611	-22.9	28	65	11.8
300	31	9,723	-31.3	28	59	13.6
250	31	[illegible]	-41.2	28	58	13.8
200	31	12,464	-52.9		68	14.2
175	31	13,312	-59.4		79	15.9
150	31	[illegible]	[illegible]		77	15.2
125	31	15,349	-72.0		79	14.8
100	31	16,656	-72.3		85	[illegible]
80	31	17,991	-65.7		89	16.1
70	31	[illegible]	-62.8		90	[illegible]
60	31	19,764	-60.0		88	[illegible]
50	30	[illegible]	-57.3		[illegible]	[illegible]
40	30	[illegible]	-54.7		[illegible]	29.3
30	[illegible]	[illegible]	-50.3		[illegible]	31.5
25	30	[illegible]	-47.8		85	[illegible]
20	27	[illegible]	-45.4		87	[illegible]
15	27	28,792	-42.1		87	[illegible]
10	13	[illegible]	-37.5		[illegible]	[illegible]

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1966

MONTERREY, MEXICO
965 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	423	23.3	89	125	2.7
1000	30	106				
950	30	560	22.3	91	121	4.3
900	30	1,026	19.4	93	136	8.5
850	30	1,518	17.9	77	135	13.2
800	30	2,036	16.0	59	142	10.9
750	30	2,588	13.7	46	152	6.4
700	30	3,162	10.2	47	164	4.1
650	30	3,776	6.5	43	134	1.7
600	30	4,427	2.3	48	79	3.7
550	30	5,113	-2.2	42	83	6.4
500	30	5,876	-6.6	35	88	9.5
450	30	6,689	-11.5	35	85	11.8
400	30	7,587	-17.1	26	82	12.0
350	30	[illegible],575	-24.1	25	80	12.0
300	30	9,682	-32.4	24	80	13.4
250	30	10,941	-42.2		76	14.2
200	29	12,414	-53.6		74	16.3
175	29	13,261	-59.8		73	21.6
150	29	14,209	-66.1		74	21.2
125	29	15,299	-71.8		69	21.0
100	29	16,606	-73.1		73	26.2
80	28	17,936	-67.0		78	28.7
70	27	18,749	-63.1		85	26.8
60	27	19,705	-60.6		81	29.3
50	27	20,845	-58.8		84	33.4
40	27	22,254	-56.1		86	39.2
30	24	24,102	-51.7		89	42.3
25	22	25,288	-49.0		90	42.9
20	14	26,752	-46.4		79	42.7
15	7	28,664	-43.0			
10						

MONTGOMERY, ALA.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	61	23.6	91	277	1.2
1000	31	137	23.7	89	282	2.9
950	31	591	23.7	77	297	5.1
900	31	1,059	21.3	74	311	3.3
850	31	1,554	18.2	73	296	1.6
800	31	2,071	15.0	70	308	1.0
750	31	2,611	11.9	61	4	1.7
700	31	3,191	8.5	56	360	2.3
650	31	3,799	4.9	53	360	3.5
600	31	4,450	1.5	46	353	3.7
550	31	5,145	-1.8	37	13	4.9
500	31	5,901	-6.0	30	16	5.8
450	31	6,714	-10.9	28	5	7.2
400	31	7,615	-16.8	28	7	8.5
350	31	8,604	-23.7	27	6	10.7
300	31	9,713	-31.7	25	16	11.8
250	31	10,975	-41.6	27	11	13.8
200	31	12,451	-52.8		10	16.9
175	31	13,301	-58.5		11	19.0
150	31	14,256	-64.3		14	19.2
125	31	15,356	-69.3		29	18.5
100	31	16,683	-69.5		49	15.2
80	31	18,030	-64.1		65	15.5
70	31	18,852	-61.4		73	17.5
60	31	19,815	-58.3		77	21.0
50	31	20,969	-55.6		85	25.4
40	31	22,400	-52.4		90	28.2
30	31	24,273	-49.2		91	30.5
25	31	25,474	-47.0		89	31.1
20	28	26,955	-45.0		85	31.5
15	21	28,886	-42.1		81	36.9
10						

* NANTUCKET, MASS.
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	14	19.8	81	256	2.7
1000	31	119	20.0	69	247	5.2
950	31	559	19.3	50	274	11.8
900	31	1,024	16.4	50	284	10.7
850	31	1,508	13.1	52	286	11.3
800	31	2,016	10.6	43	283	15.0
750	31	2,545	8.1	35	281	18.8
700	31	3,118	4.9	35	279	20.2
650	31	3,713	1.8	31	281	21.2
600	31	4,360	-1.9	29	281	24.3
550	31	5,038	-6.0	27	279	26.2
500	31	5,788	-10.4	27	274	28.7
450	31	6,583	-15.8	28	274	30.5
400	31	7,470	-21.5	25	273	33.0
350	31	8,441	-28.2	23	268	39.8
300	31	9,528	-36.4	26	267	44.7
250	31	10,767	-45.8		268	43.5
200	31	12,222	-54.1		277	44.9
175	31	13,074	-56.2		281	38.7
150	31	14,049	-58.2		276	34.6
125	30	15,192	-59.7		276	27.0
100	30	16,587	-59.3		283	15.9
80	30	17,991	-57.4		316	3.5
70	30	18,837	-55.9		58	4.1
60	30	19,822	-54.4		79	8.0
50	30	20,994	-52.6		87	11.8
40	29	22,444	-50.4		90	16.7
30	28	24,332	-47.8		88	20.2
25	27	25,538	-46.0		87	23.3
20	24	27,031	-43.4		88	26.4
15	19	28,984	-40.4		91	26.2
10	12	31,766	-36.0			

* NASHVILLE, TENN.
995 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	177	21.9	89	148	1.6
1000	31	136				
950	31	587	23.7	69	261	5.8
900	31	1,056	21.1	67	275	5.8
850	31	1,548	17.8	66	291	4.9
800	31	2,065	14.4	65	305	4.9
750	31	2,604	11.1	58	314	5.1
700	31	3,180	7.9	53	315	6.6
650	31	3,784	4.4	53	324	6.4
600	31	4,436	.9	46	329	7.2
550	31	5,129	-2.7	38	332	8.4
500	31	5,881	-6.8	26	329	8.7
450	31	6,690	-11.9	24	328	9.7
400	31	7,588	-17.8	26	332	13.0
350	31	8,573	-24.6	26	335	15.9
300	31	9,677	-32.8	26	330	19.4
250	31	10,934	-42.3		332	23.7
200	31	12,407	-53.2		339	24.5
175	31	13,256	-58.8		339	25.4
150	31	14,210	-64.1		342	23.9
125	31	15,314	-68.2		351	18.8
100	31	16,652	-67.5		10	10.1
80	31	18,012	-62.7		49	9.7
70	31	18,839	-60.2		66	12.4
60	31	19,806	-57.5		77	15.3
50	31	20,965	-54.8		84	18.6
40	31	22,401	-51.9		88	21.0
30	31	24,277	-48.9		90	22.9
25	31	25,479	-46.9		88	25.4
20	30	26,964	-44.4		85	28.0
15	26	28,910	-41.4		83	31.9
10	15	31,690	-37.1		88	39.2

NOME, ALASKA
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	7	8.7	91	175	1.9
1000	31	91	8.8	87	180	3.1
950	31	515	8.1	79	180	5.8
900	31	960	6.1	80	164	8.5
850	31	1,427	3.8	75	169	9.3
800	31	1,918	1.2	78	175	8.9
750	31	2,435	-1.6	76	181	9.1
700	31	2,983	-4.3	72	187	9.3
650	31	3,561	-7.4	66	198	8.9
600	31	4,184	-10.6	56	203	7.8
550	31	4,844	-14.7	53	210	8.5
500	31	5,564	-19.3	48	212	8.4
450	31	6,335	-24.6	49	219	9.7
400	31	7,188	-30.4	46	218	12.6
350	31	8,124	-37.4	50	222	13.4
300	31	9,171	-45.0		216	11.8
250	31	10,373	-50.4		219	8.9
200	31	11,834	-47.4		242	7.4
175	31	12,721	-45.9		250	6.4
150	31	13,747	-45.9		226	6.8
125	31	14,959	-46.3		246	5.8
100	31	16,441	-46.3		185	4.1
80	31	17,924	-46.1		176	3.9
70	31	18,810	-46.3		130	3.7
60	31	19,835	-46.4		111	4.5
50	31	21,047	-46.1		103	6.0
40	31	22,531	-45.8		99	9.3
30	31	24,452	-44.5		88	11.8
25	31	25,677	-43.3		85	15.5
20	30	27,188	-41.6		90	17.5
15	29	29,151	-38.9		93	19.4
10	19	31,952	-34.8			

■ NORTH PLATTE, NEBR.
917 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	848	19.6	85	127	2.7
1000	31	90				
950	31	538				
900	31	1,007	21.0	75	178	5.6
850	31	1,503	21.5	61	209	14.4
800	31	2,027	19.4	52	219	11.5
750	31	2,580	16.2	46	221	8.2
700	31	3,162	12.2	44	229	5.4
650	31	3,777	7.6	44	260	3.7
600	31	4,432	2.9	46	287	4.1
550	31	5,124	-2.1	46	268	4.9
500	31	5,880	-7.2	46	277	8.5
450	31	6,694	-11.6	31	280	11.8
400	31	7,589	-17.2	29	279	17.9
350	31	8,577	-23.8	30	279	23.3
300	31	9,684	-32.3	29	278	29.3
250	31	10,944	-41.9		275	33.4
200	31	12,419	-52.8		274	36.5
175	31	13,269	-58.8		272	35.2
150	31	14,222	-64.8		274	33.2
125	30	15,320	-69.1		285	24.1
100	30	16,653	-67.8		271	9.9
80	30	18,014	-62.0		82	.6
70	30	18,845	-59.4		87	6.2
60	30	19,816	-57.2		77	9.9
50	30	20,976	-54.5		85	12.0
40	30	22,415	-51.8		93	14.6
30	30	24,293	-48.9		94	17.7
25	29	25,496	-46.9		88	19.8
20	26	26,983	-44.7		65	21.2
15	19	28,921	-41.4		83	25.8
10	9	31,709	-36.3			
7						

* OAKLAND, CALIF.
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	6	14.8	81	271	4.1
1000	31	117	12.8	86	259	4.5
950	31	556	13.7	71	255	6.0
900	31	1,008	17.2	30	281	7.2
850	31	1,495	16.9	23	266	6.2
800	31	2,009	14.3	21	229	6.6
750	31	2,549	11.2	22	219	8.2
700	31	3,123	7.9	21	222	10.5
650	31	3,728	4.3	20	217	12.4
600	31	4,377	.1	22	216	14.6
550	31	5,060	-4.5	23	217	16.1
500	31	5,812	-9.6	23	225	18.8
450	30	6,608	-15.5	21	229	22.5
400	30	7,495	-22.1	21	225	28.7
350	30	8,463	-29.4	23	225	33.2
300	30	9,544	-37.8	23	224	37.9
250	30	10,777	-46.4		221	41.8
200	29	12,236	-54.0		216	47.4
175	29	13,088	-56.4		215	46.4
150	29	14,061	-59.0		218	42.9
125	29	15,196	-61.7		219	30.5
100	28	16,576	-61.5		211	12.4
80	28	17,962	-60.1		153	7.8
70	28	18,798	-58.4		117	8.4
60	28	19,769	-56.6		103	11.3
50	28	20,928	-55.1		90	14.0
40	28	22,358	-53.1		88	17.1
30	28	24,221	-50.6		86	22.1
25	27	25,411	-48.5		90	25.3
20	27	26,888	-45.6		88	25.4
15	26	28,818	-42.2		87	28.4
10	21	31,585	-37.6		92	32.6
7	12	34,059	-32.8			

OKLAHOMA CITY, OKLA.
968 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	392	23.7	81	158	5.8
1000	31	103				
950	31	562	24.6	74	180	14.2
900	31	1,030	23.8	63	209	19.2
850	31	1,528	20.8	62	213	12.4
800	31	2,051	17.3	66	219	6.2
750	31	2,596	13.6	68	236	2.7
700	31	3,179	9.9	66	287	1.9
650	31	3,787	6.1	66	322	1.7
600	31	4,444	2.5	58	30	1.6
550	31	5,136	-1.3	49	17	2.1
500	31	5,898	-5.4	43	22	1.6
450	31	6,711	-10.3	38	24	2.1
400	31	7,617	-15.9	34	9	4.7
350	31	8,620	-22.7	28	11	7.2
300	31	9,724	-30.8	28	4	10.3
250	31	10,992	-40.6	33	360	13.8
200	31	12,475	-52.0		4	16.9
175	31	13,327	-58.3		5	14.4
150	31	14,282	-64.8		2	13.0
125	31	15,379	-70.4		17	12.0
100	30	16,699	-70.3		59	8.7
80	30	18,044	-64.5		67	11.1
70	30	18,867	-61.0		80	15.5
60	30	19,831	-57.8		88	16.5
50	30	20,989	-54.5		89	19.8
40	30	22,426	-52.1		91	22.7
30	30	24,301	-48.8		87	26.2
25	29	25,504	-46.4		86	28.4
20	27	26,994	-43.4		84	30.3
15	22	28,941	-40.2		85	35.9
10	8	31,758	-34.9			
7						

OMAHA, NEBR.
967 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	403	21.1	86	142	3.5
1000	31	111				
950	31	557	22.3	78	169	6.8
900	31	1,029	22.2	65	203	11.3
850	31	1,526	19.9	59	220	8.9
800	31	2,047	17.2	54	233	6.0
750	31	2,591	14.2	46	259	4.7
700	31	3,174	10.4	47	271	5.1
650	31	3,781	6.3	47	275	6.0
600	31	4,438	2.3	39	282	7.6
550	31	5,127	-2.2	39	277	10.1
500	31	5,887	-6.4	34	279	12.0
450	31	6,695	-11.9	32	285	14.[illegible]
400	31	7,595	-17.5	30	290	18.3
350	31	8,583	-24.1	32	298	24.7
300	31	9,690	-32.2	29	299	29.9
250	31	10,952	-41.9		298	37.7
200	31	12,428	-52.8		292	41.8
175	31	13,279	-58.7		291	44.5
150	31	14,234	-63.9		299	41.2
125	31	15,341	-67.7		303	26.0
100	31	16,683	-66.6		299	13.2
80	31	18,046	-62.6		14	3.7
70	31	18,874	-60.1		63	7.6
60	31	19,841	-57.0		77	9.9
50	31	21,003	-54.0		88	12.2
40	31	22,443	-51.6		88	14.8
30	30	24,323	-48.3		87	16.5
25	29	25,529	-46.5		84	18.3
20	23	27,016	-44.6		85	20.4
15	10	28,943	-42.2			
10						
7						

PAGO PAGO AMERICAN SAMOA
+ 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	28.2	77	104	11.8
1000	31	109	26.4	74	103	12.6
950	31	562	22.1	77	88	12.6
900	31	1,029	19.3	71	84	12.2
850	31	1,520	17.0	64	72	9.9
800	31	2,037	15.6	50	61	7.0
750	31	2,585	12.9	46	48	4.5
700	31	3,160	9.8	42	38	4.3
650	31	3,770	6.7	36	10	5.8
600	31	4,425	3.1	35	2	8.0
550	31	5,123	-.6	32	360	8.2
500	31	5,882	-4.9	30	343	7.0
450	31	6,702	-9.9	27	320	4.5
400	31	7,604	-15.6	25	274	6.0
350	31	8,599	-22.4	23	257	10.9
300	31	9,713	-30.8	22	265	12.6
250	31	10,980	-41.1	20	264	15.9
200	31	12,459	-53.0		265	18.8
175	31	13,307	-59.8		261	20.0
150	31	14,254	-66.6		264	18.5
125	31	15,339	-73.0		262	14.8
100	31	16,628	-77.2		269	7.6
80	31	17,922	-72.1		262	3.9
70	31	18,714	-69.0		255	4.7
60	31	19,645	-64.7		266	6.4
50	31	20,771	-60.1		283	9.1
40	31	22,177	-56.4		277	15.3
30	31	24,020	-52.2		273	21.4
25	31	25,207	-49.4		271	23.9
20	26	26,681	-45.9		275	26.0
15	17	28,603	-42.1		272	27.8
10						
7						

* PEORIA, ILL.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	200	20.0	78	88	2.1
1000	31	130				
950	31	580	22.6	62	213	2.7
900	31	1,045	19.8	61	253	5.4
850	31	1,535	16.7	59	267	7.8
800	31	2,050	14.2	48	286	9.5
750	31	2,594	11.6	44	290	11.1
700	31	3,167	8.6	39	290	11.7
650	31	3,775	5.1	37	295	11.7
600	31	4,425	1.4	31	302	14.6
550	31	5,115	-2.6	30	312	15.7
500	31	5,871	-7.0	28	308	17.3
450	31	6,679	-12.4	28	312	18.5
400	31	7,573	-18.8	28	311	22.7
350	31	[illegible],555	-25.6	26	312	27.8
300	31	9,656	-33.4	29	314	30.7
250	31	10,912	-42.5		314	38.1
200	31	12,386	-52.7		314	44.7
175	31	13,238	-57.7		316	43.7
150	31	14,199	-62.8		316	39.0
125	31	15,312	-66.4		322	29.3
100	31	16,662	-65.6		321	15.5
80	31	18,031	-61.5		10	8.2
70	31	18,863	-59.1		45	9.1
60	31	19,835	-56.4		71	11.5
50	31	20,999	-53.7		78	13.0
40	31	22,442	-50.9		86	15.7
30	31	24,326	-48.1		89	17.3
25	31	25,532	-46.4		86	19.6
20	31	27,020	-44.3		88	22.1
15	30	28,961	-41.0		87	24.1
10	26	31,741	-36.3		86	29.5
7	11	34,180	-33.0			
5						

* PITTSBURGH, PA.
974 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	353	18.5	86	259	1.2
1000	31	132				
950	31	576	20.3	65	259	3.7
900	31	1,040	18.0	61	262	6.4
850	31	1,527	14.8	62	299	9.3
800	31	2,038	11.8	56	297	11.1
750	31	2,573	9.3	40	300	13.4
700	31	3,145	6.1	42	299	14.6
650	31	3,743	2.7	39	299	15.9
600	31	4,392	-.8	36	301	17.9
550	31	5,075	-4.8	34	302	19.6
500	31	5,825	-9.5	30	305	20.2
450	31	6,626	-14.8	28	308	20.8
400	31	7,513	-20.7	26	310	25.3
350	31	8,487	-27.5	24	307	29.3
300	31	9,577	-35.8	25	309	33.2
250	31	10,821	-44.6		307	39.8
200	31	12,285	-53.1		309	44.1
175	31	13,139	-56.5		308	41.4
150	31	14,208	-60.6		312	36.9
125	31	15,234	-63.5		310	26.0
100	31	16,607	-62.2		316	15.7
80	31	17,993	-59.3		345	7.8
70	31	18,834	-57.2		22	7.0
60	31	19,813	-55.0		54	9.1
50	31	20,984	-53.0		69	9.1
40	31	22,429	-50.8		79	14.8
30	31	24,316	-47.8		83	17.3
25	31	25,523	-46.1		86	18.8
20	31	27,016	-43.7		90	20.8
15	29	28,967	-40.8		91	25.1
10	22	31,753	-36.5		91	28.9
7	13	34,263	-31.4		93	33.0
5	7	36,701	-26.1			

PONAPE, CAROLINE IS.
+ 1004 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	39	28.6	80	60	2.9
1000	31	74	28.1	78	70	3.3
950	31	521	24.3	71	91	5.6
900	31	1,001	21.3	71	98	7.0
850	31	1,495	18.5	68	101	8.5
800	31	2,013	15.8	63	99	9.7
750	31	2,558	13.1	59	97	11.5
700	31	3,138	10.2	55	96	12.6
650	31	3,749	6.9	54	96	14.4
600	31	4,406	3.3	50	94	15.3
550	31	5,103	-.6	47	90	17.1
500	31	5,864	-4.8	39	97	16.7
450	31	6,681	-9.6	35	97	16.3
400	31	7,588	-15.0	33	96	13.6
350	31	8,585	-21.6	28	100	11.5
300	31	9,702	-29.7	26	114	8.9
250	31	10,974	-40.3	27	116	5.4
200	31	12,455	-52.8		125	6.2
175	31	13,303	-60.0		132	5.2
150	31	14,248	-67.5		110	7.4
125	31	15,325	-74.8		96	10.7
100	31	16,603	-79.1		92	14.6
80	31	17,896	-71.3		85	20.2
70	30	18,692	-67.5		91	21.6
60	30	19,629	-62.9		93	19.2
50	30	20,762	-59.0		93	15.2
40	30	22,170	-55.8		95	14.8
30	30	24,018	-51.6		103	13.0
25	30	25,205	-49.5		108	12.4
20	28	26,674	-47.2		98	11.7
15	26	28,584	-45.1		103	16.3
10	21	31,313	-42.5		92	31.7
7	12	33,727	-39.3			
5						

PORTLAND, ME.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	20	17.7	76	272	3.5
1000	31	114	18.1	65	274	4.9
950	31	555	18.5	55	265	9.1
900	31	1,017	15.7	52	284	10.3
850	31	1,500	12.4	55	287	13.2
800	31	2,006	9.3	54	287	16.1
750	31	2,534	6.3	50	285	19.4
700	31	3,103	3.3	46	282	21.2
650	31	3,696	.2	40	279	25.1
600	31	4,338	-3.5	39	280	27.8
550	31	5,014	-7.7	37	280	29.3
500	31	5,755	-12.2	35	277	30.9
450	31	6,550	-17.5	27	279	34.8
400	31	7,430	-24.5	29	278	36.3
350	31	8,394	-30.5	29	279	42.0
300	31	9,473	-38.0	28	277	44.9
250	31	10,708	-45.9		276	50.1
200	31	12,168	-52.9		278	46.4
175	29	13,021	-54.5		278	40.2
150	29	14,009	-55.2		276	35.5
125	29	15,168	-56.9		278	26.6
100	29	16,581	-56.8		283	14.6
80	29	17,998	-55.1		312	3.7
70	29	18,852	-53.9		62	1.2
60	28	19,847	-52.5		82	4.7
50	28	21,028	-51.2		39	7.4
40	27	22,483	-49.5		92	9.5
30	27	24,376	-47.2		88	13.4
25	27	25,587	-45.4		87	15.3
20	24	27,084	-42.8		86	17.9
15	20	29,037	-39.5		87	21.6
10	19	31,841	-33.6		92	22.3
7	16	34,347	-29.8		94	21.0
5	10	36,749	-25.9			

RAPID CITY, S. DAK.
904 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	966	19.2	76	122	1.0
1000	31	82				
950	31	528				
900	31	999			128	1.0
850	31	1,493	20.9	57	203	6.4
800	31	2,017	19.5	44	209	8.7
750	31	2,565	16.4	39	214	9.9
700	31	3,152	12.1	39	229	9.3
650	31	3,761	7.3	42	248	8.4
600	31	4,421	2.1	45	264	11.3
550	31	5,103	-3.3	47	272	15.3
500	31	5,862	-8.7	47	269	17.7
450	31	6,666	-13.4	34	265	23.1
400	31	7,559	-19.4	32	262	28.0
350	31	8,537	-26.2	28	262	36.1
300	31	9,634	-34.1	26	261	46.0
250	31	10,886	-43.0		262	56.9
200	31	12,357	-52.9		262	62.5
175	31	13,208	-57.6		261	59.8
150	31	14,170	-62.4		261	51.3
125	31	15,283	-66.0		264	36.5
100	31	16,638	-64.6		260	18.5
80	31	18,017	-59.8		225	3.5
70	31	18,855	-57.6		89	2.3
60	31	19,832	-56.0		90	6.6
50	30	20,996	-54.0		91	9.7
40	30	22,438	-51.2		87	12.6
30	29	24,319	-48.5		88	15.3
25	29	25,524	-46.7		85	15.7
20	27	27,009	-44.6		87	17.5
15	23	28,943	-41.8		85	18.5
10	16	31,713	-37.6		93	24.3
7	6	34,167	-34.7			
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST. CLOUD, MINN.
977 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	316	18.1	88	178	2.5
1000	31	114				
950	31	561	20.6	72	211	4.7
900	31	1,024	19.4	63	267	7.4
850	31	1,515	17.2	55	286	10.1
800	31	2,031	14.5	50	290	11.8
750	31	2,572	11.7	43	292	13.2
700	31	3,149	8.1	41	294	17.3
650	31	3,753	4.2	35	295	19.8
600	31	4,404	- .2	33	293	22.7
550	31	5,089	- 4.8	32	290	24.1
500	31	5,840	- 9.3	33	291	27.2
450	31	6,642	-14.0	30	290	29.1
400	31	7,534	-20.0	30	291	33.4
350	31	8,511	-27.0	30	291	39.2
300	31	9,604	-35.1	29	293	46.8
250	31	10,851	-44.1		289	55.8
200	31	12,319	-52.5		287	64.5
175	31	13,174	-56.7		287	63.3
150	31	14,142	-60.3		292	53.6
125	31	15,271	-62.7		296	37.3
100	31	16,648	-61.4		299	18.6
80	31	18,043	-58.6		326	9.7
70	31	18,885	-56.7		344	5.2
60	31	19,867	-55.1		30	5.4
50	31	21,036	-53.1		59	9.5
40	30	22,483	-50.5		77	11.8
30	30	24,373	-47.4		88	14.6
25	28	25,582	-45.8		88	14.8
20	26	27,070	-44.0		90	16.9
15	18	29,006	-41.3		92	15.9
10	6	31,807	-36.9			
7						
5						

ST. PAUL IS., ALASKA
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	6.6	95	167	3.1
1000	31	99	6.6	95	182	3.1
950	31	517	5.6	92	195	5.6
900	31	962	4.7	87	190	6.6
850	31	1,428	3.8	80	194	6.8
800	31	1,919	2.2	71	209	7.2
750	31	2,438	.1	70	215	7.0
700	31	2,989	- 2.6	65	223	8.7
650	31	3,569	- 5.6	65	[illegible]	8.9
600	31	4,198	- 9.0	56	232	8.4
550	31	4,861	-12.8	47	233	7.2
500	31	5,589	-17.6	43	236	8.2
450	31	6,363	-23.1	43	248	9.1
400	31	7,222	-29.1	40	245	9.5
350	31	8,162	-36.4	37	249	9.5
300	31	9,214	-43.9		249	9.9
250	31	10,421	-49.2		242	13.4
200	31	11,881	-49.6		251	12.2
175	31	12,758	-48.0		253	11.5
150	31	13,775	-48.0		249	9.3
125	31	14,975	-48.7		243	7.6
100	31	16,440	-48.8		227	5.4
80	30	17,906	-48.6		197	4.3
70	30	18,783	-48.7		148	3.9
60	30	19,795	-48.7		133	4.9
50	30	20,993	-48.8		112	6.2
40	30	22,460	-48.4		101	9.9
30	30	24,360	-46.8		95	12.8
25	29	25,573	-45.7		99	13.0
20	28	27,069	-43.9		90	15.2
15	25	29,016	-41.1		91	17.7
10	13	31,826	-36.9			
7						
5						

SALEM, OREG.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	11.[illegible]	85	270	1.9
1000	31	139	12.9	80	306	2.3
950	31	572	12.1	75	1	5.1
900	31	1,024	[illegible]	69	349	2.9
850	31	1,499	9.2	61	262	2.3
800	31	2,000	6.9	50	245	5.1
750	31	2,525	4.[illegible]	45	240	8.0
700	31	3,088	1.8	36	237	12.2
650	31	3,676	- 1.5	33	234	14.6
600	31	4,316	- [illegible]	30	230	16.9
550	31	4,986	- 9.5	30	231	17.9
500	31	5,726	-14.3	30	231	20.6
450	31	6,508	-[illegible]	31	228	25.6
400	31	7,380	-26.2	31	227	28.9
350	31	8,332	-33.3	33	230	33.2
300	31	9,397	-40.9	24	230	37.9
250	31	10,616	-48.1		228	42.5
200	31	12,074	-50.5		229	43.5
175	31	12,944	-50.9		229	41.6
150	31	13,945	-52.[illegible]		231	34.4
125	31	15,1[illegible]4	-54.4		232	23.5
100	30	16,541	-55.2		223	12.4
80	29	17,960	-56.[illegible]		176	4.9
70	29	18,809	-55.5		135	4.[illegible]
60	29	19,794	-54.1		112	5.8
50	28	[illegible],964	-53.1		94	9.3
40	28	22,406	-51.2		88	[illegible]
30	28	24,286	-48.5		86	15.9
25	28	25,488	-47.0		88	15.7
20	28	26,973	-44.8		84	[illegible]
15	22	28,909	-41.2		89	20.6
10	5	31,698	-37.[illegible]			
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5						

[illegible] CITY, [illegible]
[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,288	20.1	44	[illegible]	6.6
1000	31	66				
950	31	513				
900	31	995				
850	31	1,490	[illegible]	34	152	11.5
800	31	2,018	21.3	31	175	15.2
750	31	2,570	17.5	32	[illegible]	12.6
700	31	3,158	12.9	35	212	12.4
650	31	3,771	7.9	38	[illegible]	13.0
600	31	4,429	2.2	45	211	14.4
550	31	5,115	- 3.7	55	214	17.3
500	31	5,871	- 9.0	[illegible]	222	20.0
450	31	6,676	-14.1	39	222	24.3
400	31	7,565	-19.7	31	[illegible]	28.7
350	31	8,542	[illegible]	32	[illegible]	35.5
300	31	9,637	-34.8	33	226	44.1
250	31	10,886	-43.9		[illegible]	54.6
200	31	12,354	-53.1		227	62.4
175	31	13,205	-57.6		228	59.4
150	31	14,167	-62.6		227	49.9
125	31	[illegible]	-66.9		[illegible]	33.8
100	30	16,623	-65.8		217	17.7
80	30	17,994	-60.9		182	6.8
70	30	18,827	-58.7		131	6.2
60	29	19,799	-56.6		102	8.0
50	29	20,961	-54.5		90	11.3
40	29	22,398	-52.1		67	15.0
30	28	[illegible]	-49.4		[illegible]	18.5
25	27	25,470	-47.6		66	20.4
20	25	26,952	-45.2		[illegible]	22.0
15	14	28,377	-41.8		[illegible]	19.8
10						
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[illegible]
997 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	124	[illegible]	[illegible]	348	1.6
1000	30	[illegible]				
950	30	542	17.7	[illegible]	345	2.3
900	30	1,005	22.9	[illegible]	316	[illegible]
850	30	[illegible]	22.1	29	[illegible]	5.8
800	30	2,026	19.2	33	[illegible]	7.2
750	30	2,574	15.5	35	[illegible]	[illegible]
700	30	3,159	11.3	40	203	10.7
650	30	3,769	7.[illegible]	42	194	[illegible]
600	30	4,427	2.6	41	191	12.0
550	30	[illegible]	- 2.1	40	[illegible]	12.0
500	30	5,877	- 7.1	41	200	14.2
450	30	6,687	-12.4	35	206	17.1
400	30	[illegible]	-18.2	[illegible]	208	[illegible]
350	30	8,566	-25.2	28	[illegible]	24.3
300	30	[illegible]	-33.3	28	207	31.1
250	30	10,924	-42.4		[illegible]	38.7
200	30	[illegible]	-52.6		199	43.9
175	[illegible]	[illegible]	-58.5		[illegible]	43.5
150	30	14,208	-64.0		195	40.4
125	30	15,310	-68.8		[illegible]	29.1
100	30	16,643	-68.3		[illegible]	[illegible]
80	30	17,996	-64.1		[illegible]	[illegible]
70	29	18,819	-61.7		[illegible]	13.8
60	29	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	20.2
40	28	[illegible]	-53.9		[illegible]	[illegible]
30	28	[illegible]	[illegible]		[illegible]	29.1
25	28	25,411	-48.8		90	33.4
20	27	[illegible]	-46.0		[illegible]	33.8
15	27	[illegible]	-42.8		91	36.1
10	25	[illegible]	-37.8		[illegible]	[illegible]
7	24	34,053	-34.7		93	45.5
5	[illegible]	[illegible]	[illegible]			

* SAN JUAN, P. R.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	26.1	82	113	4.9
1000	31	144	25.3	81	100	11.1
950	31	591	21.9	81	97	15.2
900	31	1,063	19.0	78	103	15.0
850	31	1,552	16.3	72	106	15.2
800	31	2,067	14.5	55	105	16.3
750	31	2,606	11.9	46	106	15.3
700	31	3,186	8.3	44	105	14.0
650	31	3,789	4.9	39	99	12.0
600	31	4,443	1.2	40	100	9.3
550	31	5,133	- 2.7	39	87	7.6
500	31	5,889	- 7.2	34	79	4.5
450	31	6,698	-12.3	31	95	2.7
400	31	7,595	-18.0	25	259	1.4
350	31	8,578	-25.2	25	280	4.1
300	31	9,679	-33.7	25	300	7.4
250	31	10,931	-43.7		298	9.3
200	31	12,391	-55.5		300	11.8
175	31	13,230	-61.8		308	13.2
150	30	14,168	-67.8		305	12.6
125	30	15,253	-70.9		319	6.8
100	30	16,573	-71.0		63	6.2
80	30	17,902	-68.0		77	21.4
70	30	18,708	-65.5		82	32.1
60	30	19,651	-62.6		87	36.7
50	29	20,783	-59.1		89	37.5
40	28	22,188	-56.2		89	39.4
30	28	24,033	-52.1		91	37.9
25	28	25,221	-49.5		91	36.5
20	26	26,688	-46.4		87	35.9
15	22	28,608	-42.7		83	37.5
10	11	31,327	-39.7			
7	5	33,732	-36.4			
5						

SAN NICOLAS, CALIF.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	174	12.9	94	308	9.3
1000	31	104				
950	31	543	20.3	44	311	8.0
900	31	1,012	22.3	33	300	7.4
850	31	1,507	20.9	34	266	7.0
800	31	2,028	18.2	34	237	8.0
750	31	2,576	14.7	35	220	10.1
700	31	3,155	10.9	34	213	11.1
650	31	3,768	6.5	37	208	12.2
600	31	4,419	1.8	39	212	13.6
550	31	5,114	- 3.4	44	213	15.2
500	31	5,861	- 8.5	38	213	14.2
450	31	6,670	-13.9	32	215	16.7
400	31	7,555	-19.4	35	212	20.4
350	31	8,535	-26.2	32	212	26.2
300	31	9,631	-34.6	31	209	33.2
250	31	10,881	-43.5	30	206	42.2
200	31	12,349	-53.1	27	203	47.0
175	31	13,200	-58.1	27	203	48.2
150	31	14,158	-63.6	26	202	43.1
125	31	15,264	-68.0		204	32.1
100	31	16,606	-66.9		180	9.1
80	31	17,965	-63.6		116	12.0
70	31	18,791	-60.8		104	13.6
60	30	19,756	-58.1		97	18.3
50	29	20,911	-55.8		97	20.0
40	29	22,338	-53.8		81	24.1
30	28	24,200	-50.4		83	31.1
25	28	25,395	-48.3		91	32.1
20	28	26,875	-44.9		85	33.2
15	28	28,809	-42.5		90	36.1
10	28	31,577	-37.0		86	39.2
7	21	34,076	-31.7		92	41.8
5	5	36,414	-28.7			

* SAULT STE. MARIE, MICH.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	221	15.1	85	38	1.7
1000	31	121				
950	31	557	17.2	63	295	6.4
900	31	1,019	15.7	56	293	11.1
850	31	1,502	12.9	55	290	14.6
800	31	2,009	9.9	54	292	17.3
750	31	2,542	7.4	42	290	18.5
700	31	3,109	4.6	39	293	20.8
650	31	3,704	1.0	39	296	23.9
600	31	4,348	- 3.0	40	[illegible]	28.6
550	31	5,025	- 6.9	36	[illegible]	29.9
500	31	5,770	-11.4	33	298	32.1
450	31	6,565	-16.9	30	299	35.0
400	31	7,444	-22.8	28	298	39.0
350	31	8,410	-29.9	29	302	43.5
300	31	9,490	-37.9	29	302	46.8
250	31	10,722	-46.2		302	56.9
200	31	12,181	-52.5		302	64.1
175	31	13,041	-54.0		306	56.7
150	31	14,025	-56.0		306	48.2
125	31	15,178	-57.4		304	36.5
100	31	16,587	-57.1		307	20.8
80	30	18,005	-55.6		319	11.1
70	30	18,857	-54.6		339	7.8
60	30	19,847	-53.2		15	6.0
50	30	21,026	-51.5		54	6.6
40	30	22,482	-49.2		71	9.9
30	30	24,378	-46.9		[illegible]	15.0
25	30	25,591	-45.2		88	17.3
20	30	27,088	-42.8		89	18.8
15	27	29,046	-39.4		89	20.4
10	24	31,845	-35.0		87	25.6
7	14	34,349	-29.7		92	31.7
5	7	36,778	-24.5			

SHEMYA, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	38	6.3	98	237	2.7
1000	31	92			210	4.9
950	31	516	5.7	[illegible]	[illegible]	5.1
900	31	956	6.0	77	251	3.7
850	31	1,423	5.2	65	254	4.1
800	31	1,918	3.7	59	262	4.9
750	31	2,443	1.9	54	271	5.8
700	31	2,994	- .7	48	269	8.2
650	31	3,585	- 3.5	47	277	9.3
600	31	4,213	- 6.8	41	276	[illegible]
550	31	4,885	-10.8	37	279	12.4
500	31	5,614	-15.5	38	283	[illegible]
450	31	6,398	-21.0	36	[illegible]	18.8
400	31	7,262	-26.7	34	[illegible]	22.7
350	31	8,211	-33.9	37	279	24.9
300	31	9,274	-41.8	51	286	26.4
250	31	10,489	-48.9		289	28.7
200	31	11,944	-50.9		286	29.3
175	31	12,815	-49.9		285	24.5
150	31	13,822	-50.3		285	18.6
125	31	15,009	-51.2		281	13.2
100	31	16,457	-51.6		279	7.2
80	31	17,908	-50.7		248	2.7
70	29	18,776	-50.0		139	.8
60	29	19,785	-49.5		116	3.3
50	29	20,979	-49.2		106	6.6
40	29	22,443	-48.8		98	9.3
30	26	24,338	-47.1		90	11.8
25	25	25,547	-46.1		95	13.0
20	25	27,036	-44.2		[illegible]	[illegible]
15	22	28,975	-41.3		92	16.9
10	14	31,746	-37.7			
7						
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* SHREVEPORT, LA.
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	24.3	[illegible]	[illegible]	4.1
1000	31	126	24.5	89	[illegible]	5.6
950	31	583	24.3	77	233	11.1
900	31	[illegible]	21.6	72	217	8.0
850	31	1,547	18.6	71	[illegible]	6.8
800	31	2,065	15.1	67	178	5.6
750	31	2,611	11.8	65	177	4.9
700	31	3,185	8.4	62	171	4.1
650	31	3,795	5.1	58	137	2.7
600	31	4,445	1.3	64	[illegible]	2.5
550	31	5,140	- 2.3	53	84	1.9
500	31	5,894	- 6.6	49	62	3.5
450	31	[illegible]	-11.3	42	[illegible]	6.2
400	31	7,607	-16.9	33	45	8.7
350	31	8,596	-23.8	33	44	11.5
300	31	9,702	-32.1	31	42	13.0
250	31	10,963	-41.9	29	34	15.5
200	31	12,457	-53.1		30	19.6
175	31	13,285	-58.9		32	19.6
150	31	14,237	-65.1		37	[illegible]
125	31	[illegible]	-70.9		43	[illegible]
100	31	16,643	-71.2		61	15.9
80	31	[illegible]	-65.5		[illegible]	17.1
70	31	[illegible]	-62.1		82	17.3
60	31	19,758	-59.2		62	20.2
50	31	[illegible]	-56.9		87	24.5
40	29	22,328	-54.1		90	28.6
30	29	24,187	-50.8		89	29.7
25	29	25,379	-48.9		87	33.4
20	28	26,557	-45.8		[illegible]	35.2
15	27	28,785	-42.9		87	39.4
10	15	31,542	-38.4		91	45.8
7						
5						

SPOKANE, WASH.
931 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	717	13.4	63	184	4.1
1000	31	107				
950	31	543				
900	31	1,004	17.0	47	230	5.2
850	31	1,489	14.4	45	246	7.4
800	31	1,997	10.5	49	244	9.9
750	31	2,526	6.8	50	232	10.5
700	31	3,095	3.2	51	222	12.4
650	31	3,686	- .5	54	219	19.0
600	31	4,327	- 4.4	46	221	24.5
550	31	5,000	- 8.9	42	220	28.6
500	31	5,739	-13.9	39	219	29.9
450	31	6,523	-19.4	37	221	35.4
400	31	7,395	-25.9	34	224	38.5
350	31	8,349	-33.0	34	224	44.7
300	31	9,416	-40.5	32	225	47.2
250	31	10,636	-48.4		226	52.4
200	31	12,090	-51.4		226	51.3
175	31	12,958	-51.3		229	46.8
150	31	13,957	-52.4		233	36.3
125	31	15,132	-53.8		230	24.9
100	31	16,561	-55.1		228	15.0
80	31	17,985	-55.1		199	4.5
70	31	18,837	-54.4		132	2.9
60	31	19,828	-52.9		107	4.7
50	31	21,007	-51.7		84	9.1
40	31	22,461	-49.7		88	11.3
30	31	24,354	-47.1		83	14.8
25	31	25,566	-45.6		87	15.5
20	29	27,054	-43.6		88	17.9
15	25	28,998	-40.2		88	21.0
10	8	31,772	-35.3			
7						

SWAN ISLAND, W. I.
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	26.6	87	86	8.[illegible]
1000	31	110	25.9	88	88	10.7
950	31	564	22.8	88	101	15.7
900	31	1,032	20.3	79	105	18.1
850	31	1,526	17.8	69	106	17.9
800	31	2,043	15.3	60	106	17.1
750	31	2,588	12.7	52	107	16.3
700	31	3,165	9.5	48	109	14.8
650	31	3,776	6.2	47	104	13.2
600	31	4,429	2.4	44	[illegible]	12.2
550	31	5,120	- 1.5	42	101	10.7
500	31	5,881	- 6.0	43	98	8.7
450	31	6,694	-11.0	41	99	8.4
400	31	7,595	-16.9	35	90	7.0
350	31	8,583	-23.9	36	84	5.1
300	31	9,689	-32.3	33	47	3.3
250	31	10,947	-42.5		337	3.9
200	31	12,414	-54.6		316	6.0
175	31	13,255	-61.4		317	7.6
150	31	14,195	-68.4		326	7.6
125	31	15,274	-72.9		28	8.2
100	31	16,579	-72.9		72	18.6
80	31	17,896	-70.3		87	28.4
70	30	18,694	-66.9		86	32.6
60	30	19,637	-63.3		84	37.7
50	30	20,765	-60.1		89	42.5
40	30	22,170	-56.6		91	[illegible]
30	29	24,011	-52.7		94	41.0
25	29	25,196	-49.9		97	39.0
20	27	26,666	-46.2		92	38.5
15	21	28,582	-43.0		92	42.5
10	7	31,338	-40.8			
7						

TAMPA, FLA.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	25.3	91	117	1.0
1000	31	134	25.1	86	117	1.4
950	31	586	23.1	76	228	3.1
900	31	1,056	20.7	70	228	4.1
850	31	1,549	18.0	63	222	3.5
800	31	2,066	15.0	64	241	2.9
750	31	2,607	12.0	57	232	2.5
700	31	3,186	8.9	53	228	1.6
650	31	3,795	5.5	50	249	2.9
600	31	4,448	1.8	47	264	2.9
550	31	5,139	- 2.1	41	277	3.5
500	31	5,898	- 6.3	38	302	2.9
450	31	6,713	-10.9	38	332	3.5
400	31	7,612	-16.8	33	16	4.1
350	31	8,601	-23.7	31	3	6.0
300	31	9,709	-32.0	29	6	5.2
250	31	10,971	-41.9		1	6.2
200	31	12,444	-53.6		14	10.9
175	31	13,290	-59.8		26	12.6
150	31	14,240	-65.4		26	17.3
125	31	15,336	-69.9		42	17.1
100	31	16,660	-69.8		57	18.6
80	31	18,005	-65.4		75	19.6
70	31	18,822	-6[illegible]		77	23.3
60	31	19,777	-59.6		83	30.1
50	31	20,925	-56.9		[illegible]	35.2
40	31	22,347	-54.1		96	37.3
30	31	[illegible]	-50.4		93	37.5
25	27	[illegible]	-47.7		90	38.9
20	24	26,872	-45.2		85	37.3
15	12	28,807	-41.5			
10						
7						

* TATOOSH IS., WASH
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	31	11.8	95	[illegible]	4.7
1000	31	140	11.2	94	215	4.3
950	31	566	9.8	89	[illegible]	5.2
900	31	1,016	8.7	73	281	4.7
850	31	1,489	7.5	66	[illegible]	2.3
800	31	1,986	5.3	58	304	3.1
750	31	2,509	2.4	54	[illegible]	4.3
700	31	3,066	- .5	52	298	4.7
650	31	[illegible]	- 3.7	52	287	5.6
600	31	4,283	- 7.4	48	[illegible]	7.2
550	31	4,949	-11.5	40	[illegible]	6.6
500	31	5,680	-16.4	33	265	9.3
450	31	6,457	-22.1	35	261	10.1
400	31	7,320	-28.6	36	273	11.1
350	31	8,263	-35.6	32	283	11.8
300	31	9,318	-42.8	26	276	13.8
250	31	10,530	-49.0		269	14.8
200	31	[illegible]	-50.1		249	18.6
175	31	12,862	-49.7		245	19.8
150	31	13,869	[illegible]		242	19.2
125	31	15,054	-51.7		238	15.5
100	31	16,496	-53.1		[illegible]	10.1
80	31	17,933	-53.5		182	2.9
70	31	18,790	-53.5		[illegible]	2.7
60	31	19,783	-53.1		[illegible]	4.5
50	31	20,961	-52.1		94	6.6
40	[illegible]	22,413	-50.3		[illegible]	[illegible]
30	30	24,299	-48.3		82	12.4
25	29	25,502	-46.7		83	13.4
20	28	26,990	-44.7		[illegible]	16.3
15	25	28,924	-41.3		91	18.8
10	23	[illegible]	-35.8		87	23.9
7	13	34,185	-31.5			

TOPEKA, KANS.
983 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	269	23.0	74	147	2.3
1000	31	114				
950	31	566	23.9	70	200	8.7
900	31	1,037	23.0	65	[illegible]	10.3
850	31	1,534	20.1	64	226	8.0
800	31	2,056	17.0	61	[illegible]	6.4
750	31	2,597	13.6	56	221	5.8
700	31	3,183	10.2	53	221	4.7
650	31	[illegible]	6.6	56	[illegible]	[illegible]
600	31	4,449	3.0	49	228	4.3
550	31	5,142	- .7	42	246	5.1
500	31	5,906	- 5.2	36	262	5.6
450	31	6,716	-10.4	34	274	8.2
400	31	7,624	-16.4	30	300	10.9
350	31	8,614	-23.3	30	[illegible]	16.3
300	31	[illegible]	-31.3	31	315	21.8
250	31	10,991	-40.9	39	314	25.3
200	31	12,470	-52.6		313	28.4
175	31	[illegible]	-58.6		[illegible]	30.3
150	31	14,276	-64.3		318	27.6
125	31	15,377	-69.3		320	19.4
100	31	16,706	-68.8		329	8.4
80	30	18,060	-62.8		56	6.6
70	30	18,887	-60.1		71	9.5
60	30	19,855	-57.5		78	12.0
50	[illegible]	21,013	-54.8		87	15.3
40	30	22,449	-52.0		91	18.1
30	[illegible]	24,324	-49.1		91	20.0
25	28	25,525	-47.2		[illegible]	22.3
20	27	27,007	-45.1		[illegible]	24.3
15	20	28,948	-41.4		[illegible]	28.9
10	6	31,696	-37.8			
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

JULY 1966

Standard pressure surface (mb)	+ TRUK, CAROLINE IS. 1009 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	2	28.1	81	63	1.7
1000	31	83	27.4	79	83	2.7
950	31	529	24.0	74	100	5.2
900	31	1,008	21.1	70	100	7.8
850	31	1,502	1[illegible]	67	97	8.5
800	31	2,021	15.9	63	95	9.1
750	31	2,568	13.1	60	93	11.3
700	31	3,146	10.0	56	95	12.4
650	31	3,759	6.5	55	93	14.0
600	31	4,413	2.7	55	92	16.1
550	31	5,106	- 1.2	51	91	16.7
500	31	5,869	- 5.[illegible]	45	93	16.3
450	30	6,690	-10.0	37	92	15.9
400	30	7,592	-15.2	33	97	15.0
350	30	8,588	-21.9	29	100	13.2
300	30	9,704	-31.3	26	99	10.9
250	30	10,974	-40.7	29	110	8.0
200	30	12,454	-53.2		107	7.0
175	30	13,299	-60.3		103	7.2
150	30	14,242	-68.1		94	8.7
125	30	15,316	-75.8		95	12.6
100	30	16,590	-78.6		87	17.5
80	30	17,886	-71.3		86	24.3
70	30	18,682	-67.6		90	24.9
60	30	19,619	-63.3		93	22.3
50	30	20,752	-59.0		91	17.9
40	27	22,165	-55.2		94	14.6
30	22	24,[illegible]	-51.8		108	13.2
25	17	25,205	-49.0		102	10.9
20	9	26,679	-46.6			
15						
10						
7						
5						

Standard pressure surface (mb)	* TUCSON, ARIZ. 923 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	789	24.2	61	163	6.0
1000	31	75				
950	31	526				
900	31	1,008	26.4	47	184	3.9
850	31	1,511	24.0	45	332	1.7
800	31	2,038	20.4	47	349	2.9
750	31	2,588	16.5	50	60	1.4
700	31	3,176	12.4	55	146	2.9
650	31	3,786	7.8	61	168	7.2
600	31	4,448	2.9	68	169	9.1
550	31	5,137	- 1.9	69	161	10.9
500	31	5,903	- 6.3	64	156	9.7
450	31	6,712	-11.0	52	158	8.0
400	31	7,613	-16.7	46	168	8.0
350	31	8,603	-23.3	42	172	12.0
300	31	9,712	-31.5	37	170	16.1
250	31	10,977	-41.3		178	17.7
200	31	12,453	-52.9		184	18.5
175	31	13,302	-59.3		185	18.6
150	30	14,232	-65.7		179	18.3
125	30	15,344	-71.5		167	17.1
100	30	16,654	-72.1		142	9.9
80	28	17,986	-66.7		103	15.5
70	27	18,800	-63.2		99	17.9
60	27	19,756	-59.6		93	21.6
50	27	20,905	-56.5		95	24.7
40	27	22,326	-54.5		91	26.2
30	27	24,180	-51.2		89	30.5
25	27	25,371	-48.9		87	31.9
20	27	26,845	-46.0		85	35.2
15	26	28,775	-42.3		88	36.9
10	21	31,542	-37.4		90	44.1
7	8	34,025	-32.8			
5						

Standard pressure surface (mb)	* VANDENBERG AFB, CALIF. 1002 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	100	11.4	97	324	2.9
1000	31	117	11.4	96	326	3.7
950	31	553	15.2	61	353	7.4
900	31	1,012	20.9	28	5	6.6
850	31	1,505	19.3	28	22	1.0
800	31	2,023	16.5	26	218	4.3
750	31	2,564	13.7	24	214	7.4
700	31	3,146	10.3	23	216	10.3
650	31	3,752	6.5	26	217	12.4
600	31	4,410	2.3	24	216	14.0
550	31	5,095	- 2.5	23	212	14.8
500	31	5,856	- 7.7	22	213	16.9
450	31	6,657	-13.5	21	218	19.2
400	31	7,552	-20.0	23	217	22.1
350	31	8,528	-27.6	21	215	27.0
300	31	9,618	-36.1	22	211	32.8
250	31	10,861	-44.9		207	42.0
200	30	12,320	-53.9		205	50.7
175	30	13,170	-57.9		206	52.3
150	30	14,132	-62.3		205	46.4
125	30	15,248	-65.5		207	31.5
100	30	16,607	-64.6		194	9.7
80	30	17,974	-62.6		128	10.1
70	30	18,801	-60.6		109	11.3
60	30	19,764	-58.4		102	14.8
50	30	20,917	-56.2		89	17.1
40	29	22,340	-54.3		81	20.6
30	29	24,197	-50.9		84	27.2
25	28	25,390	-48.8		87	28.6
20	28	26,863	-46.5		88	29.9
15	27	28,787	-43.0		87	31.3
10	25	31,538	-39.1		89	33.6
7	18	34,008	-33.4		89	35.4
5						

Standard pressure surface (mb)	VICTORIA, TEXAS 1010 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	33	24.6	92	146	2.3
1000	31	121	24.9	93	156	5.1
950	31	569	22.8	91	188	13.6
900	31	1,043	20.4	77	184	13.8
850	31	1,557	17.8	67	174	11.5
800	31	2,054	15.0	63	161	9.5
750	31	2,593	12.2	60	151	8.2
700	31	3,175	9.1	59	146	6.2
650	31	3,778	5.7	54	129	5.8
600	31	4,438	2.2	50	112	7.2
550	31	5,129	- 1.7	46	86	8.5
500	31	5,889	- 5.9	38	84	9.3
450	31	6,702	-10.8	34	76	10.7
400	31	7,604	-16.6	34	63	11.3
350	31	8,594	-23.3	30	62	12.6
300	31	9,702	-31.8	28	66	13.2
250	30	10,969	-41.4		63	15.2
200	30	12,446	-52.9		65	20.6
175	29	13,297	-59.2		65	21.2
150	29	14,249	-65.5		65	23.7
125	29	15,340	-71.7		70	25.4
100	29	16,647	-72.5		78	25.3
80	29	17,978	-66.4		82	23.7
70	29	18,792	-63.3		88	24.5
60	29	19,745	-60.2		87	25.8
50	29	20,889	-57.7		88	31.1
40	29	22,303	-55.5		92	35.4
30	28	24,154	-51.4		92	39.4
25	28	25,344	-49.1		90	40.4
20	28	26,815	-46.5		89	43.7
15	24	28,740	-42.7		88	45.8
10	5	31,484	-41.2			
7						
5						

Standard pressure surface (mb)	* WAKE IS., PACIFIC AREA 1013 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	28.0	81	76	9.3
1000	31	121	26.8	83	81	11.7
950	31	571	22.9	86	90	15.2
900	31	1,045	20.1	80	92	15.9
850	31	1,537	17.3	77	92	15.7
800	31	2,054	14.5	75	90	14.4
750	31	2,596	11.9	64	90	14.6
700	31	3,174	9.0	55	90	13.4
650	31	3,781	5.8	45	91	12.6
600	31	4,435	2.0	42	93	12.0
550	31	5,129	- 2.2	40	90	10.3
500	31	5,884	- 7.0	43	87	7.6
450	31	6,692	-11.9	44	85	5.4
400	31	7,592	-17.9	46	73	2.9
350	31	8,577	-24.8	39	258	2.3
300	31	9,680	-33.2	35	265	7.0
250	31	10,934	-43.3		269	12.0
200	31	12,397	-55.1		271	15.5
175	31	13,238	-61.2		267	19.8
150	31	14,181	-67.5		273	19.8
125	31	15,265	-72.0		274	8.9
100	30	16,576	-71.9		82	9.7
80	27	17,901	-68.3		87	23.9
70	25	18,705	-65.6		87	30.5
60	25	19,647	-62.9		85	35.7
50	25	20,776	-60.2		86	40.2
40	25	22,179	-56.5		88	39.8
30	25	24,017	-53.0		88	41.6
25	24	25,201	-50.3		86	42.7
20	23	26,667	-47.3		83	42.5
15	23	28,583	-44.2		86	44.9
10	22	31,318	-41.0		87	52.6
7	15	33,773	-37.2		88	60.6
5	7	36,106	-35.5			

Standard pressure surface (mb)	* WALLOPS IS. VA. NASA 1015 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	21.4	83	279	1.9
1000	31	136	22.3	73	271	3.3
950	31	581	21.7	57	298	5.2
900	31	1,050	19.2	50	313	4.9
850	31	1,540	15.7	53	315	4.7
800	31	2,052	12.1	58	313	7.0
750	31	2,592	9.3	52	300	8.9
700	31	3,160	6.4	46	294	10.7
650	31	3,762	3.1	44	286	12.0
600	31	4,410	- .6	38	278	14.2
550	31	5,095	- 4.3	36	280	14.8
500	31	5,847	- 8.7	33	280	15.7
450	31	6,655	-13.8	31	275	19.0
400	31	7,542	-19.7	28	282	18.6
350	31	8,519	-26.7	28	287	22.0
300	31	9,614	-35.0	29	289	23.5
250	31	10,860	-44.4		298	27.2
200	31	12,322	-54.2		304	31.3
175	31	13,170	-58.3		304	28.4
150	31	14,131	-61.9		304	24.3
125	31	15,250	-64.7		305	16.9
100	31	16,613	-63.3		316	11.5
80	31	17,995	-60.2		28	6.0
70	31	18,831	-58.0		62	8.2
60	31	19,806	-55.9		77	11.7
50	31	20,971	-54.7		81	14.2
40	31	22,411	-51.5		83	17.1
30	30	24,291	-48.4		86	22.9
25	30	25,496	-46.4		87	24.7
20	30	26,985	-44.1		88	26.2
15	27	28,950	-40.9		86	29.1
10	8	31,729	-35.9			
7						

Standard pressure surface (mb)	WASHINGTON, D. C. 1006 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	84	19.8	84	312	1.0
1000	31	133			306	1.7
950	31	578	21.8	53	319	6.0
900	31	1,046	19.1	54	321	7.4
850	31	1,535	15.7	57	308	8.2
800	31	2,047	12.1	60	295	10.9
750	31	2,587	9.0	50	293	12.6
700	31	3,154	6.1	49	292	12.8
650	31	3,756	2.7	48	294	14.2
600	31	4,402	- .8	43	288	15.2
550	31	5,088	- 4.7	40	292	18.5
500	31	5,836	- 9.0	31	292	20.0
450	31	6,642	-14.1	27	291	21.0
400	31	7,530	-19.9	32	294	23.1
350	31	8,506	-27.0	31	295	25.3
300	31	9,600	-35.2	30	296	30.7
250	31	10,845	-44.4		302	37.1
200	31	12,307	-53.6		308	42.7
175	31	13,160	-57.0		311	39.2
150	31	14,127	-61.0		313	32.1
125	30	15,251	-63.6		311	26.4
100	30	16,619	-63.2		313	15.5
80	30	18,002	-59.7		11	6.8
70	30	18,839	-58.0		55	7.4
60	30	19,815	-55.9		76	10.3
50	30	20,982	-53.6		85	15.2
40	30	22,424	-51.2		88	19.0
30	28	24,304	-48.4		88	22.0
25	27	25,511	-46.4		88	23.9
20	18	26,998	-44.1		85	26.2
15	5	28,969	-41.2			
10						
7						

Standard pressure surface (mb)	WINNEMUCCA, NEV. 868 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,310	13.4	32	302	.8
1000	31	91				
950	31	533				
900	31	1,001				
850	31	1,489	18.8	29	309	3.7
800	31	2,008	17.0	27	288	5.2
750	31	2,549	13.6	29	256	5.2
700	31	3,132	9.8	32	217	10.1
650	31	3,759	5.6	33	208	17.5
600	31	4,391	.7	39	203	25.3
550	31	5,075	- 4.8	43	206	29.9
500	31	5,826	-10.3	41	211	29.3
450	31	6,625	-15.9	34	220	29.9
400	31	7,507	-21.9	30	221	34.2
350	31	8,477	-28.8	30	220	41.2
300	31	9,562	-36.8	29	219	49.1
250	31	10,800	-45.4		218	57.7
200	31	12,261	-52.8		219	65.1
175	31	13,117	-55.6		220	60.0
150	31	14,091	-58.9		220	52.1
125	31	15,227	-61.5		223	33.4
100	29	16,607	-61.5		213	15.7
80	29	17,999	-59.0		144	5.4
70	29	18,839	-57.7		119	7.2
60	28	19,818	-55.6		103	8.2
50	28	20,986	-53.7		85	11.5
40	27	22,426	-51.9		87	15.7
30	27	24,303	-48.9		85	17.9
25	27	25,507	-46.6		85	20.0
20	25	26,989	-44.7		88	22.0
15	21	28,930	-41.4		83	23.1
10	5	31,719	-37.2			
7						

Standard pressure surface (mb)	WINSLOW, ARIZ. 852 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,492	18.8	63	190	3.3
1000	31	86				
950	31	536				
900	31	1,016				
850	31	1,512	19.1	62	194	3.3
800	31	2,056	20.9	44	234	4.3
750	31	2,593	17.2	45	232	5.1
700	31	3,176	12.9	49	221	7.0
650	31	3,791	8.3	54	200	9.1
600	31	4,451	3.3	58	194	12.2
550	31	5,144	- 1.8	62	197	13.0
500	31	5,903	- 6.7	58	201	14.6
450	31	6,713	-11.5	52	202	13.0
400	31	7,613	-17.1	45	210	15.3
350	31	8,602	-23.9	42	207	18.1
300	31	9,709	-32.1	39	205	23.5
250	31	10,973	-41.5	37	206	30.1
200	31	12,450	-53.0		210	32.1
175	31	13,299	-59.3		209	31.5
150	31	14,250	-65.5		207	26.4
125	31	15,343	-71.1		199	20.2
100	31	16,657	-71.8		167	10.1
80	31	17,992	-65.5		113	11.3
70	31	18,810	-62.6		100	13.0
60	31	19,767	-59.2		89	16.5
50	30	20,916	-56.5		92	20.0
40	30	22,340	-53.8		89	22.1
30	30	24,200	-51.0		89	27.2
25	27	25,382	-49.3		88	28.7
20	26	26,856	-46.6		86	29.7
15	24	28,776	-43.1		87	32.8
10	10	31,557	-38.5			
7						

Standard pressure surface (mb)	YAKUTAT, ALASKA 1016 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	8.9	99	98	1.2
1000	31	143	10.0	94	123	.2
950	31	571	8.7	89	204	1.7
900	31	1,016	6.8	88	255	1.7
850	31	1,486	5.8	79	229	3.1
800	31	1,982	4.1	70	245	4.1
750	31	2,504	1.8	60	254	4.3
700	31	3,059	- .6	57	261	5.8
650	31	3,647	- 4.0	56	268	6.8
600	31	4,276	- 7.7	52	272	9.1
550	31	4,943	-11.8	50	275	11.3
500	31	5,672	-16.4	50	269	12.4
450	31	6,450	-21.7	47	265	14.6
400	31	7,313	-27.7	43	262	16.1
350	31	8,259	-35.1	46	268	19.8
300	31	9,316	-42.8	44	274	25.6
250	31	10,524	-51.0		277	28.9
200	31	11,958	-54.1		276	22.9
175	31	12,821	-51.0		274	16.7
150	31	13,826	-50.0		272	12.6
125	31	15,018	-49.[illegible]		263	8.5
100	30	16,479	-49.3		260	4.7
80	30	17,943	-49.1		191	.8
70	30	18,819	-48.9		117	1.2
60	30	19,832	-48.7		99	2.3
50	30	21,031	-48.3		85	4.9
40	29	22,501	-47.4		88	7.4
30	29	24,409	-45.9		87	10.9
25	28	25,623	-44.7		88	13.4
20	28	27,123	-42.8		87	15.0
15	27	29,071	-40.2		85	17.3
10	16	31,836	-36.2		85	22.9
7	6	34,396	-31.6			

Standard pressure surface (mb)	+ YAP, CAROLINE IS. 1007 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	17	28.5	82	110	1.2
1000	31	80	27.6	80	108	1.7
950	31	53[illegible]	23.6	77	120	2.9
900	31	1,005	20.8	74	108	4.7
850	31	1,499	18.3	70	101	5.2
800	31	2,017	15.6	64	96	6.0
750	31	2,562	12.7	59	97	7.3
700	31	3,141	9.7	56	96	12.0
650	31	3,752	6.4	54	99	14.4
600	31	4,406	2.7	52	100	16.5
550	31	5,101	- 1.2	48	100	17.5
500	31	5,861	- 5.3	45	99	16.5
450	31	6,679	-10.1	42	100	15.9
400	31	7,581	-15.5	37	95	13.4
350	31	8,576	-22.2	32	93	11.7
300	30	9,689	-30.7	29	89	10.9
250	30	10,957	-40.9	24	92	10.1
200	30	12,433	-53.6		86	9.7
175	30	13,277	-60.9		89	9.5
150	30	14,218	-68.6		86	10.3
125	30	15,289	-76.0		86	14.8
100	30	16,563	-78.9		83	22.7
80	30	17,860	-71.3		84	28.2
70	30	18,654	-68.3		87	29.5
60	30	19,587	-64.2		89	28.7
50	30	20,716	-59.8		91	28.0
40	29	22,122	-56.4		88	24.9
30	27	23,966	-52.0		93	21.6
25	24	25,155	-49.6		91	21.6
20	20	26,623	-46.7		97	24.5
15	11	28,528	-45.0			
10						

Standard pressure surface (mb)	YUCCA FLAT, NEV. 880 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,196	15.5	37	201	1.4
1000	30	81				
950	30	525				
900	30	998				
850	30	1,491	22.6	28	202	5.8
800	30	2,015	19.7	27	200	17.5
750	30	2,562	15.8	29	200	19.6
700	30	3,148	11.5	33	192	16.5
650	30	3,756	6.6	37	186	16.3
600	30	4,413	1.9	37	187	17.1
550	30	5,101	- 3.2	R35	172	18.5
500	30	5,856	- 8.5	R28	201	22.0
450	30	6,657	-13.7	R24	210	24.1
400	30	7,552	-19.7	R24	217	28.2
350	30	8,530	-26.7	R23	215	34.4
300	29	9,622	-34.8	R22	215	47.0
250	29	10,870	-43.7		211	55.2
200	29	12,338	-53.0		209	66.2
175	28	13,186	-58.0		210	62.5
150	28	14,145	-63.5		211	58.5
125	28	15,252	-67.1		211	43.1
100	28	16,599	-66.7		186	17.5
80	28	17,965	-62.0		149	9.3
70	28	18,794	-59.8		109	9.7
60	28	19,764	-57.5		90	14.2
50	28	20,920	-55.4		78	18.5
40	28	22,351	-53.2		76	22.1
30	27	24,212	-50.6		86	24.1
25	27	25,405	-48.7		84	26.6
20	25	26,879	-46.1		86	28.0
15	14	28,800	-43.4		87	31.7
10	8	31,535	-39.9			

Note: All observations scheduled at 1200, G.C.T Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i. e., elevation angles less than 6° above the horizon, or any obstruction above the horizon

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of 98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

R More than half of the observations are from statistical values. Equipped with lithium chloride hygristor.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

JULY 1966

ALBUQUERQUE, N. MEX.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
July									
1-----	0.80	0.87	1.00	1.19	1.37	1.18	----	----	----
2-----	----	----	----	1.23	1.40	1.18	----	----	----
3-----	.88	.95	1.07	1.23	1.46	1.27	1.12	1.01	0.94
4-----	.98	1.04	1.07	1.30	1.45	1.26	1.12	.99	----
5-----	.84	.92	1.03	1.19	1.39	----	----	----	----
6-----	.81	.86	1.00	1.16	----	----	----	----	----
7-----	.76	.84	.97	1.15	1.34	----	----	----	----
8-----	----	----	----	1.12	1.32	----	----	----	----
9-----	.70	.79	.95	1.10	1.27	----	----	.81	.75
14----	.65	.73	.87	1.06	1.28	----	----	----	----
15----	.68	.77	.90	1.08	1.35	----	----	----	----
16----	.71	.80	.93	1.09	1.28	----	----	----	----
17----	----	----	----	1.15	1.39	----	----	----	----
18----	.75	.84	.95	1.15	----	----	----	----	----
19----	.74	.83	.91	1.11	1.33	----	----	----	----
21----	----	----	----	1.12	1.37	1.21	1.06	.95	.83
22----	.81	----	----	1.20	1.39	1.22	1.06	.96	----
23----	----	----	----	1.03	----	----	----	----	----
24----	----	.77	.90	1.09	1.36	----	----	----	----
25----	----	----	----	----	1.32	----	----	----	----
26----	----	----	----	----	1.33	----	----	----	----
30----	----	----	----	----	1.31	----	----	----	----
31----	----	----	----	----	1.33	----	----	----	----
Averages	0.78	0.85	0.97	1.14	1.35	1.22	1.09	0.94	0.84

BLUE HILL OBS., MASS.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
July									
1-----	----	0.82	----	1.13	1.28	1.07	0.83	0.72	0.55
4-----	----	----	----	----	----	1.11	.93	.77	.71
5-----	0.76	.86	0.96	1.10	1.23	----	----	----	----
9-----	.55	.66	.78	.98	1.22	.99	.69	----	----
11----	----	----	----	----	1.23	1.01	.86	.71	.61
15----	----	----	.84	1.10	----	1.00	.79	.67	.58
16----	.77	.89	1.00	1.18	1.33	1.06	.88	.75	.62
17----	.72	.82	.93	1.08	1.27	----	----	----	----
18----	.48	.58	.71	.91	----	----	----	----	----
21----	.82	.87	1.01	1.18	1.35	1.06	.88	.78	.67
22----	----	----	----	----	1.27	.85	.62	.48	.41
23----	.49	.55	.70	.88	1.16	----	----	----	----
24----	.40	.49	.59	.82	1.08	.88	.64	.50	.42
25----	.43	.53	.64	.78	----	----	----	----	----
27----	----	----	----	1.18	1.35	1.00	.70	----	----
30----	.82	.94	1.04	----	----	----	----	----	----
31----	----	----	----	----	1.30	----	----	----	----
Averages	0.62	0.73	0.84	1.03	1.26	1.00	0.78	0.67	0.57

GUAM, M. I.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
July									
3-----	----	M 0.79	----	----	----	----	----	----	----

MADISON, WIS.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
July									
1-----	M 0.79	M 0.88	M 1.01	S 1.14	S 1.33	M 0.98	M 0.73	M 0.56	M 0.40
2-----	----	----	----	HI .65	M .86	----	-	----	----
10----	M .62	M .72	M .87	S 1.06	----	----	----	----	----
16----	S .78	S .83	S .94	S 1.10	----	----	----	----	----
20----	S .84	S .93	S 1.05	S 1.20	----	----	----	----	----
21----	M .77	S .87	S .98	S 1.10	S 1.29	----	----	----	----
30----	M .78	M .88	S 1.00	S 1.16	----	----	----	----	----
31----	M .61	S .69	S .83	S .99	----	----	----	----	----
Averages	0.74	0.93	0.95	1.05	1.16	0.98	0.73	0.56	0.40

TUCSON, ARIZ.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
July									
4-----	----	----	----	----	----	----	----	0.71	0.65
5-----	0.45	0.54	0.68	----	----	----	----	----	.69
6-----	.49	.57	.70	----	----	----	----	.80	.70
7-----	----	.43	.56	0.79	----	----	----	----	----
10----	----	.62	.78	----	----	----	----	----	----
11----	.63	.74	.88	----	----	----	0.92	----	.71
13----	.62	.71	.94	----	----	----	----	----	----
19----	.60	.69	----	----	----	----	----	----	----
22----	.60	.69	----	----	----	----	----	----	----
31----	.25	.31	.45	----	----	----	----	----	----
Averages	0.52	0.59	0.71	----	----	----	----	0.76	0.69

OMAHA, NEBR.

Date	A.M. 78.7°	A.M. 75.7°	A.M. 70.7°	A.M. 60.0°	*	P.M. 60.0°	P.M. 70.7°	P.M. 75.7°	P.M. 78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
July									
1-----	HI0.36	HI0.41	HI0.51	HI0.68	----	----	----	----	----
2-----	HI .28	HI .36	HI .44	HI .64	----	HI0.68	HI0.48	HI0.34	HI0.21
3-----	HI .22	HI .32	HI .41	HI .58	----	----	----	----	----
4-----	HS .37	HS .47	HS .60	HS .82	HS1.14	HM .96	HS .79	HS .69	HS .53
5-----	HS .51	HS .63	HS .75	HS .92	HS1.95	----	----	----	----
7-----	----	----	----	----	HS1.27	HS1.00	HS .80	HS .66	HS .52
9-----	----	----	----	----	HS1.19	HS .92	HS .79	HS .61	HS .49
10----	HM .57	HM .66	HM .83	HM1.02	HS1.28	----	----	----	----
11----	----	----	----	HS1.13	----	----	----	----	----
17----	----	----	----	----	----	HM .84	HM .56	HM .48	HM .34
18----	----	----	----	HM .90	----	----	----	----	----
21----	----	----	HS .91	HS1.03	HM1.26	HM .98	HM .75	HM .68	HM .52
24----	----	----	HI .74	----	----	HM .70	HS .54	HS .44	HM .35
27----	----	----	----	----	HS1.24	----	----	----	----
29----	----	----	----	----	HS1.27	----	----	----	----
30----	.81	.89	1.00	1.10	----	----	----	----	----
31----	----	HM .70	HM .79	HM .92	----	----	----	----	
Averages	0.45	0.56	0.60	0.88	1.32	0.87	0.67	0.56	0.42

HS Slight haze
HM Moderate haze
HI Intense haze
S Slight haze - indeterminable
M Moderate haze - indeterminable
* Values corresponding to true solar noon

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

JULY 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	720	719	756	766	720	737	852	828	910	427	---	---	---	---	---	659	806	586	742	657	774	817	787	811	714	740	715	---	504	657	743	726
AMES IOWA	625	647	613	647	447	690	676	378	565	671	713	586	631*	222*	350*	571*	593*	555*	589	661	652	299	542	549	587	277	563	463	407	544	584	545*
ANNETTE ALASKA	693	599	741	556	738	737	694	511	206	732	719	693	711	664	494	162	433	543	143	196	299	657	656	670	548	339	293	114	336	231	88	490*
APALACHICOLA FLORIDA	388	666	591	---	466	390	483	589	649	658	656	661	569	146	551	678	599	530	582	201	252	---	651	567	478	533	---	703	657	512	586	535
ARGONNE NAT. LAB.	599	505	503	415	448	603	647	388	464	621	592	500	361	299	662	636	604	579	593	658	603	486	457	521	542	389	289	333	300	609	602	510
ASTORIA OREGON	218	133	191	470	250	228	---	581	600	442	574	272	317	201	567	279	538	477	---	695	692	652	312	574	518	656	552	498	565	456	584	452
ATLANTA GEORGIA	203	293	547	424	594	534	700	628	693	617	613	624	493	471	555	453	128	498	377	636	373	672	704	532	219	237	607	441	---	140	306	477
BARROW ALASKA	472	432	300	595	343	290	348	477	451	680	325	391	514	434	590	340	354	380	186	198	362	185	379	370	545	551	644	444	261	278	285	400
BETHEL ALASKA	311	364	221	331	169	131	58	133	352	209	148	---	177	221	359	143	129	688	674	664	559	600	559	555	200	153	334	227	305	506	299	326
BISMARCK N.DAK.	485	359	330	496	702	690	593	486*	609	520	350	643	634	622	575	654	---	---	---	632	499	645	595	396	558	596	218	393	649	631	360	533*
BLUE HILL MASS.	745	671	633	548	711	240	369	685	701	479	712	556	618	596	616	728	662	555	450	354	712	642	593	660	636	432	646	83	630	530	610	574
BOISE IDAHO	640	672	755	750	735	711	709	745	566	713	725	703	725	702	716	693	699	710	701	707	731	706	693	669	717	707	696	690	693	446	382	684
BOSTON MASSACHUSETTS	712	637	578	530	712	201	344	645	601	426	649	530	---	---	582	712	654	612	398	415	635	515	569	622	607	408	652	80	558	531	628	543
BROWNSVILLE TEXAS	580	661	579	617	327	524	740	723	726	714	690	728	599	646	711	757	707	516	678	560	666	606	688	629	592	578	666	641	688	702	672	642
CANTON ISLAND P.I.	460*	430	302	---	571	549	291	435	350	144	587	552	518	554	450	427	512	598	581	540	477	230	599	457	414*	564	541	531	511	599	561	478*
CAPE HATTERAS N.C.	596	644	606	538	676	582	508	362	158	593	601	608	623	644	414	579	200	713	663	515	701	705	681	634	269	512	667	600	550	330	280	540
CARIBOU MAINE	721	509	452	732	762	407	294	488	550	466	187	590	147	761	533	717	680	431	212	492	591	473	441	505	426	501	617	439	264	370	677	498
CHARLESTON S.C.	242	589	460*	715	669	667	648	655	616	622	676	626	329	588	608	303	373	713	610	552	319	742	578	406	306	403	478	423	672	452	444	532*
CLEVELAND OHIO	680	653	633	312	593	388	570	656	533	633	498	102	594	350	709	710	623	595	403	709	715	631	603	492	520	550	113	445	468	664	668	542
COLUMBIA MISSOURI	626	601	625	631	665	635	434	619	635	655	663	642	634	643	483	505	539	630	---	660	673	543	486	500	352	358	412	232	335	672	647	558
DAVIS CALIFORNIA	753	773	766	768	755	784	764	691	758	771	759	746	729	761	751	757	738	723	719	720	704	714	716	741	733	735	732	722	690	102	682	718
DODGE CITY KANSAS	624	658	670	676	642	655	657	682	602	672	668	634	612	604	545	655	637	667	513	285	521	352	507	543	572	639	452	504	625	598	622	590
E. LANSING MICHIGAN	691	684	612	237	507	624	621	492	224	750	401	240	643	184	267	751	711	524	417	715	754	641	588	597	652	589	361	437	415	710	711	540
EL CENTRO CALIF. NPF	617	631	620	626	612	605	486	421	494	458	595	606	625	612	580	583	429	591	579	504	553	475	424	491	350	549	501	423	199	388	548	522
EL PASO TEXAS	765	756	784	808	769	733	778	714	781	630	759	728	763	737	785	775*	516	708	774	738	736	764	739	698	736	715	650	714	747	732	744	735*
ELY NEVADA	744	758	763	769	767	629	761	701	309	598	754	765	764	775	761	---	724	741	734	537	676	577	514	598	---	---	---	575	517	477	470	658
EPPLEY NEWPORT R.I.	693	670	670	510	693	260	412	664	697	488	665	616	576	500	575	709	695	622	492	389	703	645	636	659	631	400	612	86	458	341	552	559
FAIRBANKS ALASKA	647	567	599	577	---	322	494	483	363	547	373	565	594	702	630	577	549	310	581	628	566	358	575	595	496	510	333	586	618	548	426	524
FORT WORTH TEXAS	673	698	589	697	678	590	348	458	683	738	711	714	664	700	724	327	484	712	727	715	588	430	557	342	252	675	694	661	660	618	646	605
FRESNO CALIFORNIA	729	743*	755	740	732	738	738	413	731	730	724	732	727	726	716	714	719	716	704	710	696	693	669	683	698	684	682	696	574	165	647	681*
GAINESVILLE FLORIDA	434	584	671	618	540	680	450	604	608	610	526	584	365	653	730	556	447	504	654	193	324	610	683	288	551	660	173	---	---	---	---	530
GLASGOW MONTANA	467	136	592	713	749	733	732	481	652	650	703	255	341	697	704	656	424	566	651	611	309	374	695	620	263	467	698	512	691	680	266	551
GRAND JUNCTION COLO.	478	588	795	787	803	822	769	777	819	717	707	699	704	807	745	549	549	728	521	657	466	497	540	518	721	510	723	716	731	611	598	666
GREAT FALLS MONTANA	453	---	637	625	646	629	586	585	553	491	647	437	271	541	610	639	566	620	623	610	616	---	---	---	---	---	---	---	596	565	439	604
GREENSBORO N.C.	443	498	668	546	467	605	576	615	640	435	620	380	419	615	304	528	628	614	452	595	627	553	587	656	557	622	529	584	375	63	684	532
INDIANAPOLIS INDIANA	539	574	556	475	619	533	674	683	568	613	566	655	620	524	561	700	675	580	608	752	715	685	242	403	651	572	345	398	608	713	705	584
ITHACA NEW YORK	649	617	618	326	525	409	508	492	576	385	456	477	668	428	630	637	624	475	159	673	499	552	421	449	514	284	180	157	562	539	603	487
LAKE CHARLES LA.	433	402	661	244	301	591	443	497	668	595	681	721	591	614	650	338	484	506	608	606	513	129	439	462	613	677	251	655	484	587	517	515
LANDER WYOMING	290	703	755	758	746	707	692	667	693	381	429	558	583	658	737	551	622	621	292	---	297	674	668	616	654	523	549	670	703	700	326	594
LARAMIE WYOMING	389	620	674	703	687	668	613	557	694	474	449	554	464	664	573	459	509	395	582	563	466	530	479	537	537	455	524	468	657	624	423	548
LAS VEGAS NEVADA	783	816	800	813	812	798	804	719	339	689	780	805	813	813	776	568	730	763	762	614	625	352	587	710	608	669	684	720	478	486	692	691
LITTLE ROCK ARKANSAS	574	381	436	547	669	724	548	---	---	---	634	585	676	630	585	342	677	683	639	210	562	713	319	286	684	681	642	619	398	496	667	557
LOS ANGELES CALIF.	722	721	651	720	734	726	733	689	726	753	758	766	741	744	753	728	744	714	668	572	511	651	663	679	603	604	592	618	276	373	593	662
MADISON WISCONSIN	717	648	632	334	229	724	706	510	231	697	660	333	187	200	707	712	659	533	513	753	693	507	618	580	638	314	465	479	430	686	624	539
MANHATTAN KANSAS	616	623	645	644	649	652	651	626	611	636	622	637	640	623	247	509	575	616	440	504	209	342	441	575	478	550	464	478	561	627	633	552
MATANUSKA ALASKA	246	255	230	554	---	103	449	370	617	308	217	147	538	486	582	568	657	414	673	658	652	370	621	624	545	96	189	232	321	551	292	419
MEDFORD OREGON	192	236	701*	773*	746*	576	571	396	449	761*	709	470	519	653	746*	595	748	747	563	750	735	728	705	672	749	731	700	685	688	550	712	631*
MIAMI FLORIDA	389	369	636	472	613	282	369	584	464	271	560	648	454	771	638	564	721	734	780	402	679	462	455	586	818*	573	---	---	---	---	---	550*
MIDLAND TEXAS	733	723	678	678	701	719	517	546	605	630	662	736	708	675	729	655	586	658	736	707	720	710	585	640	666	409	604	684	685	464	635	651
NASHVILLE TENNESSEE	269	452	333	514	551	586	478	578	638	521	679	581	676	683	434	280	471	581	288	695	677	625	572	626	607	597	527	458	271	572	700	533
NEW YORK N.Y.U	645	689	696	546	552	462	537	612	703	473	588	606	575	456	485	698	651	574	411	614	704	647	534	653	585	451	505	142	504	268	674	556
NORTH OMAHA NEBRASKA	739	726	725	750	554	481	735	651	740	752	742	644	624	391	141	606	726	663	697	639	741	129	270	715	636	204	690	653	685	738	695	609
OAK RIDGE TENNESSEE	280	521	372	349	602	528	591	625	672	532	633	496	574	432	264	443	248	575	381	657	665	660	543	624	670	617	587	516	454	426	523	518
OKLAHOMA CITY OKLA.	512	566	547	490	592	568	557	475	568	597	609	605	605	579	471	472	518	572	587	360	148	371	234	267	468	570	493	376	356	498	544	490

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PAGE ARIZONA	602	647	640	645	660	659	509	645	600	422	602	589	647	636	611	473	476	562	555	487	422	275	546	572	495	556	598	503	413	543	476	551
PHOENIX ARIZONA	573	641	644	628	643	649	619	603	516	590	624	609	613	611	562	580	600	598	305	555	488	587	585	524	441	552	457	420	567	507	517	562
PORTLAND MAINE	707	619	536	654	713	79	414	517	670	367	553	297	605	667	530	716	673	406	314	478	572	617	597	583	596	244	708	94	447	665	696	527
PROSSER WASHINGTON	296	233	489	764	710	580	710	702	762	---	796	479	719	601	625	689	694	709	743	737	762	699	727	647	741	743	721	708	703	649	710	662
RAPID CITY S.DAK.	480	635	650	608	548	528	508	579	633	562	519	546	475	483	468	662	584	344	391	568	400	383	452	581	490	487*	499	195	616	595	262	507*
RENO NEVADA	585	724	713	706	700	711	687	508	700	700	667	694	711	714	715	713	713	696	681	643	663	638	686	694	707	678	678	676	623	214	550	661
RICHLAND 25 NW WASH.	264	195	488	704	667	---	---	663	668	605	705	381	677	586	548	643	652	654	686	705	690	675	679	610	683	670	665	659	655	600	654	611
RIVERSIDE CALIFORNIA	711	686	720	721	744	729	733	671	403	726	734	758	759	744	718	715	746	739	714	628	646	650	656	686	664	652	662	417	117	589	638	661
RUSTON LOUISIANA	507	282	398	663	502	466	592	563	633	457	565	539	593	633	571	434	381	609	563	401	342	562	530	555	607	615	601	568	530	312	524	519
SAINT CLOUD MINN.	552	649	453	687*	525*	583*	697*	705	743	508	581	706	137	593	747	672	590	687	628	753	703	369	648	625	627	392	497	688	581	636	615	599*
†SALT LAKE CITY ASR	595	800	807	808	809	737	730	811	548	615	557	682	841	839	810	528	670	787	745	653	725	592	692	597	653	573	708	738	746	401	533	688
SALT LAKE CITY	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	688	620	728	576	688	648	648	609	641	690	701	470	462	---
SAN ANTONIO TEXAS	644	593	655	662	456	296	586	512	595	696	654	600	483	613	694	695	674	674	667	670	690	647	615	650	657	657	---	603	647	607	647	618
SANTA MARIA CALIF.	651	624	704	670	655	586	644	541	711	669	539	686	599	658	679	665	694	667	650	549	618	618	617	628	648	635	546	595	485	241	607	615
SAULT STE MARIE MICH	701	687	440	769	376	518	766	750	469	760	708	554	614	741	734	691	512	409	725	713	721	235	597	502	379	477	397	491	687	651	447	588
SEATTLE WASH. UNIV.	76	---	---	---	145	521	526	681	526	237	528	683	432	198	441	577	655	554	426	689	704	614	542	228	394	653	655	639	654	618	627	508
SEATTLE TACOMA WASH.	180	99	131	482	242	578	534	705	421	365	614	683	435	161	426	568	705	605	538	722	726	667	528	475	636	663	698	684	703	628	687	525
SPOKANE WASHINGTON	445	171	370	615	---	753	694	755	653	737	771	683	646	540	733	731	648	---	---	750	736	716	724	657	728	680	721	706	718	666	706	659
STATE COLLEGE PENN.	733	766	749	528	277	477	681	691	679	605	441	562	667	375	667	784	649	597	333	750	729	702	600	404	603	522	400	295	680	460	718	585
STERLING VIRGINA	646	694	701	398	317	537	584	669	685	473	545	520	696	646	333	698	645	666	416	656	744	621	629	611	638	572	459	232	342	142	704	556
STILLWATER OKLAHOMA	570	621	564	589	576	633	661	535	556	664	677	643	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SWAN ISLAND W.I.	709	664	718	724	736	679	639	647	273	461	639	738	721	679	606	167	730	372	621	506	749	769	752	747	702	707	624	738	663	727	667	764
TAMPA FLORIDA	532	637	662	662	578	420	521	429	392	468	498	637	399	511	691	605	529	394	675	618	115	243	732	337	429	644	681	620	488	703	314	521
TUCSON ARIZONA	646	699	702	506	717	725	692	580	586	645	703	443	670	603	519	535	580	586	639	589	449	528	566	598	681	631	587	491	643	478	544	599

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values in parentheses are interpolated.

† ASR Research Lab, formerly listed as Salt Lake City Utah.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

JULY 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	177	401	461	448	430	453	480	358	353	446	431	425	397	381	411	355	355	432	356	385	259	432	438	349	424	430	425	401	407	417	115	389

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

DESCRIPTION of CHARTS

CHART I., A. NORMAL DAILY AVERAGE TEMPERATURE (°F. 1931-60) FOR MONTH. B. TEMPERATURE DEPARTURE FROM 30-YEAR MEAN (°F. 1931-60) FOR MONTH. Chart I-A is reproduced from Evironmental Data Service Publication "Climatic Maps of the United States". Chart I-B is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin", a publication of Environmental Data Service.

CHART II. TOTAL PRECIPITATION.-CHART II is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin".

CHART III. PERCENTAGE OF NORMAL PRECIPITATION.-Chart III is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin".

CHART IV. TOTAL SNOWFALL. CHART V. A. PERCENTAGE OF MEAN MONTHLY SNOWFALL. B. DEPTH OF SNOW ON GROUND.-Chart IV gives the total depth in inches of unmelted snowfall as reported during the month by Weather Bureau and cooperative stations. This is converted in Chart V-A into a percentage of the mean monthly total amount computed for each Weather Bureau station having at least 10 years of record. The depth of snow on ground is that reported by both Weather Bureau and cooperative stations as of 7:00 a.m. Eastern Standard Time on the Monday nearest the end of the month. This is reported only for the months December through March. The snowfall charts are presented each month November through April.

> Isolines for Charts I, II, III, IV, and V, are drawn through points of approximately equal value. Caution should be used in interpolating on these charts, particularly in mountainous areas.

CHART VI. A. PERCENTAGE OF POSSIBLE SUNSHINE. B. PERCENTAGE OF MEAN MONTHLY SUNSHINE.-CHART VI-A shows the amount of sunshine received in terms of percentage of the total hours of sunshine possible during the month. In Chart VI-B this is shown as a percentage of the mean number of hours of sunshine received. Means are computed for Weather Bureau stations having at least 10 years of record.

CHART VII. A. AVERAGE DAILY VALUES OF SOLAR RADIATION, LANGLEYS. B. PERCENTAGE OF MEAN DAILY SOLAR RADIATION.-Shown on Chart VII-A are the monthly averages of daily total solar radiation, both direct and diffuse, in langleys (gm. cal. cm. $^{-2}$) for all Weather Bureau stations which record this element.

CHART VII-B shows the percentages of the mean based on at least 5 years of record during the period 1950-1960, and corrected to the International Pyrheliometer Scale of 1956.

CHART VIII.-TRACKS OF CENTERS OF ANTICYCLONES AT SEA LEVEL.

CHART IX. TRACKS OF CENTERS OF CYCLONES AT SEA LEVEL.-Centers which can be identified for 24 hours or more are tracked in these charts. Semi-permanent features such as the Great Basin and Pacific Highs and Colorado and Mexico Lows are not shown. The 7:00 a.m. EST positions are shown by open circles, with the intermediate positions at 6-hour intervals shown by solid dots. The date is given above the circle and the central pressure to whole millibars below. A dashed track indicates a regeneration rather than actual movement to the next position. Solid squares indicate position of stationary center for period shown beside it.

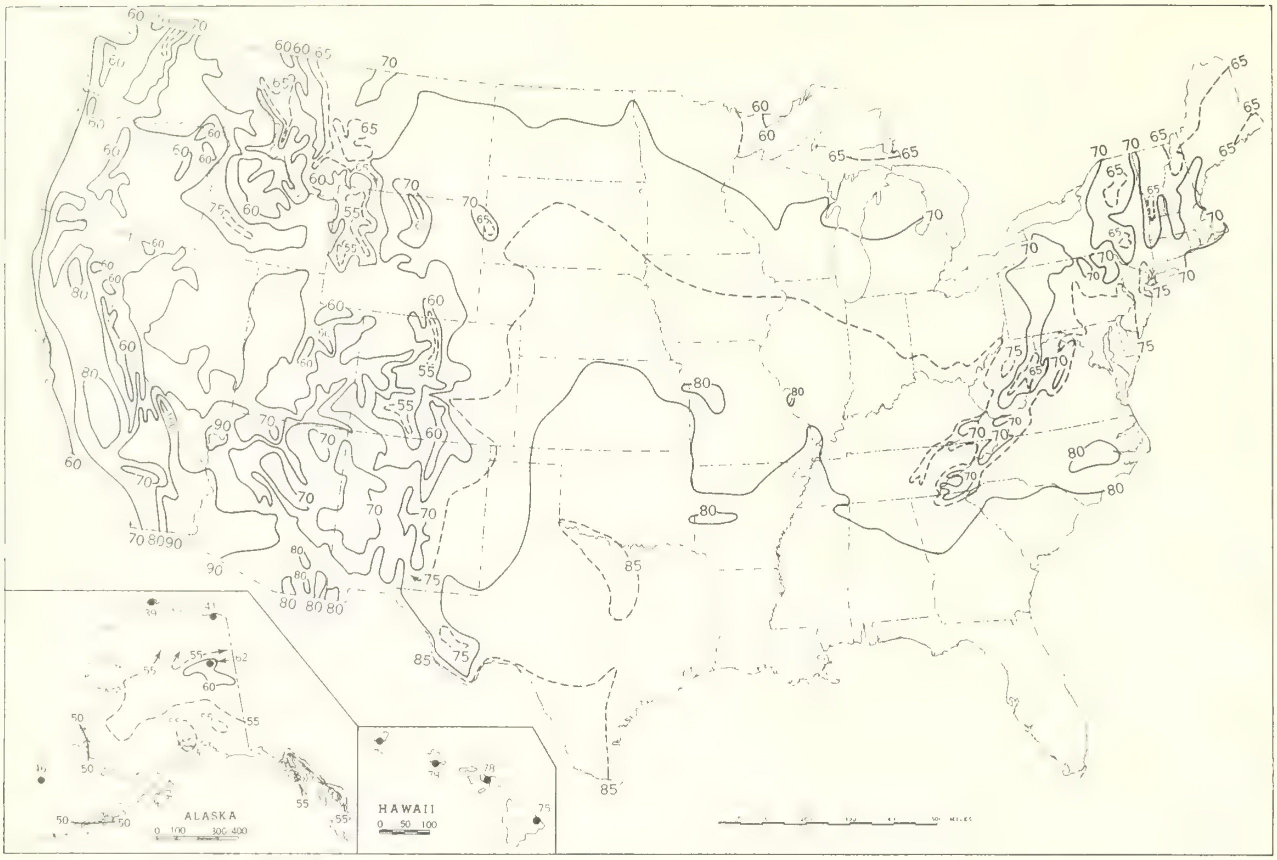
CHART X. AVERAGE SEA LEVEL PRESSURE (mb.) AND RESULTANT SURFACE WIND.-The average monthly sea level pressures are obatined from the eight daily 3-hourly observations reported at Weather Bureau Stations. Resultant surface wind directions (to 36 points of the compass) for the month are shown by arrows. Resultant speeds are indicated by the length of arrow shafts. Constancy ratios (resultant surface wind divided by average surface wind for month) are shown to two decimal places. The inset shows the departure of the average pressure based on 30-year normals for first-order Weather Bureau Stations, other stations having at least 10 years of record; and for each 10° intersection in a diamond grid over the oceans.

CHARTS XI-XVI. AVERAGE HEIGHT, TEMPERATURE, AND RESULTANT WINDS, 850, 700, 500, 300, 200, and 100 mb.-Height is given in geopotential meters and temperature in degrees Celsius. These are the averages of the 1200 GMT radiosonde reports. Wind speeds are given in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. Directions are shown to 360° of the compass. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

CHART XVII. A. 50-MB. RESULTANT WINDS. B. 30-MB. RESULTANT WINDS.-Wind speed (isotachs) in knots. Arrows show resultant wind direction. Winds are based on rawins at the indicated pressure surface and at 1200 GMT.

Exact values of most of these charted elements for Weather Bureau stations are printed each month in tabular form in CLIMATOLOGICAL DATA, NATIONAL SUMMARY. Extreme values of temperature and precipitation for each state are included in the tables, Condensed Climatological Summary. Annual averages for surface elements are presented in the CDNS Annual Issue each year.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), July.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), July 1966.

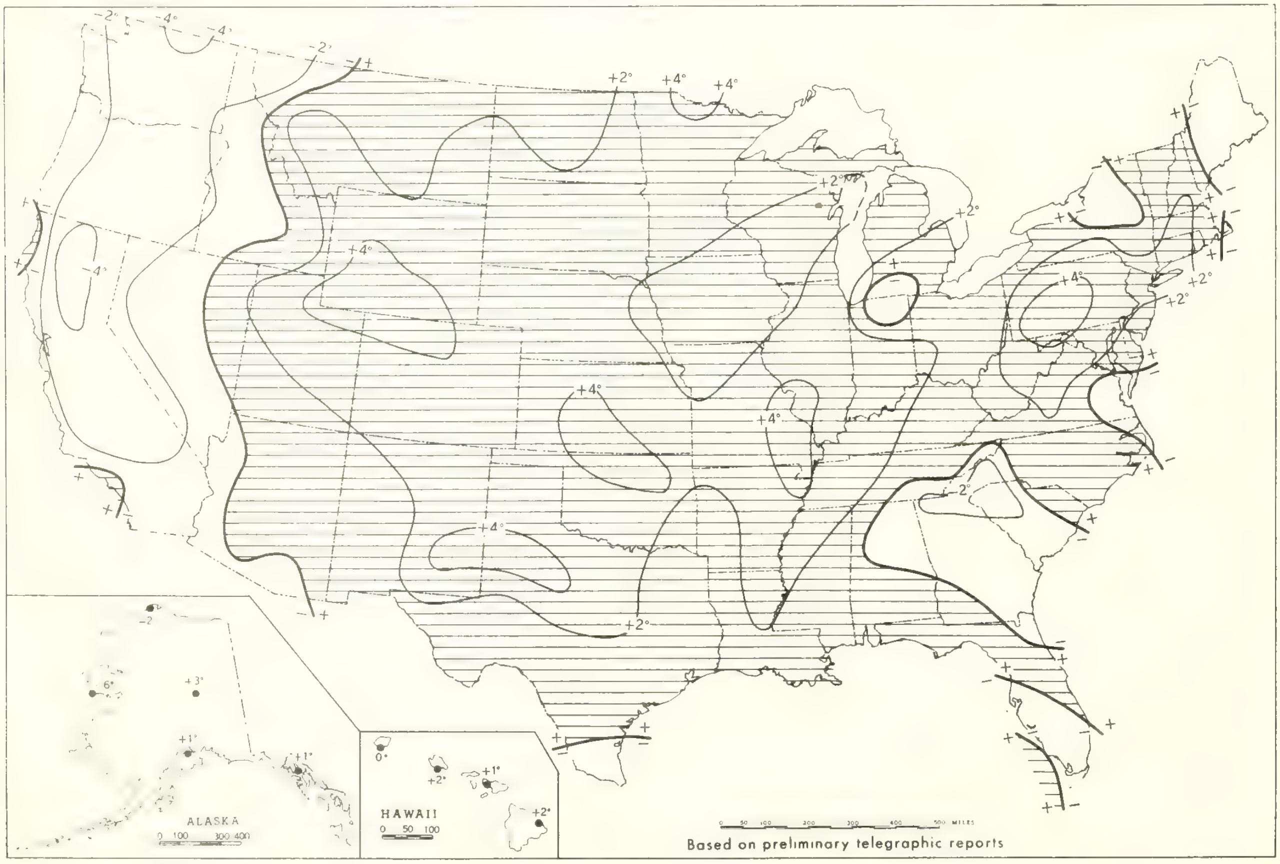
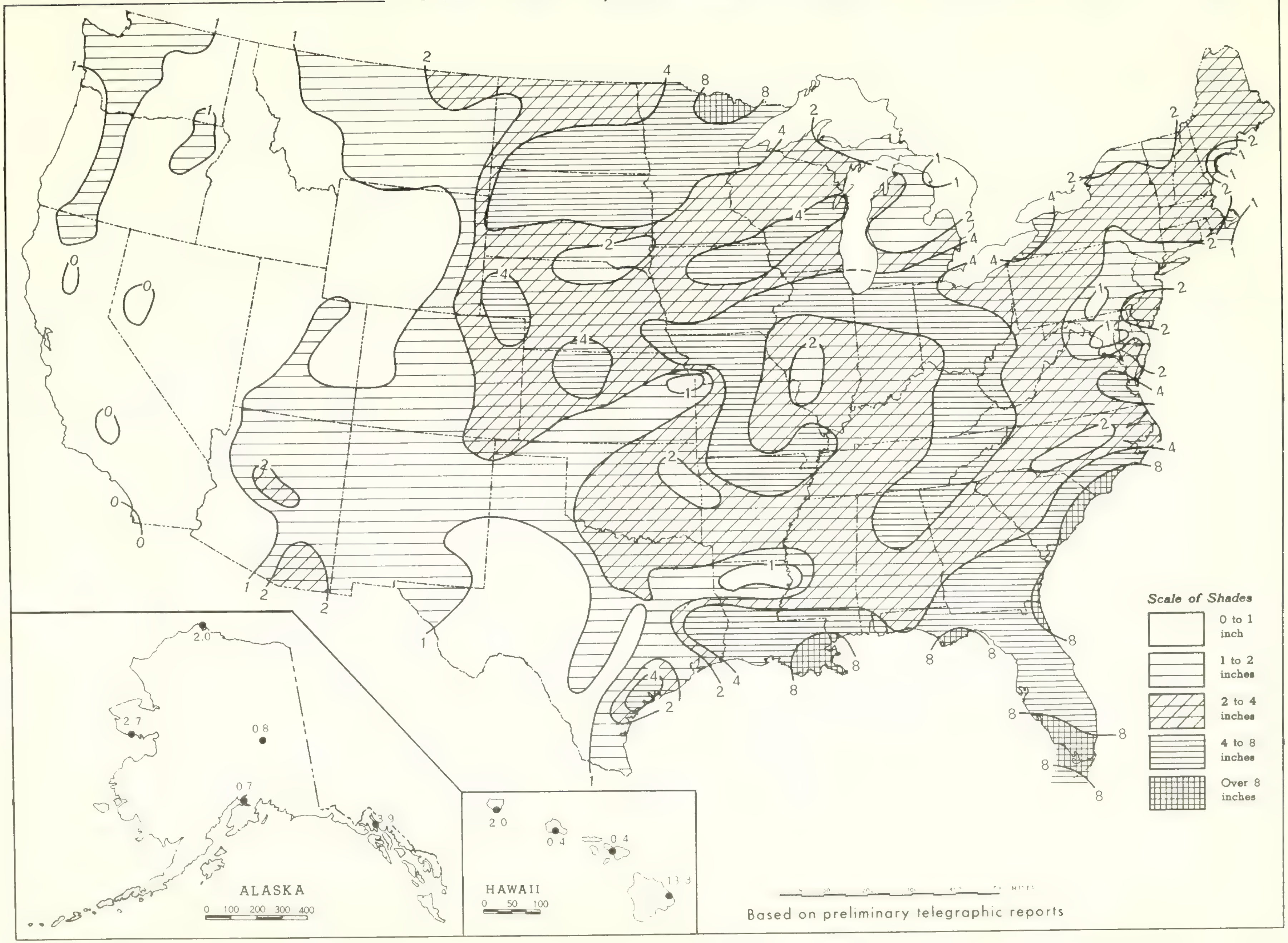
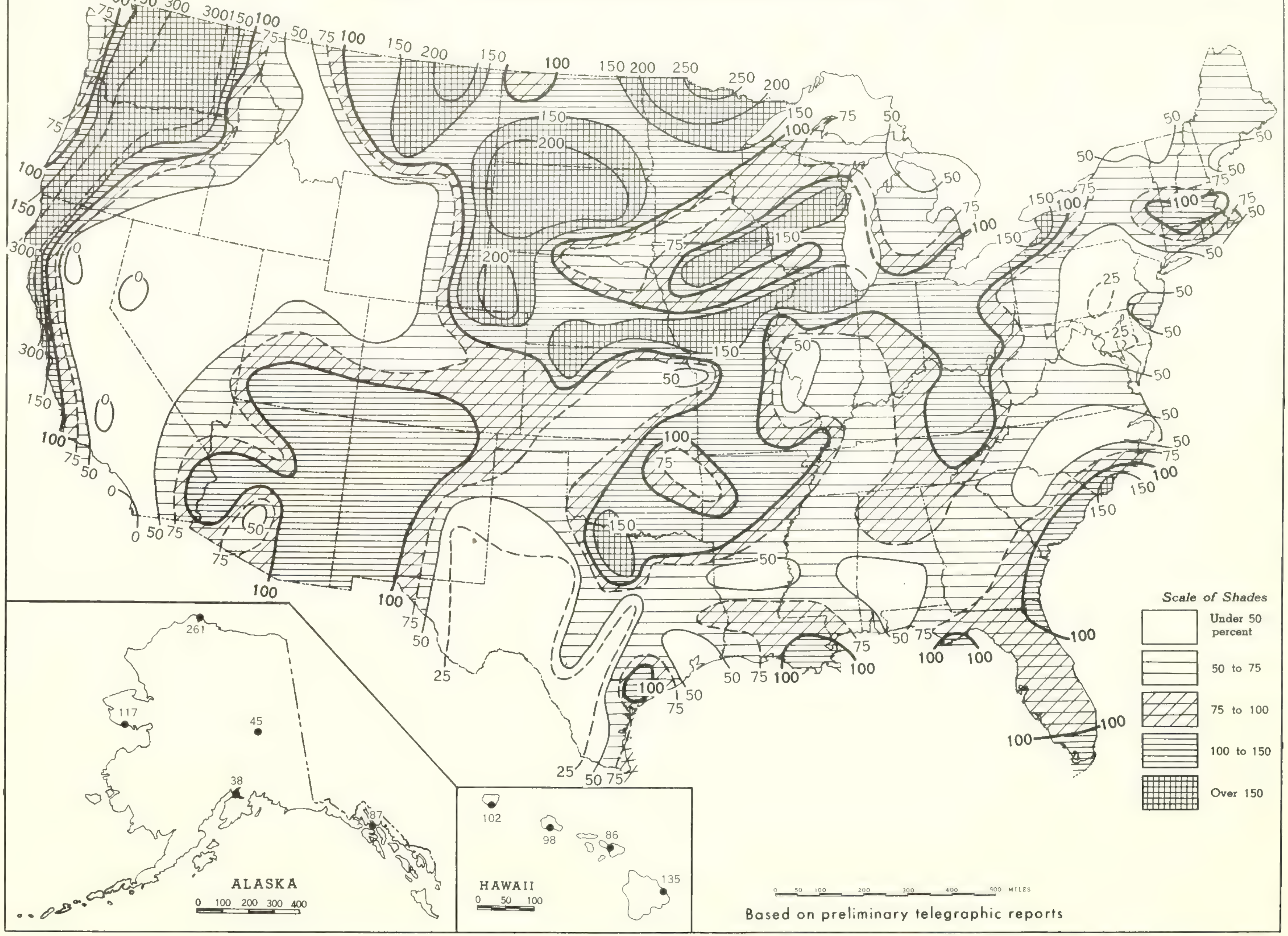

-2°
-4°
+2°
+4°
+
-
+3°
+1°
6°
0°
ALASKA
HAWAII
0 50 100
0 100 300 400
0 50 100 200 300 400 500 MILES
Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), July 1966.



Based on preliminary telegraphic reports

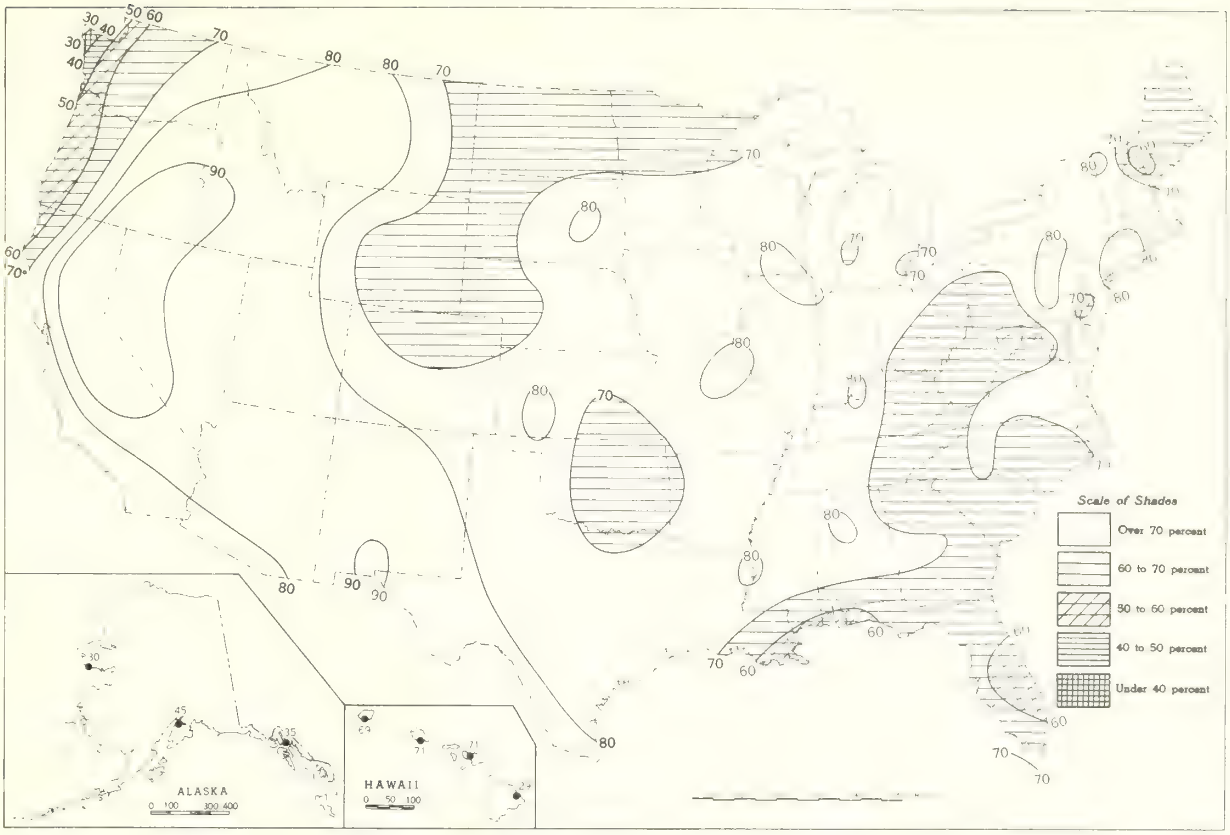
Chart III. Percentage of Normal Precipitation, July 1966.



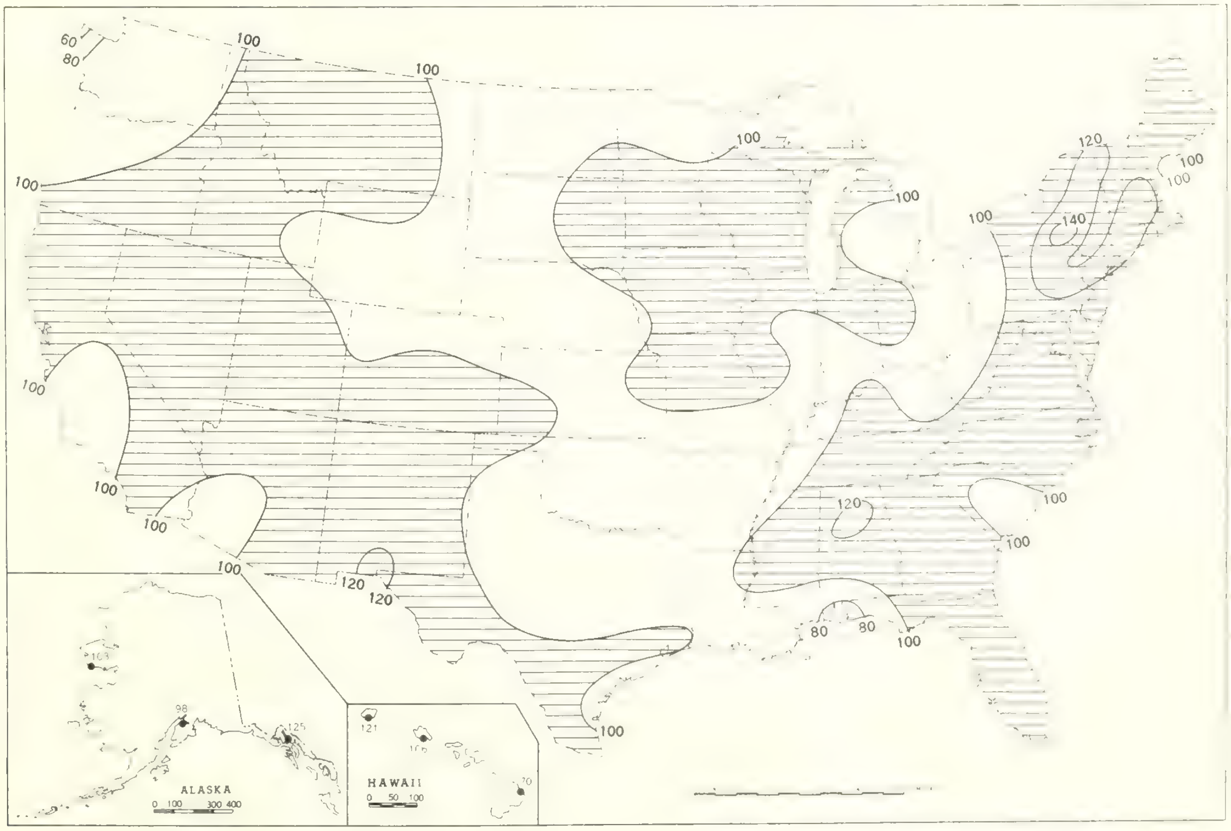
Based on preliminary telegraphic reports

Normal monthly precipitation amounts are computed from 30-yr. normals (1931-60) for first-order Weather Bureau stations.

Chart VI. A. Percentage of Possible Sunshine, July 1966.

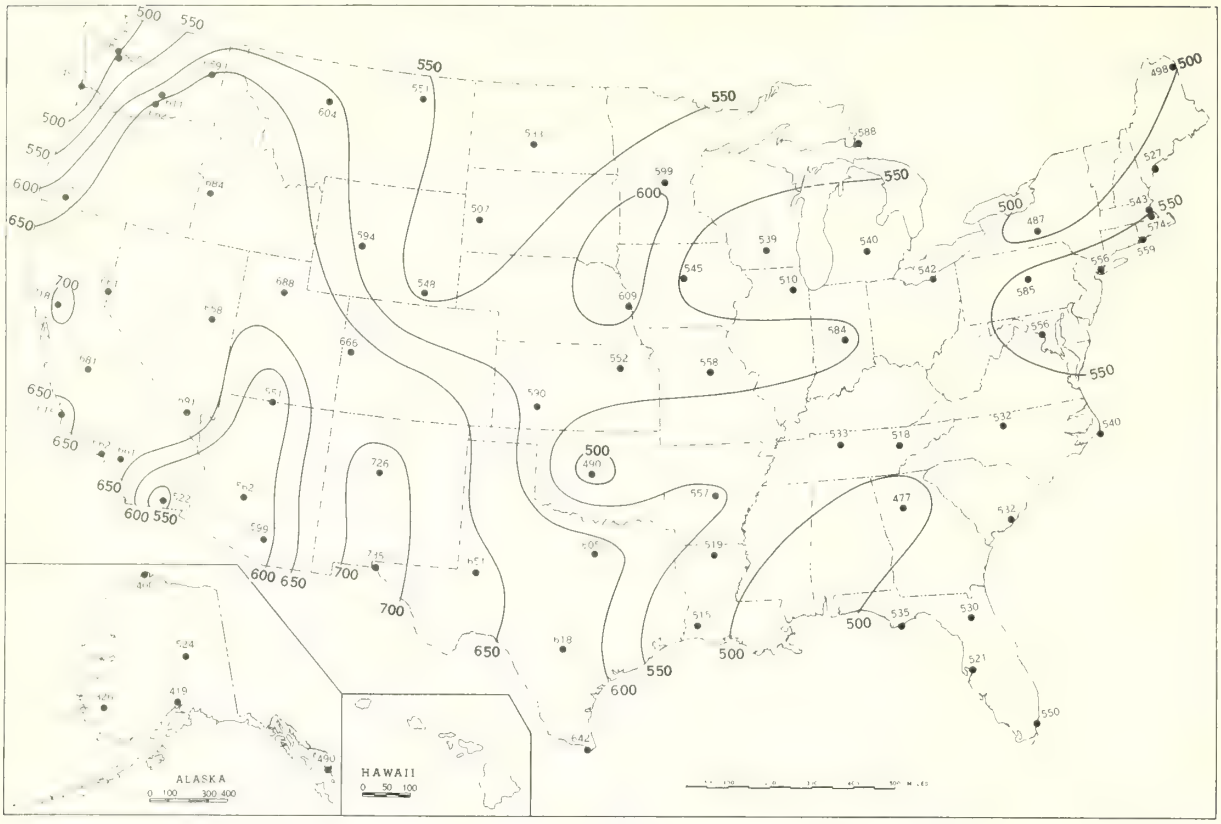


B. Percentage of Mean Monthly Sunshine, July 1966.

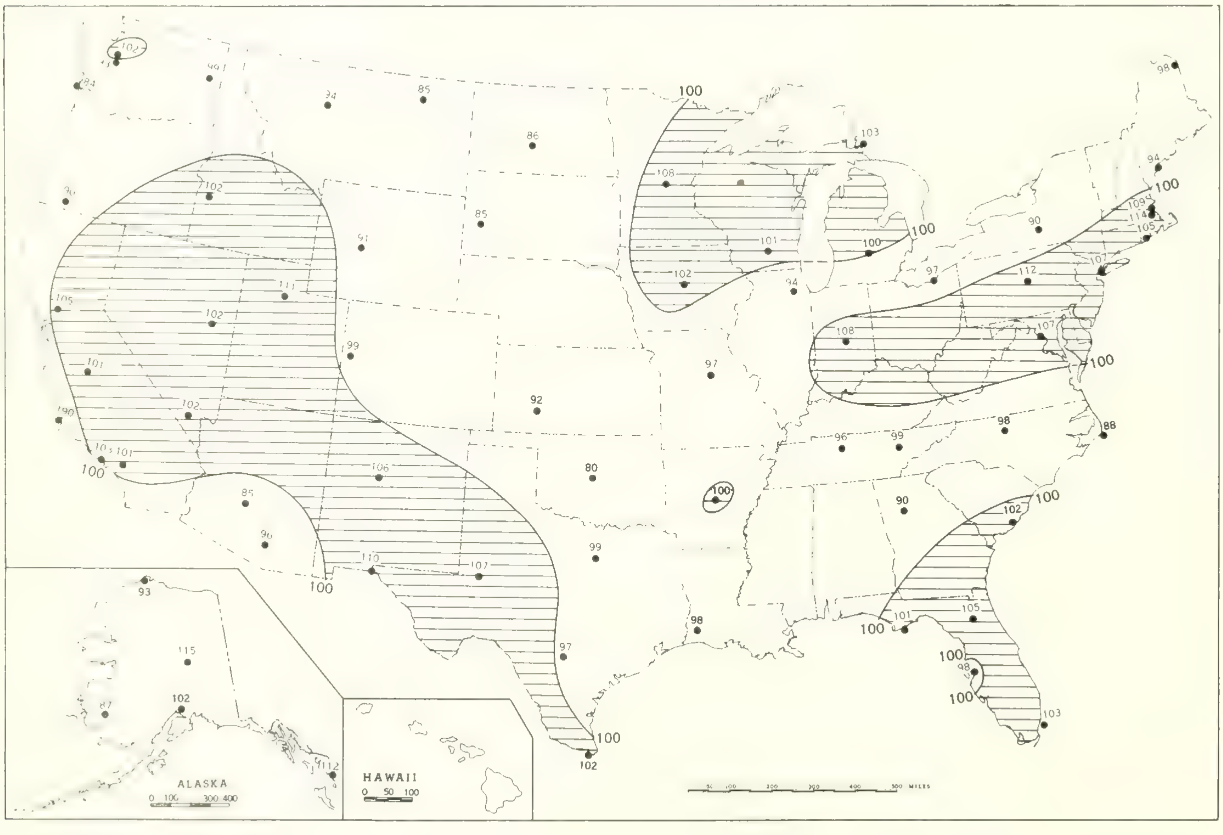


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, July 1966.

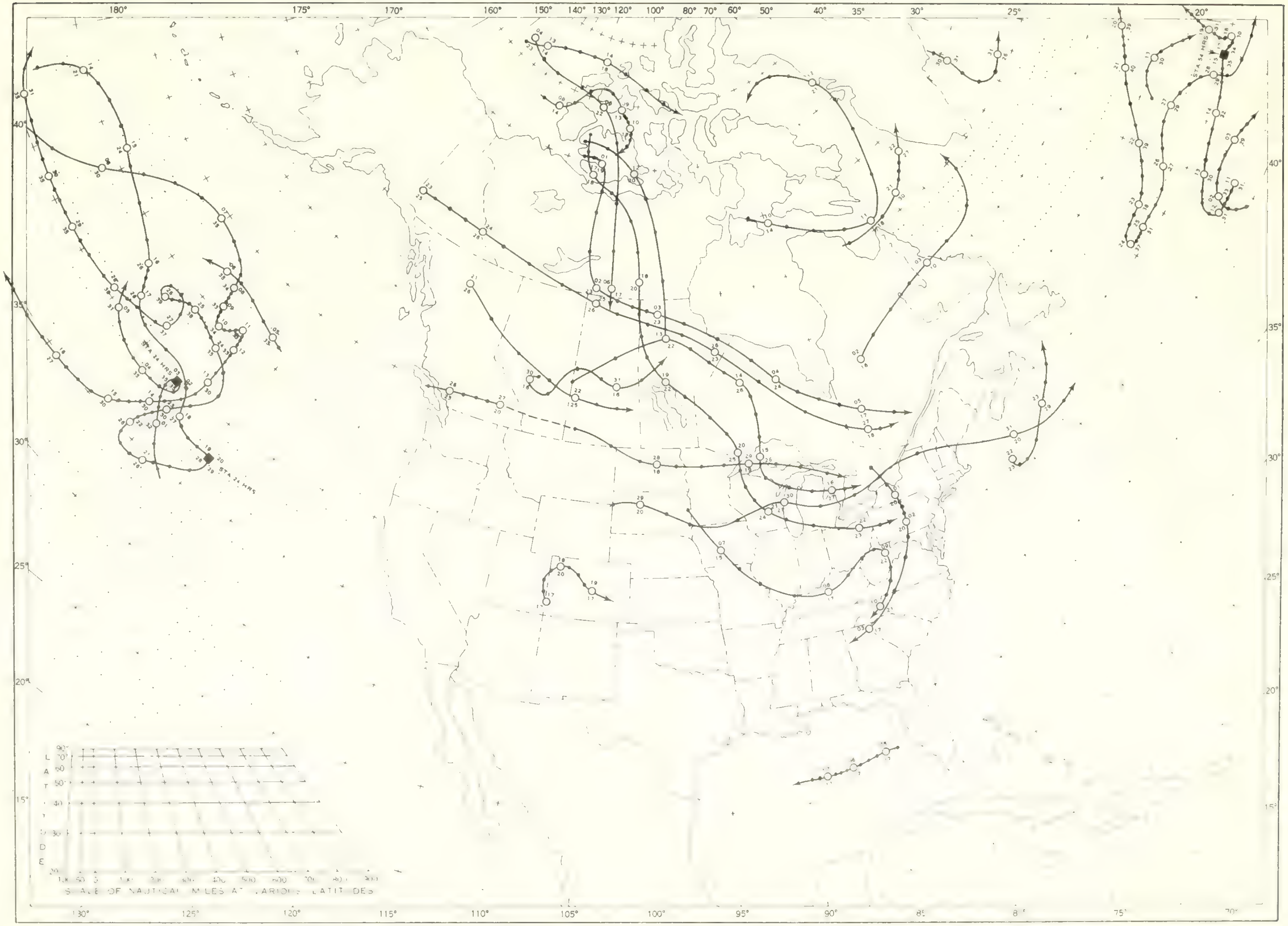


B. Percentage of Mean Daily Solar Radiation, July 1966.



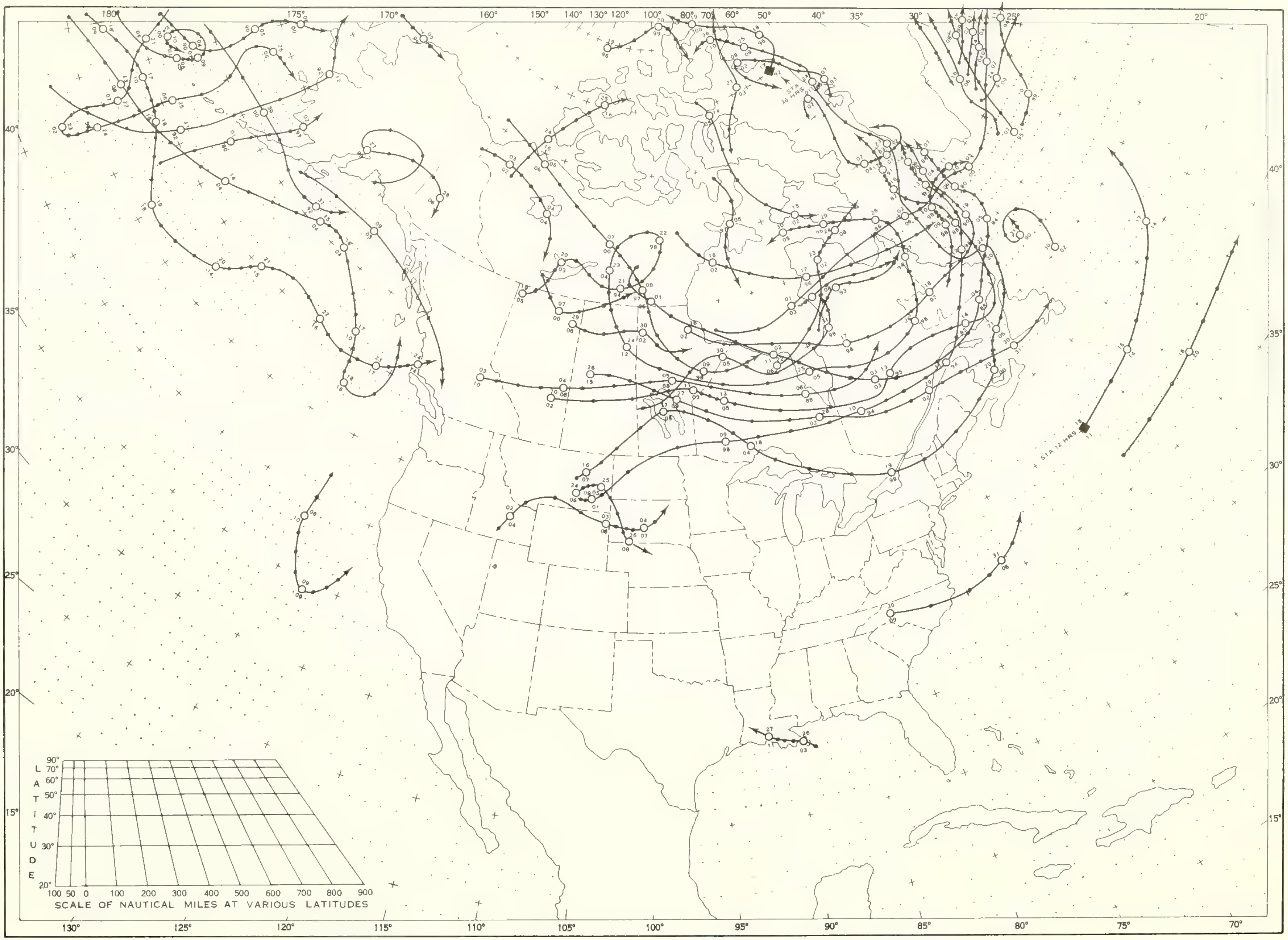
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, July 1966.



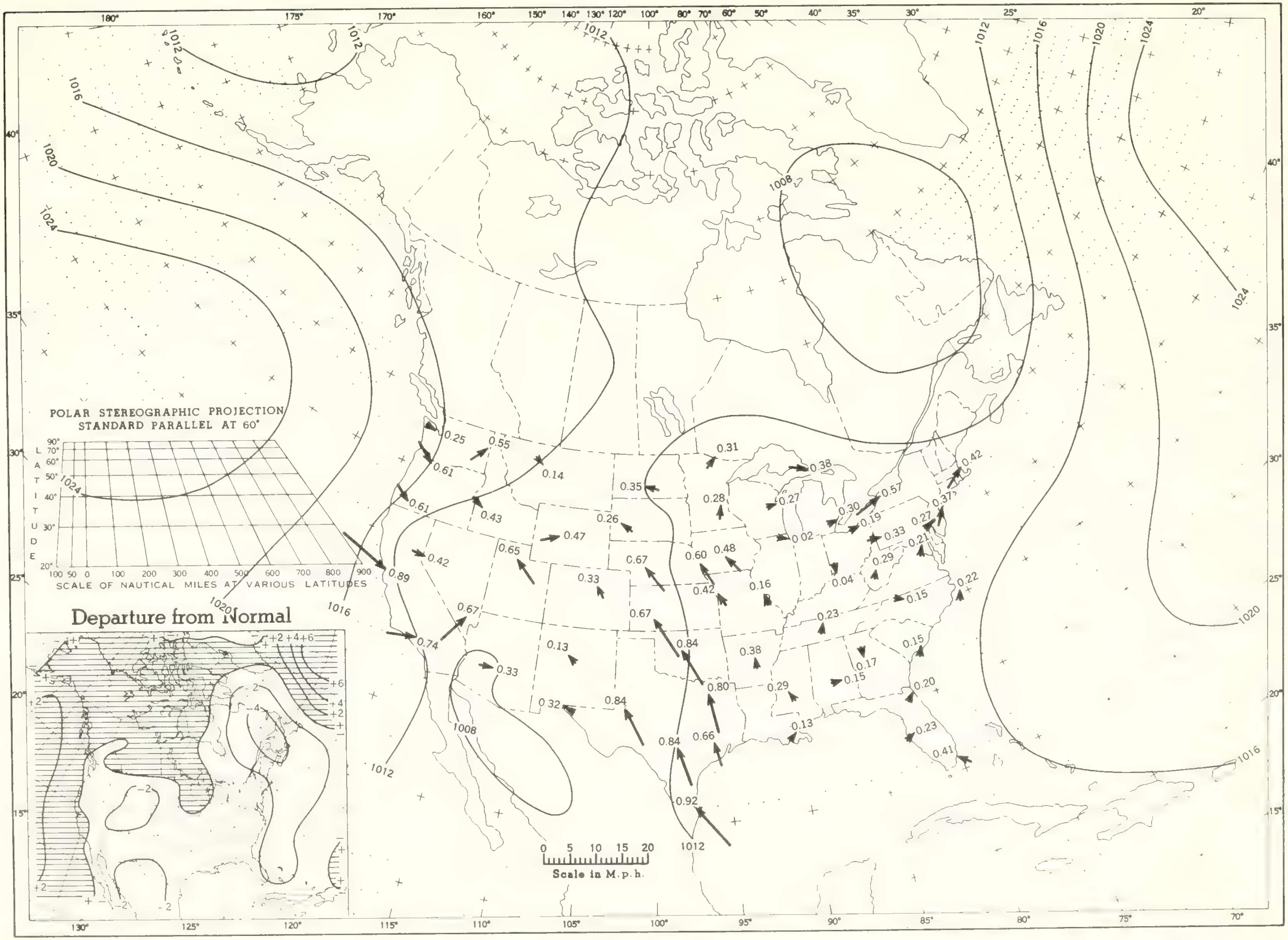
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, July 1966.



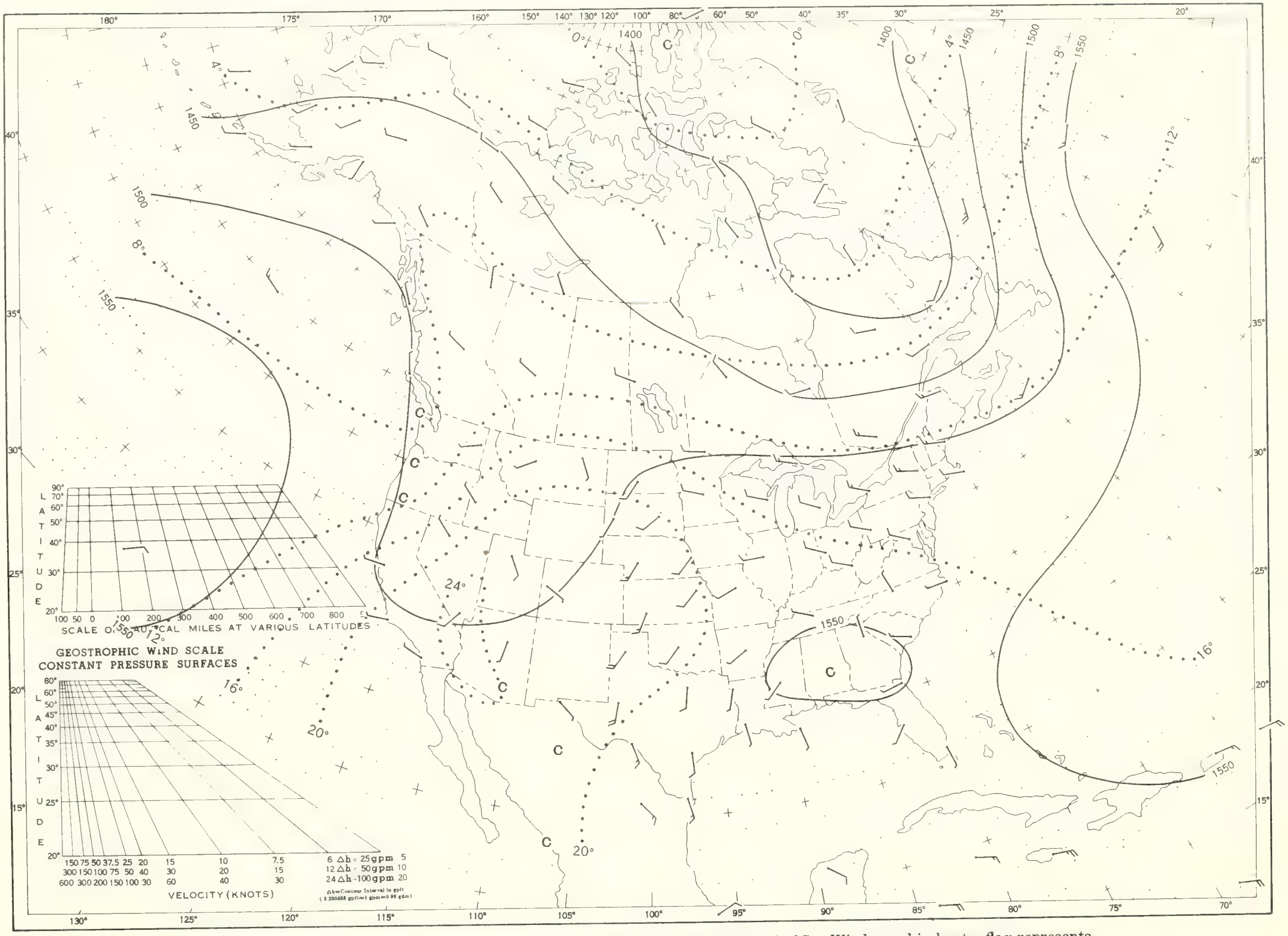
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, July 1966. Inset: Departure of Average Pressure (mb) from Normal, July 1966.



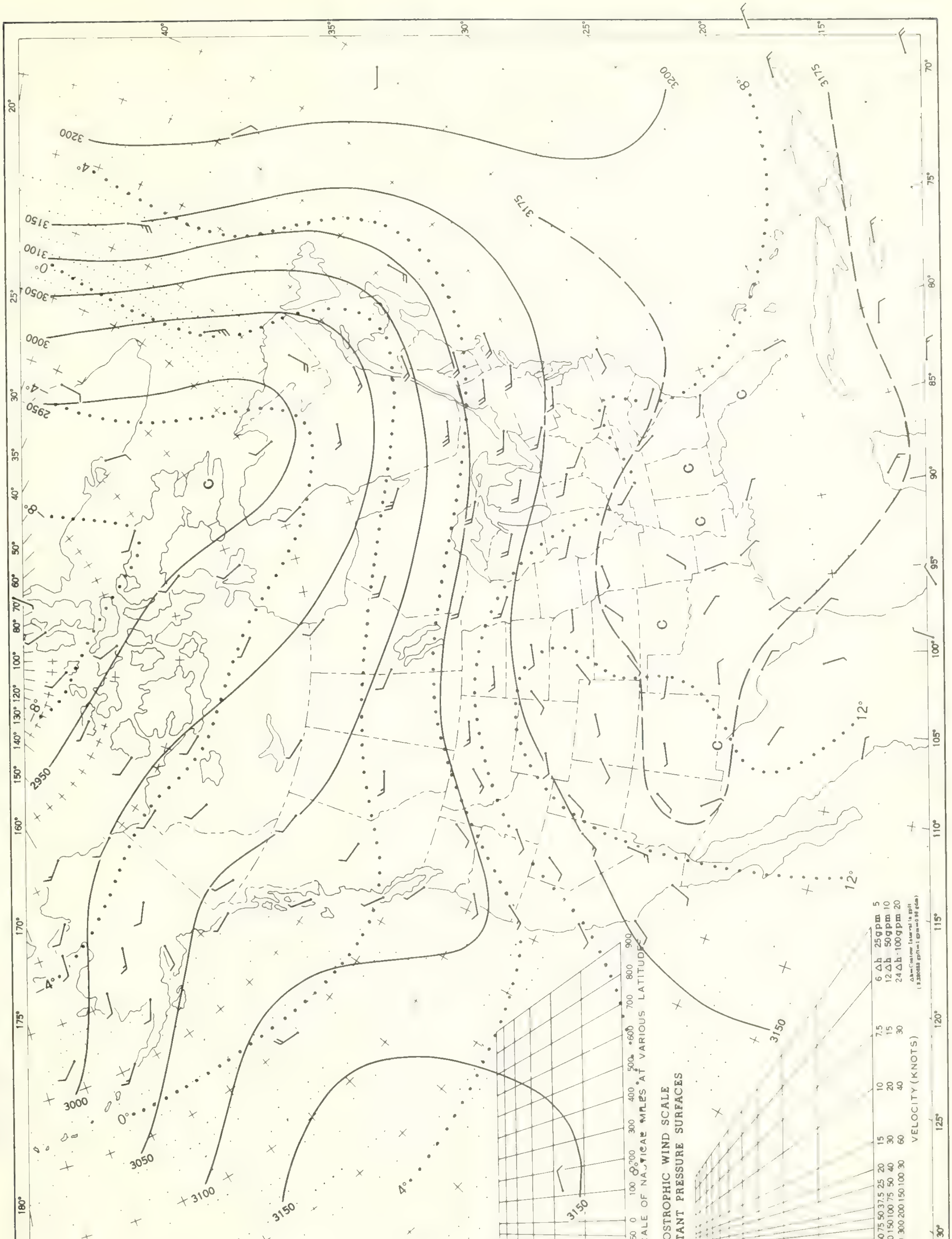
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed ÷ average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, July 1966. Average Height and Temperature, and Resultant Winds.



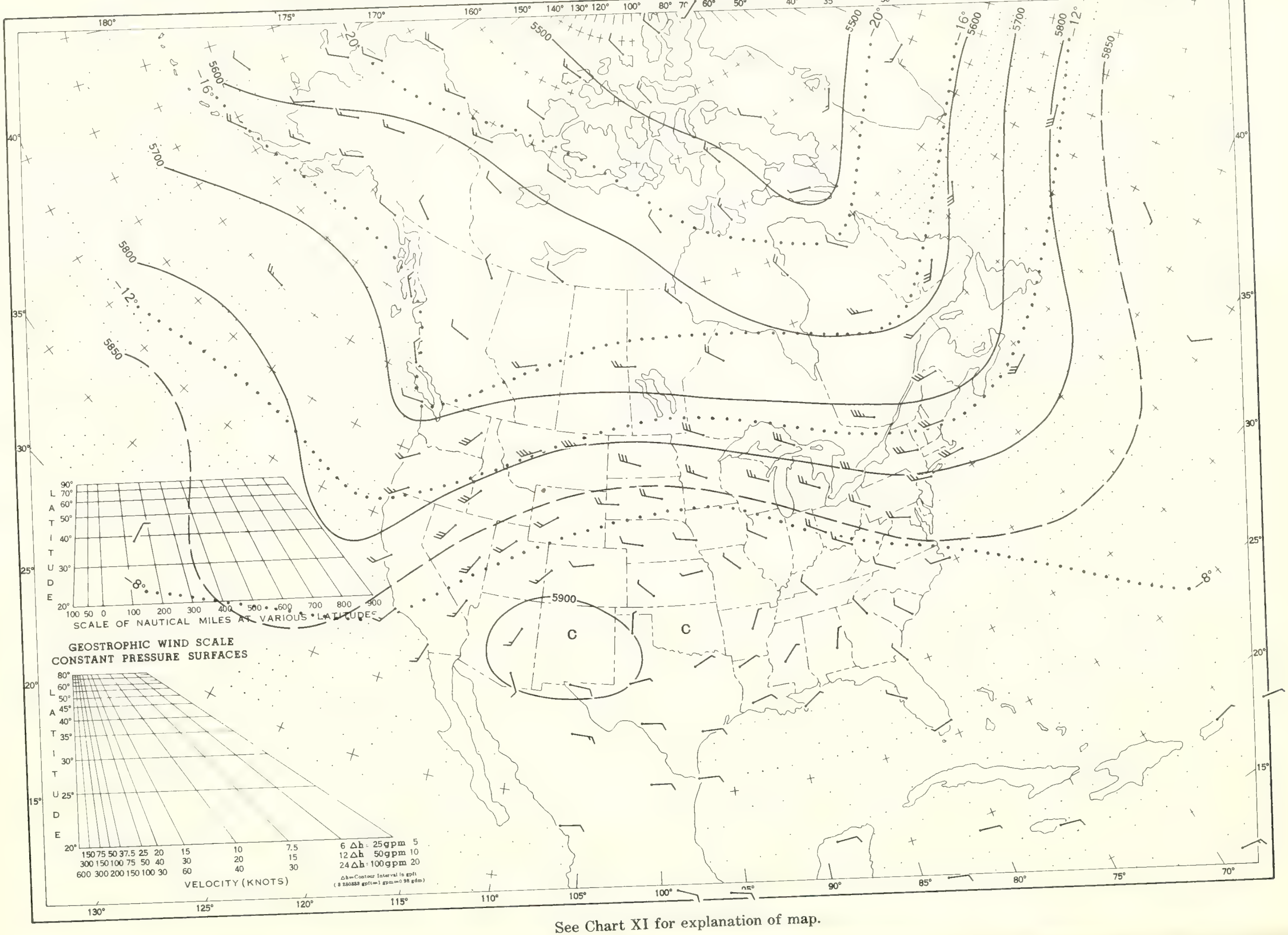
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, July 1966. Average Height and Temperature, and Resultant Winds.



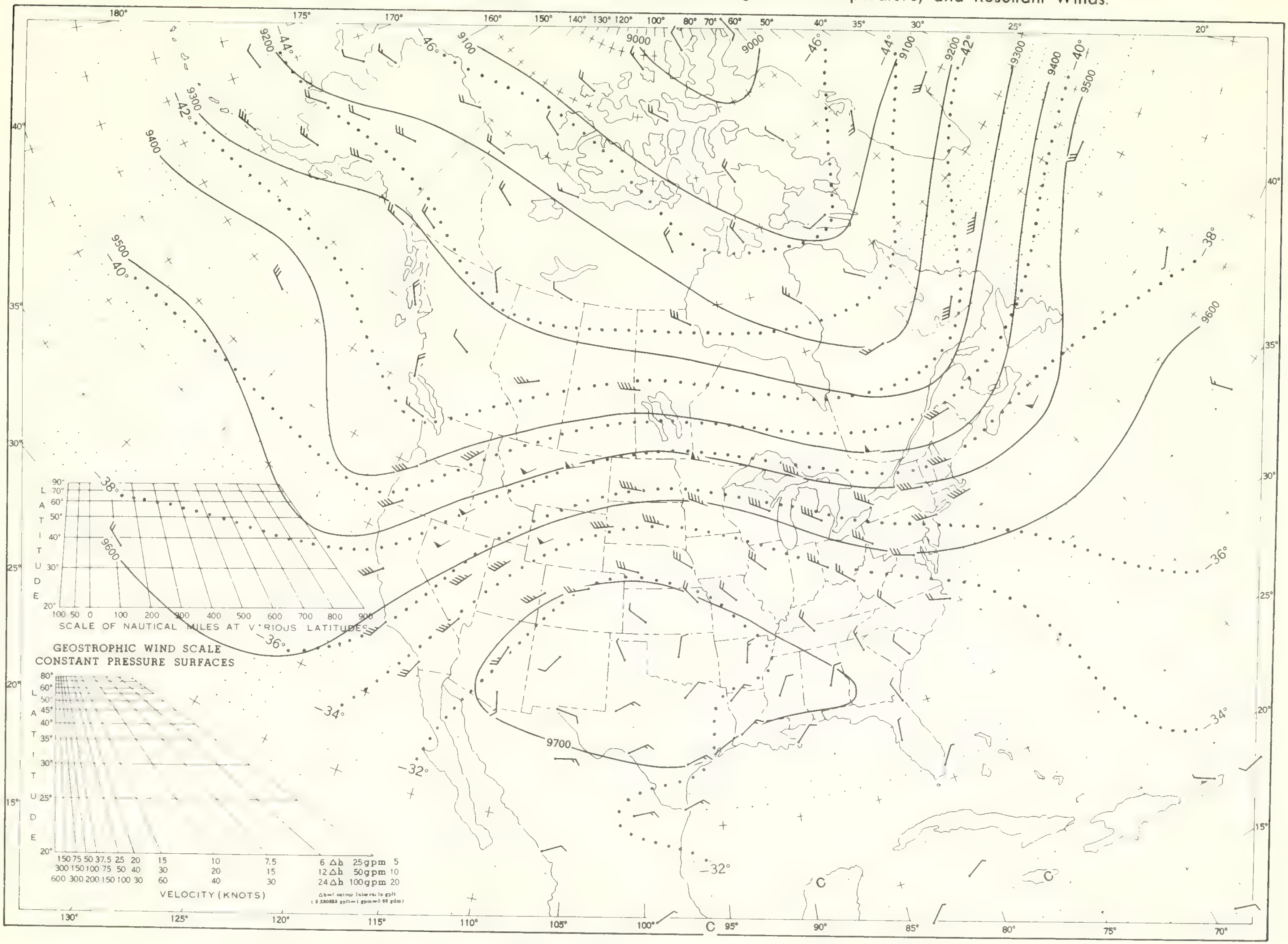
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, July 1966. Average Height and Temperature, and Resultant Winds.



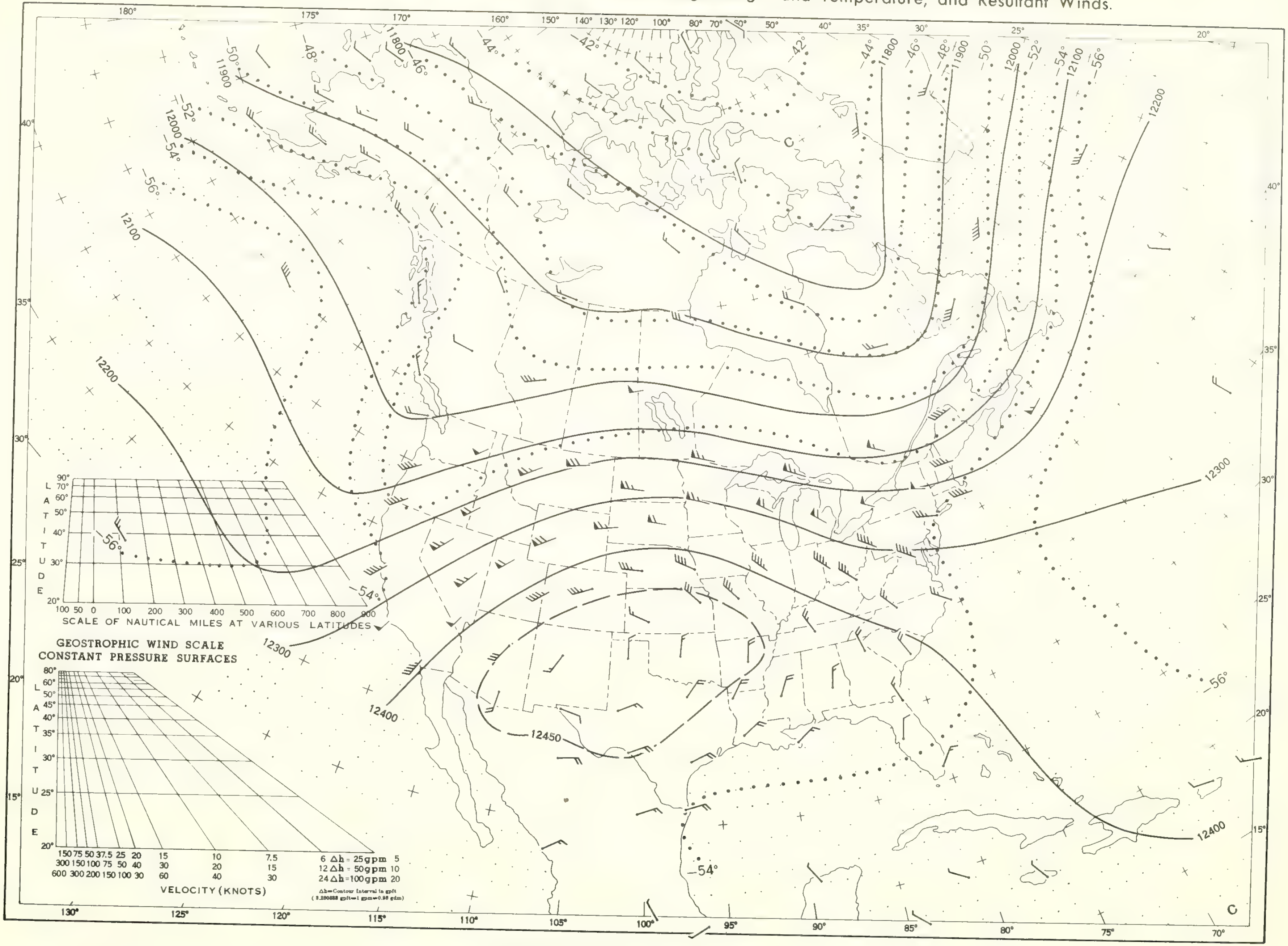
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, July 1966. Average Height and Temperature, and Resultant Winds.



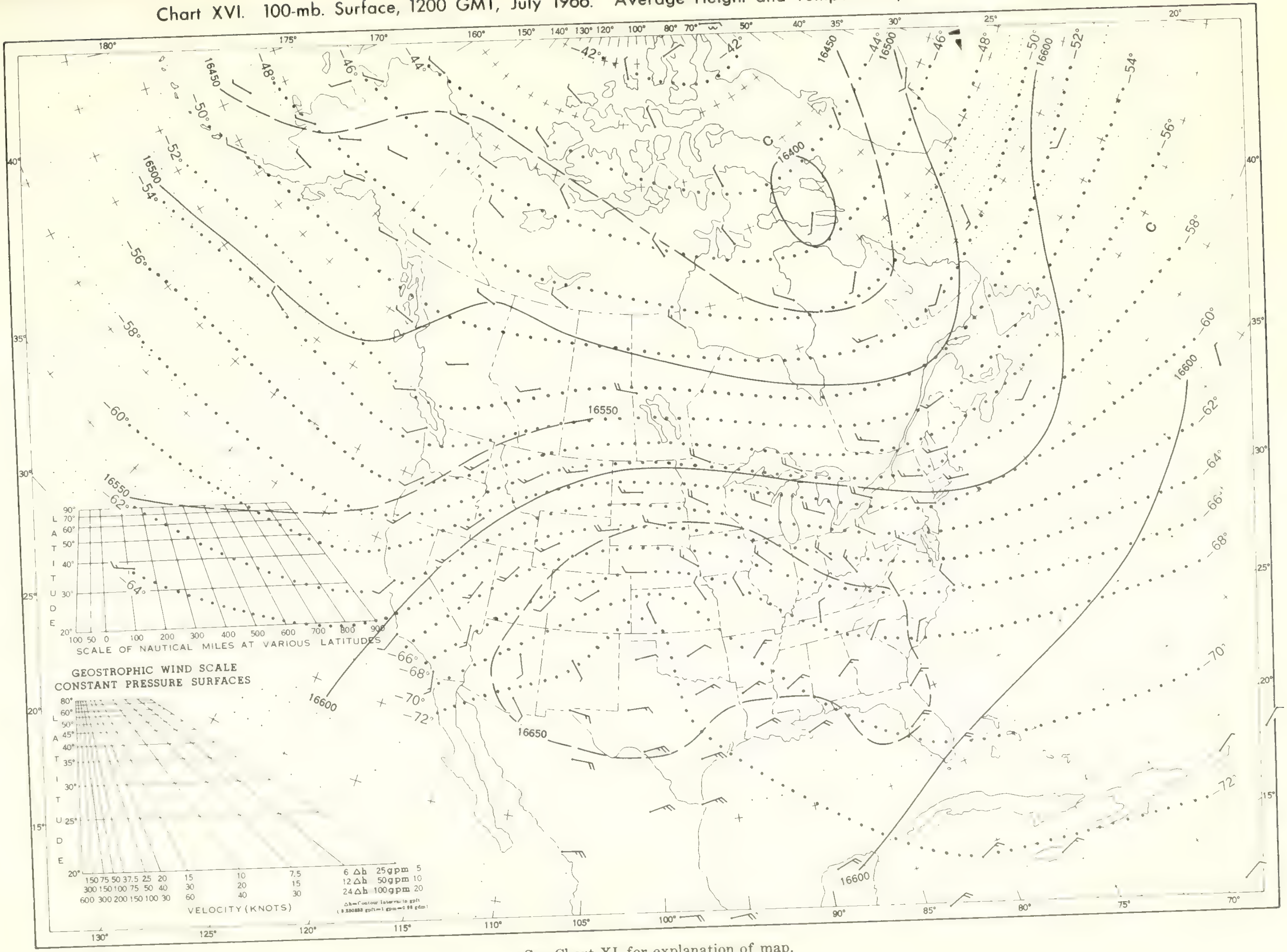
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, July 1966. Average Height and Temperature, and Resultant Winds.



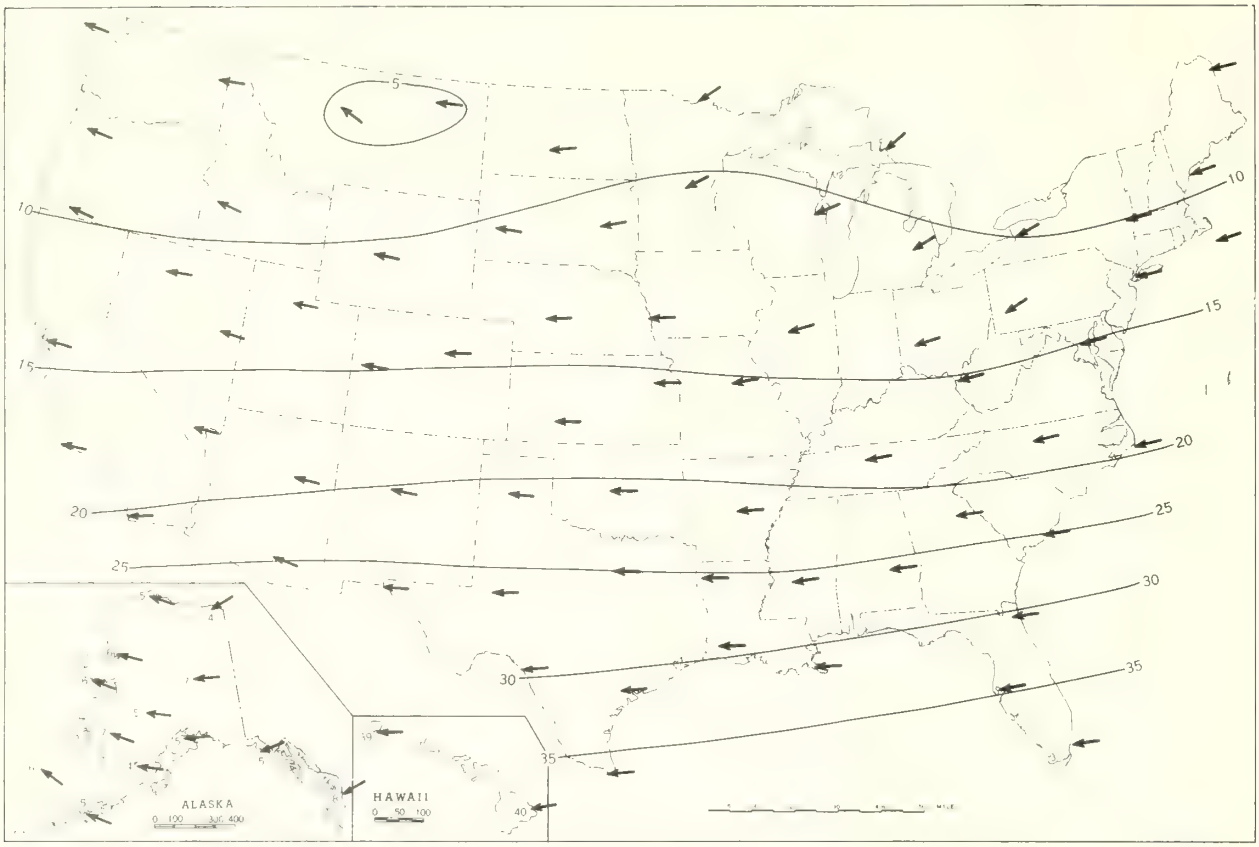
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, July 1966. Average Height and Temperature, and Resultant Winds.

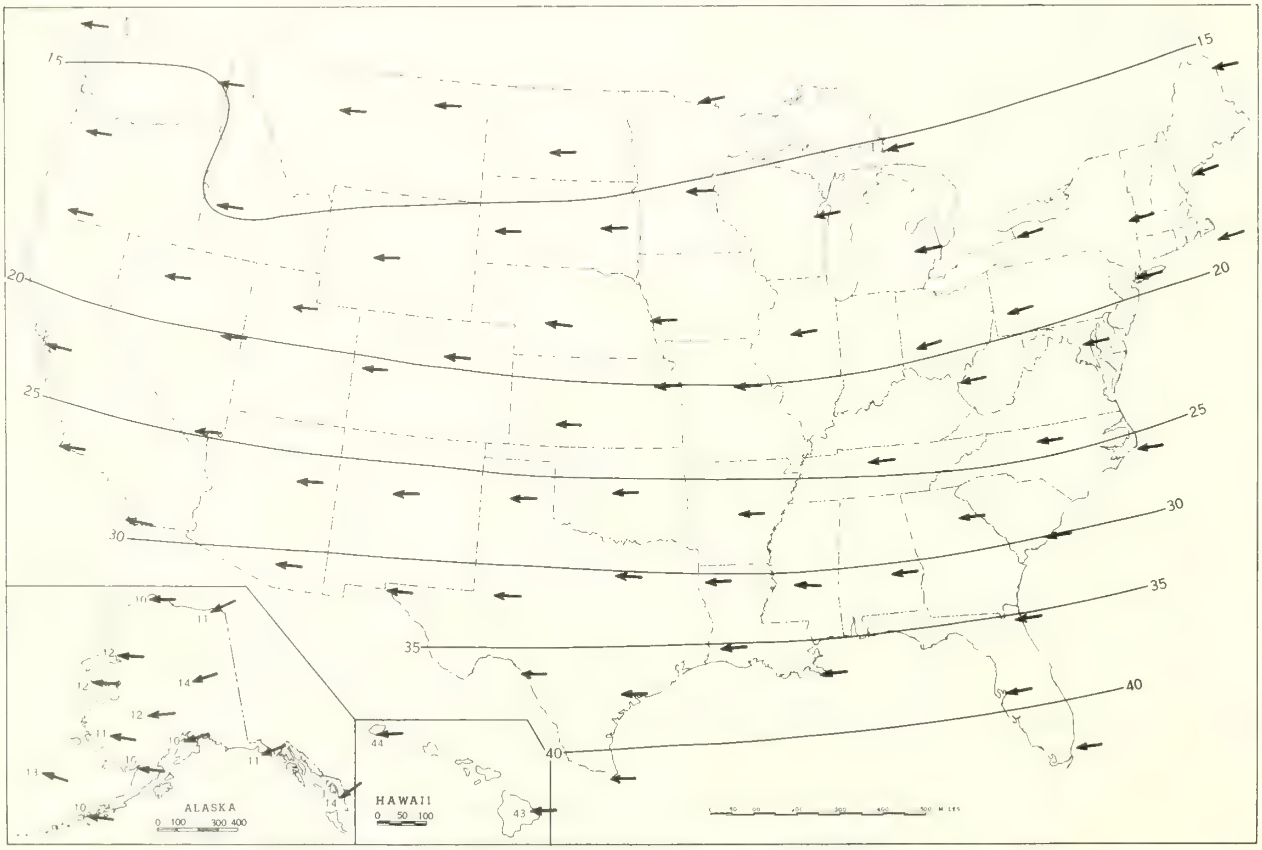


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, July 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, July 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. 10/26/66-1900

U. S. DEPARTMENT OF COMMERCE
JOHN T. CONNOR, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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AUGUST 1966
Volume 17 No. 8

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 8 AUGUST 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Unusually cool and wet in Great Plains.

2. Severe drought persisting from Virginia to southern New England.

TEMPERATURE.--August was unusually cool from the Great Plains to the Appalachians, but warmer than normal in the Far West and Northeast. This temperature pattern was the reverse of the July pattern, but similar to that of August 1965. Temperatures were persistently below normal in the midcontinent area where frequent cold air masses from Canada dipped farther south than usual during August.

This was the coolest August since 1950 at Memphis, Tenn.; since 1927 at South Bend, Ind.; since 1911 at Bismarck, N. Dak.; and since 1906 at Amarillo, Tex. At the latter location temperatures averaged 25° below normal on the 23d and 16° below for the period August 21-27. Scattered frost damage was reported in the vicinity of Kalispell, Mont., on the last day of the month when a low of 31° was observed. The maximum temperature for the month at Huntington, W. Va., was 87°, the lowest maximum there for August during a record dating back to 1897.

Hot weather prevailed in the Northeast after the first week. High temperatures in the region were favored by southerly winds and abundant sunshine. Harrisburg, Pa., had its hottest August during a record dating back to 1888, the average temperature for the month, 78.3°, exceeding the previous highest average in 1900 by 0.1°. Temperatures rose to 90° or higher on 19 days at Washington, D. C., a new August record there. Boston, Mass., had its hottest August since 1961.

This August was one of the hottest at Sacramento, Calif., since 1877, and 12 days with 100° or higher set a new record. Phoenix, Ariz., had its hottest August since 1962.

PRECIPITATION.--August rainfall generally was above normal between the Continental Divide and the Appalachians, most of Florida, parts of New England, northern Idaho, southeast Oregon, and northwestern California. Marked deficiencies occurred east of the Appalachians from New York and southern New England to central Georgia, in western Indiana, Illinois, southeastern Iowa, northeastern Missouri, and most sections of the Pacific States and Great Basin of the Far West. At the end of the month streamflow was greater than usual in North Dakota, northern Minnesota, the southeastern half of Texas, central Ohio, and most of Kentucky, reflecting the abundant rainfall in those areas for the entire summer as well as for August. Pastures and ranges were very poor in the Northeastern Drought area, southern Illinois, southeastern Montana, and central and northern portions of the Great Basin of the Far West.

Rainfall ranged up to 500 percent of normal in the southern Great Plains with a high monthly total of 17.71 inches at Port Arthur, Tex., and up to 300 percent in northern portions where Greeley, Nebr., measured 12.62 inches for the highest total. During the second week torrential rains in parts of the Great Plains ranged up to a foot or more in Nebraska and Texas and resulted in serious flooding.

Heavy rainfall fell in a 6-county area of Nebraska on the 12th, with an unofficial measurement of 17 inches in Boone County. These rains resulted in serious flooding which caused property losses in the millions of dollars. Fullerton, where almost complete evacuation was necessary, apparently was hardest hit.

On the 11th heavy rainfall, measuring up to 10 inches, caused considerable flooding in the coastal areas of southeast Texas between Houston and the Louisiana border. On the 12th and 13th heavy rains in southwest Texas caused some smaller streams to rise to their highest levels in history and resulted in severe flooding along the Nueces and Frio Rivers.

Heavy rains fell in southeastern New Mexico and again in western Texas during the fourth week. Flood damage in the latter area was estimated at more than $4 million, and losses in the vicinity of Carlsbad, N. Mex., probably exceeded $1 million.

The greatest monthly total was 18.97 inches at Amity, Ark. Other high totals included 16.61 inches at Phelps Deerskin Dam, Wis., 15.70 inches at Grand Chenier, La. Record amounts included 14.46 inches at Little Rock, Ark.; the most for August back to 1879; 6.71 inches at Valentine, Nebr., an August record back to 1889; and 8.55 inches at Lubbock, Tex., an August record back to 1911.

The light rainfall in the Northeast continued the meteorological drought in that region. New York City water reservoirs were near normal levels, but farther south the flow of the Potomac River, water supply source for Washington, D. C., was near its lowest level on record.

In the Far West large areas not only had an extremely dry August but had received less than 50 percent for the year to date. This long dry period resulted in poor range conditions and a high fire hazzard; 15,000 acres of range and forest lands were burned in the Garden Valley district of Idaho early in the month.

Crop prospects were dimmed somewhat in the Northeast Drought area, and also in parts of Indiana, Illinois, and Missouri.

DESTRUCTIVE STORMS.--During the second week thunderstorms occurred over a wide area east of the Rockies, some of which were accompanied by damaging winds. On the 11th a speed of 156 m.p.h. was recorded at Linden, N. J., during one of these thunderstorms. On the 16th a thundersquall caused $140,000 loss at Canastota Airport in New York.

CONDENSED CLIMATOLOGICAL SUMMARY

AUGUST 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	4 Stations	98	16+	Valley Head	48	26	Coden	11.12	Prattville	1.69
Alaska	Data Delayed									
Arizona	2 Stations	117	6+	Maverick	32	29	Sala Ranch	9.22	2 Stations	.00
Arkansas	Morilton	103	1	Huntsville	46	25	Amity 3NE	18.97	Corning	1.76
California	Death Valley	121	7+	2 Stations	22	30	White Mountain 2	2.82	288 Stations	.00
Colorado	John Martin Dam	101	1	Fraser	18	28+	Rye	7.79	Fruita	.23
Connecticut	Falls Village	98	11	Coventry	37	4	Torrington	3.48	Bulls Bridge Dam	1.04
Delaware	Wilmington Porter Resvr	98	19	Middletown 1WSW	51	4	Lewes 1SW	1.53	Wilmington Porter Resvr	.83
Florida	2 Stations	99	23+	2 Stations	59	25+	Wewahitchka	21.41	Key West	.86
Georgia	Blackbeard Island	99	23	do	49	27+	Americus 4ENE	11.16	Godfrey 4NE	1.81
Hawaii	Data Delayed									
Idaho	2 Stations	110	25+	Galena	22	30	Burke 2ENE	2.87	9 Stations	.00
Illinois	Harrisburg	97	8	Mount Carroll	44	13+	Beardstown	7.64	Mount Carroll	.27
Indiana	2 Stations	97	21+	Wheatfield 2NNW	40	4	Rushville Sewage Plant	6.80	Indianapolis Fall Cr	1.06
Iowa	3 Stations	96	17	4 Stations	40	23	Akron	6.91	Washington	.29
Kansas	Ashland	108	2	Aetna 2S	41	23	Ottawa	8.89	Colby 1SW	.71
Kentucky	Nolin River Reservoir	95	19	2 Stations	46	27	Hazard Water Works	10.07	Rough River Dam	1.70
Louisiana	4 Stations	100	18+	4 Stations	53	26	Grand Chenier	15.70	Sikes 2E	.72
Maine	Saco	92	7	Squa Pan Dam	32	30+	Sanford 2NNW	6.63	Madison	.96
Maryland	Waldorf Police Brks	98	18	Sines Deep Creek 2	43	26+	Sines Deep Creek 2	5.10	Salisbury	.33
Massachusetts	2 Stations	95	19+	South Egremont	39	4	South Wellfleet	5.80	Amherst	.67
Michigan	do	92	7+	Vanderbilt Trout Sta	34	26	Stambaugh 1S	10.41	Cheboygan RR Light Sta	1.02
Minnesota	Canby	97	5	Cotton 11E	31	19	Cass Lake	8.44	Harmony	1.51
Mississippi	2 Stations	101	10+	3 Stations	50	26	McHenry 5ESE	9.41	Elliott	1.05
Missouri	Pomme De Terre Dam	99	16	Edgerton	42	23	Pleasant Hill	8.55	Kirksville FAA AP	.67
Montana	Mildred	107	3	Wisdom	17	21	Fort Peck Power Plant	4.35	Helena 6N	.18
Nebraska	Pawnee City	101	17	Agate	31	22	Greeley	12.62	Brewster	1.07
Nevada	Sunrise Manor Las Vegas	115	8	2 Stations	23	21	Lehman Caves Nat Mon	2.02	11 Stations	.00
New Hampshire	Campton	96	8	Mount Washington	33	28	Mount Washington	10.84	Greenville	1.09
New Jersey	3 Stations	96	31+	Sussex 1SE	41	4	Atlantic City WBAP	9.04	Phillipsburg Bridge	.58
New Mexico	Jal	109	1	2 Stations	30	25	Carlsbad Caverns	11.71	Fruitland 1SW	.27
New York	Poughkeepsie	98	30+	Morrisville	28	17	Hinckley	8.09	2 Stations	.62
North Carolina	Dunn 4NW	98	16	Hayesville 4NE	40	28	Greenville	14.17	Roxboro	2.19
North Dakota	3 Stations	100	4+	Marmarth	32	23	Fullerton	9.65	Marmarth	.66
Ohio	2 Stations	95	22+	2 Stations	41	4	Columbus Sullivant Ave	6.45	Tom Jenkins Dam	.81
Oklahoma	Buffalo	111	1	do	47	25+	Zoe 1E	10.40	Boise City 2E	1.06
Oregon	Ontario KSRV	108	2	Seneca	21	31	Klamath Falls 2SSW	1.37	17 Stations	.00
Pennsylvania	2 Stations	98	7+	Clermont 4NW	32	4	Conneautville	7.40	Le Roy	.59
Puerto Rico	do	99	25+	2 Stations	62	19+	Palmarito	15.64	Ensenada	.42
Rhode Island	Providence WBAP	92	19	Kingston	44	4	Providence WBAP	3.37	Newport	1.16
South Carolina	Pelion 4NW	99	23	4 Stations	52	27+	Branchville 6S	14.32	Chappells	2.09
South Dakota	Philip	105	16	Custer	22	22	Victor 1ESE	7.37	Belle Fourche 29NNW	.81
Tennessee	2 Stations	96	17+	Unicoi 2ESE	46	27	Gatlinburg 2SW	12.64	Lexington	1.18
Texas	do	110	2+	Van Horn	46	22	Port Arthur	17.71	Port Isabel	.02
Utah	Saint George	110	6+	Hardware Ranch	19	27	Bryce Canyon FAA AP	2.71	2 Stations	.00
Vermont	4 Stations	91	31+	West Burke	34	30+	Peru	10.26	Vernon	1.06
Virginia	Berryville	98	22	3 Stations	41	27	Wallaceton Lk Drummond	12.71	Fredericksburg 2S	.65
Washington	Lower Granite Dam	112	25	Davenport	29	28	Clearwater	3.59	10 Stations	.00
West Virginia	Omps	97	24	Canaan Valley	38	1	Pickens 1	8.21	Kearneysville 1NW	1.21
Wisconsin	2 Stations	95	29+	Prentice 4ENE	36	12	Phelps Deerskin Dam	16.61	Cashton 2S	.11
Wyoming	Arvada 3N	103	26+	Bondurant 3NW	15	22	Newcastle	3.25	Echeta 2NW	.00

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Fastest mile: Speed	Fastest mile: Direction	Fastest mile: Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	994.6	1016.7	86	69	77.0	- 4.1	91	16+	55	26	4	0	69	79	6.48	1.63	3.64	12	8	0.0	0	0.5	21	29	NW	3	5	7	19	6.9	56
HUNTSVILLE	600	993.9	1016.4	87	69	77.8	- 2.4	92	16+	56	26	9	0	69	77	6.30	3.01	2.92	14	8	0.0	0	1.2	17	29	30	14	5	15	11	6.4	
MOBILE	211	1008.5	1016.3	89	73	81.2	- 0.9	94	23+	66	26+	16	0	70	74	6.48	0.04	2.06	18	12	0.0	0	0.8	16	20	23	10	4	12	15	6.6	
MONTGOMERY	194	1009.1	1016.4	90	70	79.8	- 1.9	95	15	60	27+	18	0	70	77	1.79	- 2.31	0.60	14	7	0.0	0	1.1	20	26	S	10	6	11	14	6.7	65
ALASKA																																
ANCHORAGE PRK STRIP	85			61	49	54.8	- 0.8	70	13	40	14	B 1	0			2.80	0.23	0.68	20		0.0	0										
ANCHORAGE	114	1004.7	1009.7	60	49	54.4		68	13	38	26	0	0	48	80	2.47		0.82	16	0	0.0	0	3.0	17	22	17	3	1	6	24	8.9	23
ANNETTE	110	1012.9	1017.0	64	51	57.4	- 1.0	78	23	43	10	7	0	50	81	4.81	- 2.70	1.03	16	0	0.0	0	2.0	19	26	16	8	5	3	23	8.0	
BARROW	22	1013.5	1014.1	38	32	34.9	- 3.0	49	12	27	31+	0	22	34	95	0.57	- 0.33	0.21	7	0	0.9	T	9.8	8	32	7	29	3	4	24	8.4	
BARTER ISLAND	39	1010.8	1012.8	41	32	36.5	- 3.5	57	1	28	31+	0	17	35	93	2.25	1.20	0.84	17	0	1.7	T	6.4	7	26	7	6+	0	3	28	9.3	
BETHEL	125	1001.4	1007.0	59	45	51.6	- 0.7	72	14	35	19	3	0	48	88	2.60	- 1.60	0.69	17	0	0.0	0	2.5	22	25	23	28	1	5	25	8.9	
COLD BAY	96	1004.4	1008.4	53	46	49.1	- 2.2	58	10	38	6	0	0	45	88	3.73	- 0.52	0.78	28	0	0.0	0	4.4	23	54	15	26	0	0	31	9.7	
FAIRBANKS	436	991.9	1008.8	67	47	57.1	2.8	85	8	39	15	11	0	41	58	0.59	- 1.61	0.33	8	0	0.0	0	0.9	3	28	23	16	4	6	21	7.7	
JUNEAU	12	1014.9	1015.5	60	45	52.4	- 1.7	73	6	38	5	3	0	49	89	6.37	1.35	1.56	20	0	0.0	0	5.7	9	25	11	22+	3	3	25	8.7	23
KING SALMON	43	1005.4	1007.6	56	45	50.2	- 4.4	67	26	40	20	0	0	47	91	5.69	2.26	1.01	23	0	0.0	0	6.6	17	32	17	27+	0	4	27	9.4	
KOTZEBUE	10	1007.1	1007.6	58	46	52.3	1.7	72	6	36	18+	4	0	45	77	0.91	- 1.25	0.30	13	0	T	T	2.3	8	35	32	15	3	6	22	7.8	
MC GRATH	349	995.6	1008.1	61	43	51.6	- 2.5	73	9	33	26	5	0	44	79	2.06	- 1.73	0.47	17	1	0.0	0	1.5	19	20	11	5	2	3	26	8.7	
NOME	13	1005.4	1006.3	57	43	49.8	0.8	83	8	27	18	2	2	43	77	2.19	- 1.61	0.45	13	1	0.0	0	1.3	6	28	8	21	5	6	20	7.6	32
ST. PAUL ISLAND	22	1006.1	1007.2	50	43	46.8	- 0.8	55	13	35	7	0	0	44	90	2.21	- 1.08	0.67	19	0	0.0	0	4.1	29	35	18	27	0	4	27	9.2	
SHEMYA	122	1008.5	1012.2	51	45	48.2	- 1.6	56	29	42	9	0	0	46	94	2.31	0.19	1.01	13	0	0.0	0	4.9	27	37	22	28+	0	4	27	9.4	
YAKUTAT	28	1012.5	1013.7	56	44	49.9	- 3.9	72	27	34	27+	1	0	48	93	16.94	6.02	5.19	25	0	0.0	0	4.2	12	32	15	22	3	2	26	8.6	
ARIZONA																																
FLAGSTAFF	6993	791.1	1015.3	80	51	65.2	1.3	87	5	44	29+	0	0	49	63	3.55	0.71	0.96	11	19	0.0	0	2.5	22	21	19	30+	7	21	3	4.9	
PHOENIX	1117	970.9	1008.4	104	78	90.9	3.4	110	9+	71	18	31	0	65	45	2.17	1.05	1.74	4	10	0.0	0	1.4	17	58Y	NE	18	23	6	2	2.5	91
TUCSON	2584	924.5	1010.0	94	72	82.9	- 0.2	100	8+	68	22+	26	0	63	56	3.31	0.43	1.38	9	14	0.0	0	3.7	19	47	SE	8	15	11	5	4.3	80
WINSLOW	4895	852.4	1012.0	92	62	77.0	- 0.8	99	7	55	15	26	0	54	49	0.96	- 0.47	0.30	10	11	0.0	0	3.4	22	43	24	27	8	18	5	4.9	
YUMA	194	1001.0	1008.1	105	82	93.2	1.6	111	9	72	31	31	0	64	43	0.08	- 0.42	0.08	1	2	0.0	0	7.8	19	34	E	30	22	8	1	2.1	94
ARKANSAS																																
FORT SMITH	447	999.0	1015.4	88	68	77.7	- 4.6	99	9	54	25	12	0	66	72	2.87	- 0.05	0.76	8	5	0.0	0	1.7	8	25	W	21	6	10	15	6.7	54
LITTLE ROCK	257	1006.8	1016.2	87	69	77.9	- 3.4	97	16+	62	26+	10	0	68	74	14.46	11.64	7.32	12	9	0.0	0	1.2	17	31	NW	18	8	10	13	6.2	55
TEXARKANA	372	1002.7	1015.7	88	69	78.7	- 3.9	96	8	57	25	14	0	70	78	8.62	5.55	3.57	10	8	0.0	0	2.0	14				7	9	15	6.2	
CALIFORNIA																																
BAKERSFIELD	494	993.9	1010.9	99	70	84.7	3.0	108	9	57	31+	26	0	49	32	T	0.00	T	0	0	0.0	0	3.5	33	18	35	29	30	0	1	0.5	
BISHOP	4108			98	57	77.3	3.0	106	6	44	30	28	0			0.10	- 0.02	0.07	2		0.0	0						23	6	2	2.2	
BLUE CANYON	5280			79	60	69.4	2.7	86	17	39	26	0	0			0.00	- 0.06	0.00	0		0.0	0			22	19	29	28	2	1	1.0	
EUREKA U	43			61	51	55.9	- 0.8	68	25	49	24+	0	0			0.50	0.40	0.50	2		0.0	0			25	SW	25	6	13	12	6.3	58
FRESNO	328	999.0	1010.6	100	62	81.0	2.1	106	16+	49	30	27	0	52	41	0.00	- 0.01	0.00	0	0	0.0	0	5.2	29	23	NW	28	29	2	0	0.7	99
LONG BEACH	34	1011.2	1012.7	87	66	76.3	4.0	92	25+	60	30+	8	0	60	64	T	- 0.03	T	0	0	0.0	0	2.8	25	17	28	13	26	4	1	2.2	
LOS ANGELES	97	1008.8	1012.4	78	66	71.9	2.8	83	25	62	30+	0	0	62	75	T	- 0.02	T	0	0	0.0	0	6.6	26	24Y	SW	31+	22	8	1	2.6	
LOS ANGELES U	270			86	67	76.6	3.5	92	25+	63	29+	5	0			T	- 0.04	T	0		0.0	0			14	SW	31+	24	6	1	2.0	88
MT SHASTA R	3544			87	51	68.8	2.1	97	15	40	30	14	0			0.23	0.05	0.11	4		0.0	0										
OAKLAND	6	1013.2	1013.6	72	58	65.0	0.8	84	6	55	15	0	0	55	75	0.06	0.03	0.05	2	0	0.0	0	8.7	30	24	28	29	17	11	3	3.2	
RED BLUFF	341	998.0	1010.4	98	66	82.2	1.2	110	6	55	31	27	0	48	34	0.11	0.05	0.11	1	1	0.0	0	2.2	19	26	S	25	25	6	0	1.6	95
SACRAMENTO	17	1010.2	1011.1	96	58	76.9	2.8	107	6	49	26	24	0	52	52	T	- 0.02	T	0	0	0.0	0	6.5	20	25	SW	25	26	3	2	1.3	98
SANDBERG R	4517			86	65	75.6	2.3	96	5	45	31	11	0			T	- 0.09	T	0		0.0	0			29	33	31	29	1	1	0.8	
SAN DIEGO	13	1011.5	1012.5	78	67	72.6	0.8	83	2	65	22+	0	0	63	76	0.00	- 0.08	0.00	0	0	0.0	0	3.9	27	17	NW	23+	24	6	1	2.6	84
SAN FRANCISCO	8	1013.2	1013.9	72	53	62.3	- 0.5	85	6	50	15+	0	0	52	77	0.09	0.07	0.09	1	1	0.0	0	10.5	30	34	W	28+	22	8	1	2.3	
SAN FRANCISCO U	52			65	53	58.8	- 0.6	77	16	50	4+	0	0			0.10	0.06	0.09	3		0.0	0			34	W	28					72
SANTA CATALINA	1568			80	63	71.7	1.3	94	26	56	23+	6	0			0.01	- 0.05	0.01	1	1	0.0	0						26	3	2	1.8	
SANTA MARIA	236			73	54	63.6	1.2	80	27+	49	30+	0	0			T	- 0.03	T	0		0.0	0						21	10	0	2.8	
STOCKTON	22	1010.8	1011.9	95	61	78.4	2.2	107	6	53	20	27	0	50	43	0.00	0.00	0.00	0	0	0.0	0	8.1	30	28	28	28	26	4	1	1.1	
COLORADO																																
ALAMOSA	7536			79	46	62.6	- 0.4	85	7+	37	25	0	0			1.42	0.44	0.90	11		0.0	0						12	15	4	4.4	
COLORADO SPRINGS	6145	814.8	1014.8	79	54	66.8	- 2.4	92	14	47	22	2	0	49	59	2.00	- 0.16	0.41	13	13	0.0	0	2.0	8	38	36	20	9	12	10	5.5	
DENVER	5283	838.5	1012.8	85	57	70.8	- 0.7	96	11	50	25	10	0	49	53	2.06	0.78	0.64	12	7	0.0	0	2.2	14	33	S	7	12	12	7	4.7	68

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, Sleet		Resultant speed	Resultant direction	Fastest mile			Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
												Max. 90° F. or above	Min. 32° F. or below						.01 inch or more	With thunderstorms	Total	Maximum depth on ground			Speed	Direction	Date					
COLORADO	Ft.	Mb.	Mb.	F.	F.	°F.	F.	°F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
GRAND JUNCTION	4855	852.4	1010.7	92	62	77.0	1.5	100	9	52	22	24	0	40	31	0.52	- 0.55	0.43	4	5	0.0	0	1.9	13	38	NW	12	18	9	4	3.5	80
PUEBLO	4684	857.1	1013.1	87	59	72.7	- 1.9	97	17	48	24	12	0	53	56	1.34	- 0.51	1.11	6	6	0.0	0	2.6	8	40	NW	14+	10	11	10	5.2	72
CONNECTICUT																																
BRIDGEPORT	7	1014.9	1015.6	83	67	74.9	2.6	90	19	57	4	1	0	63	67	1.83	- 2.62	0.78	7	4	0.0	0	3.7	23	30	26	11	12	10	9	5.5	
HARTFORD	169	1008.5	1014.9	85	62	73.4	2.2	95	30+	51	4	8	0	60	68	1.90	- 2.11	1.01	6	2	0.0	0	2.1	25	22	NW	3	8	11	12	5.9	68
NEW HAVEN	6			80	63	71.4	0.8	87	31	52	4	0	0			1.27	- 2.97	0.48	6		0.0	0			19	SW	12+	8	15	8	5.8	67
DELAWARE																																
WILMINGTON	78	1012.9	1015.8	85	64	74.8	0.5	92	31+	57	26+	7	0	63	71	1.42	- 4.17	0.56	4	4	0.0	0	3.0	24	32	22	11	10	8	13	5.7	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1013.5	1015.8	89	69	78.7	2.2	94	29+	62	6+	19	0	64	63	1.67	- 3.23	1.21	8	3	0.0	0	2.7	21	25	NW	11	8	10	13	6.2	63
FLORIDA																																
APALACHICOLA U	13			87	75	81.1	- 0.4	95	23	70	9	6	0			9.03	1.29	3.25	10	11	0.0	0			26	E	1	14	8	9	4.9	63
DAYTONA BEACH	31	1016.3	1017.5	89	73	81.2	0.5	93	26	70	28	17	0	71	76	7.93	1.56	2.26	15	15	0.0	0	1.5	13	31	20	4	6	14	11	6.1	
FORT MYERS	15	1016.6	1016.9	91	75	82.8	0.1	93	30+	72	16	26	0	73	77	8.10	0.72	2.05	17	18	0.0	0	1.9	11	29	24	17	3	19	9	6.3	
JACKSONVILLE	20	1015.9	1017.0	90	72	80.8	- 1.5	98	23	66	28	16	0	71	78	3.88	- 2.97	1.05	13	9	0.0	0	2.0	19	30	W	5	8	16	7	5.6	67
KEY WEST	4	1015.6	1016.1	89	79	84.1	0.5	91	27+	73	11	9	0	74	71	3.50	- 0.83	1.85	11	11	0.0	0	6.5	11	39	SE	10	5	15	11	6.0	81
LAKELAND U	214			90	73	81.7	- 0.2	95	23	71	24+	21	0			7.16	0.08	1.63	16		0.0	0						2	22	7	6.0	63
MIAMI	7	1016.3	1016.4	88	75	81.7	- 0.6	92	26+	72	23+	9	0	74	81	7.62	0.65	2.06	19	18	0.0	0	3.5	11	25	33	23	2	15	14	6.8	
ORLANDO	108	1012.9	1017.2	90	74	82.3	- 0.5	93	23+	72	17	23	0			7.76	0.82	1.61	15	19	0.0	0	1.7	16	27	24	5	3	17	11	6.6	
PENSACOLA	112	1012.5	1016.6	88	73	80.1	- 1.4	93	22	66	24	6	0	71	77	6.25	- 0.72	3.05	11		0.0	0	2.1	19	34	W	4					54
TALLAHASSEE	55	1014.6	1016.8	90	71	80.2	- 0.9	96	22	65	29+	19	0	70	76	8.89	1.96	3.16	12	13	0.0	0	0.9	21	18	24	9+	10	13	8	5.4	
TAMPA	19	1016.6	1016.8	91	74	82.5	0.5	95	30+	70	29+	25	0	73	77	4.75	- 3.49	1.09	17	20	0.0	0	1.6	14	31	1	19+	4	20	7	5.9	72
WEST PALM BEACH	15	1016.3	1016.9	89	74	81.7	- 1.3	91	30+	71	17	11	0			9.76	3.02	1.86	21	20	0.0	0	3.1	12	37	27	7	1	20	10	6.6	
GEORGIA																																
ATHENS	802	988.8	1017.1	87	67	77.0	- 2.0	92	16	59	27	9	0	69	81	6.27	2.64	1.75	11	13	0.0	0	0.5	23	23	25	20	4	13	14	6.5	
ATLANTA	1010	980.7	1016.9	84	67	75.4	- 2.8	90	16+	60	27	2	0	67	79	3.94	0.34	1.09	10	9	0.0	0	0.9	23	23	SW	16	4	9	18	7.1	60
AUGUSTA	145	1011.2	1016.4	88	68	78.2	- 2.0	95	22	59	27	14	0	69	79	5.74	1.85	1.58	13	11	0.0	0	1.2	18	28	15	3	8	11	12	6.2	
COLUMBUS	385			89	70	79.3	- 1.4	93	21+	62	27	14	0	70	79	7.16	2.52	2.21	12		0.0	0	0.3	17	29	18	11	7	10	14	6.4	
MACON	354	1004.1	1017.0	90	68	78.9	- 2.4	98	22	61	28	16	0	67	72	2.69	- 1.49	0.95	12	8	0.0	0	0.9	21	30	SW	11	9	10	12	6.2	74
ROME	637			87	66	76.4	- 2.0	93	1	55	28+	10	0			5.11	1.35	2.33	16		0.0	0										
SAVANNAH	46	1015.2	1016.9	89	71	79.6	- 1.4	96	22	61	27	12	0	72	82	3.73	- 2.89	1.33	10	11	0.0	0	2.0	20	24	W	9	10	9	12	6.0	58
HAWAII																																
HILO	27	1014.6	1015.8	84	70	77.1	1.3	87	28	65	21	0	0	71	84	7.22	- 4.23	1.68	28	0	0.0	0	0.6	1	17	E	4	1	12	18	7.5	24
HONOLULU	7	1014.9	1015.4	89	75	82.0	2.6	91	30+	70	1	16	0	67	63	0.82	- 0.07	0.50	6	0	0.0	0	12.5	6	26	N	21+	9	14	8	5.4	76
KAHULUI	48	1012.9	1015.3	87	72	79.5	0.5	91	28	66	23	2	0			0.31	- 0.04	0.16	10	0	0.0	0	13.4	6	31	NE	5	6	17	8	5.5	64
LIHUE	103	1011.5	1016.7	84	73	78.6	0.2	86	17	69	11	0	0	71	82	2.04	- 0.42	0.42	20	0	0.0	0	12.2	6	22	E	4	1	19	11	6.8	71
IDAHO																																
BOISE	2838	914.7	1012.4	88	56	72.1	0.0	103	2	43	31	16	0	40	35	0.01	- 0.15	0.01	1	2	0.0	0	2.8	28	29	NW	29	17	7	7	3.7	91
IDAHO FALLS 42NW R	4790			86	45	65.7	- 0.7	96	25+	26	22	9	1			0.30	- 0.19	0.22	5				0.9	20	27	S	29					
IDAHO FALLS 46W R	4932			84	46	65.4	- 1.2	94	25	35	24+	6	0			0.11	- 0.37	0.06	2		0.0	0										
LEWISTON	1413			88	57	72.9	1.2	106	24	45	31	16	0			0.48	0.05	0.29	4		0.0	0						17	5	9	4.0	
POCATELLO	4454	863.5	1013.4	87	49	67.6	- 2.5	97	16	34	22	11	0	35	33	0.02	- 0.53	0.01	2	2	0.0	0	5.5	23	54	SW	4	14	14	3	3.7	81
ILLINOIS																																
CAIRO U	314			84	68	75.9	- 4.0	90	18+	59	25	4	0			3.13	0.03	1.00	9		0.0	0			20	SW	10	10	9	12	5.9	65
CHICAGO O HARE	658	991.5	1015.8	82	57	69.6	- 1.7	90	15	48	4+	1	0	58	69	1.00	- 2.21	0.40	4	2	0.0	0	2.1	25	24	25	21	10	13	8	5.1	
CHICAGO MIDWAY	607	993.2		81	63	71.7	- 2.5	88	31+	53	24	0	0	59	66	1.41	- 1.75	0.61	4	3	0.0	0	2.8	23	26	SW	21	10	15	6	4.9	75
MOLINE	582	994.2	1015.5	83	58	70.6	- 3.0	92	15	50	24	3	0	60	71	0.77	- 2.76	0.20	5	3	0.0	0	2.4	25	23	NW	1	14	9	8	4.7	79
PEORIA	652	992.6	1016.1	81	59	70.3	- 4.0	92	1	49	24	2	0	60	72	2.56	- 0.32	1.30	6	3	0.0	0	1.2	25	24	W	1	11	9	11	5.0	69
ROCKFORD	724	988.8	1015.4	82	58	69.7	- 2.8	90	31+	48	24	2	0	60	74	1.50	- 2.64	0.73	4	3	0.0	0	2.7	24	28	25	15	11	14	6	4.7	
SPRINGFIELD	588	993.9	1015.8	84	60	72.0	- 3.2	95	1	49	24	5	0	61	72	2.71	- 0.03	1.04	9	7	0.0	0	1.0	24	39	NW	15	14	6	11	5.2	72

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1002.4	1016.2	87	62	74.4	- 2.9	95	8+	52	26+	8	0	63	73	2.24	- 0.83	0.80	10	3	0.0	0	1.4	27	24	S	20	8	11	12	5.8	71
FORT WAYNE	791	986.5	1015.9	78	57	67.8	- 4.7	87	7	49	24+	0	0	58	73	4.15	1.11	2.25	11	6	0.0	0	2.1	27	37	NW	21	11	8	12	5.4	66
INDIANAPOLIS	792	987.5	1016.1	85	61	73.2	- 0.5	91	31+	50	24	6	0	59	65	1.31	- 1.72	0.62	5	4	0.0	0	2.1	26	26	NW	10	10	12	9	5.5	61
SOUTH BEND	773	988.2	1015.9	77	58	67.2	- 4.8	84	8+	48	4	0	0	58	75	5.48	1.93	3.70	11	7	0.0	0	2.9	27	21	27	15	9	14	8	5.2	
IOWA																																
BURLINGTON	692			82	60	71.0	- 3.6	90	30	50	23	1	0	61	72	1.01	- 2.60		4	3	0.0		2.0	30	21	32	21+	13	10	8	4.8	
DES MOINES	938	981.7	1016.1	82	60	70.8	- 3.3	92	17	48	23	3	0	59	70	2.09	- 1.58	0.83	5	4	0.0	0	1.8	22	48	NW	6	14	12	5	4.4	83
DUBUQUE	1056			80	56	68.2	- 2.3	91	17	47	9	1	0			1.96	- 1.77	1.89	3		0.0	0						11	11	9	5.1	
SIOUX CITY	1095	976.3	1015.4	81	59	70.1	- 5.0	95	17	47	23	3	0	62	79	4.88	2.22	1.82	8	8	0.0	0	1.6	18	30	N	6	14	9	8	4.5	73
WATERLOO	868	984.1	1015.5	79	56	67.5	- 4.2	89	17	45	19	0	0	59	77	5.97	2.55	5.28	6	4	0.0	0	1.8	25	24	18	17	12	13	6	4.9	
KANSAS																																
CONCORDIA	1470	962.8	1014.8	85	63	73.7	- 5.3	98	17	52	22	5	0	61	68	3.47	0.32	1.35	8	10	0.0	0	4.4	15	28	S	20	14	10	7	4.6	68
DODGE CITY	2582	925.5	1014.4	85	63	74.2	- 5.0	102	1	53	22	7	0	61	70	4.36	2.00	1.69	12	9	0.0	0	6.4	14	36	SE	17	8	10	13	5.9	84
GOODLAND	3645	890.3	1014.5	84	59	71.8	- 2.9	97	17	49	22	12	0	57	65	2.15	- 0.13	1.09	8	8	0.0	0	5.1	14	46	36	9	13	11	7	4.7	
TOPEKA	876	984.4	1015.5	86	63	74.8	- 3.6	98	17+	51	24	9	0	62	68	3.62	- 0.67	1.68	8	8	0.0	0	2.2	15	54	N	18	7	14	10	5.6	71
WICHITA	1321	967.8	1014.9	87	65	76.1	- 4.7	103	1	57	25	9	0	62	66	1.09	- 1.78	0.39	6	6	0.0	0	4.2	15	42	N	9	7	13	11	6.0	64
KENTUCKY																																
COVINGTON	869	985.4	1016.4	85	64	74.5	0.4	92	10+	55	24	6	0	61	65	4.31	1.71	2.18	11	5	0.0	0	1.9	24	21	33	10	6	13	12	6.1	
LEXINGTON	966	981.7	1016.8	82	63	72.6	- 3.4	89	10	53	24	0	0	63	74	4.55	1.34	1.61	11	5	0.0	0	2.5	19	23	20	14	6	12	13	6.4	
LOUISVILLE	477	998.6	1015.9	86	66	75.6	- 0.6	94	10	56	25+	7	0	63	69	5.18	2.21	1.77	11	7	0.0	0	1.7	21	27	N	10	8	7	16	6.2	70
LOUISIANA																																
ALEXANDRIA	92	1011.5	1015.7	89	69	78.9	- 3.2	95	1	58	26	15	0	70	80	7.62	4.14	3.05	9	10	0.0	0	1.0	12	23	31	31	4	16	11	6.2	
BATON ROUGE	64	1013.5	1016.2	89	71	80.0	- 2.4	92	22+	62	26	18	0	70	77	5.92	0.66	2.23	12	12	0.0	0	0.9	9	29	10	17	6	10	15	7.0	
LAKE CHARLES	9	1014.6	1015.7	90	74	82.1	- 0.1	94	23+	67	26	19	0	73	78	6.63	1.83	2.36	14	15	0.0	0	1.9	13	20	13	11	6	14	11	6.5	
NEW ORLEANS	3	1014.9	1015.7	89	71	80.4	- 1.5	95	16+	62	26	20	0	72	79	2.84	- 2.50	0.70	11	7	0.0	0	0.9	15	21	20	9	6	14	11	6.2	
SHREVEPORT	252	1006.4	1015.4	91	71	81.0	- 2.8	97	8+	61	26	21	0	69	72	1.71	- 0.84	1.25	6	8	0.0	0	2.2	14	25	4	18	5	11	15	6.5	55
MAINE																																
CARIBOU	624			72	52	62.0	- 0.6	80	18+	41	29	0	0			1.54	- 2.13	0.39	12		0.0	0						2	13	16	7.1	
PORTLAND	47	1011.9	1014.3	77	55	66.2	- 0.6	88	19	44	27	0	0	58	77	4.99	2.57	2.60	11	4	0.0	0	2.9	23	25	SW	12	14	5	12	5.5	66
MARYLAND																																
BALTIMORE	148	1010.5	1016.1	89	65	76.5	1.5	95	22	55	4	16	0	61	64	1.87	- 3.32	0.77	7	3	0.0	0	2.7	24	37	W	16	7	14	10	6.0	65
MASSACHUSETTS																																
BLUE HILL OBS P	629			79	60	69.7	0.3	90	19+	53	4	2	0			2.49	- 1.56	0.94	9		0.0	0			35	W	12					66
BOSTON	15	1013.9	1014.9	79	64	71.3	- 0.4	92	19	59	29+	3	0	58	66	1.25	- 2.41	0.58	9	4	0.0	0	3.1	24	34	NW	12	12	7	12	5.4	68
NANTUCKET	43	1014.9	1015.4	76	60	67.6	- 0.5	83	6	50	21	0	0	62	85	4.22	0.54	1.58	7	3	0.0	0	4.8	22	24	SW	17	6	10	15	6.5	60
PITTSFIELD	1170			79	53	66.2	0.0	87	30+	41	4	0	0			1.73	- 2.17	0.46	11		0.0	0										
WORCESTER	986	979.3	1015.6	77	59	68.1	- 0.2	87	30+	53	24+	0	0	56	68	1.95	- 2.29	0.66	10	3	0.0	0	4.7	26	24	28	12	12	9	10	5.3	
MICHIGAN																																
ALPENA	689	989.5	1014.4	77	53	64.9	0.4	91	29	39	13	1	0	55	73	1.76	- 1.27	0.37	14	9	0.0	0	1.2	25	21	SE	13	7	13	11	6.1	53
DETROIT	619	992.6	1015.1	81	62	71.3	- 1.5	90	7	52	20	1	0	59	67					7	0.0		3.5	26	23	29	23+					
DETROIT M WAYNE CO	633	991.5	1015.3	80	58	69.1	- 2.8	87	8+	50	3	0	0	61	76	5.03	2.19	1.25	11	7	0.0	0	3.4	24	25	NW	18+	10	13	8	5.0	67
DETROIT WILLOW RUN	711	987.8	1015.8	79	56	67.6	- 5.0	88	7	47	13	0	0	57	72	3.88	1.04	1.41	11	6	0.0	0	3.7	25	24	34	2	12	11	8	4.9	
FLINT	770	987.8	1015.2	78	55	66.3	- 1.9	87	8+	43	3	0	0	56	72	2.44	- 0.73	0.83	10	5	0.0	0	3.8	25	31	26	8	12	9	10	5.3	
GRAND RAPIDS	784	986.5	1015.3	81	56	68.5	- 1.9	90	7	46	4+	1	0	57	72	3.82	1.12	1.59	7	5	0.0	0	3.8	25	25	SW	25+	12	10	9	5.1	63
HOUGHTON LAKE	1149	973.9	1015.5	76	54	64.7		84	29+	39	13	0	0	56	74	1.92		0.48	12	7	0.0	0	3.3	26	20	29	23	9	11	11	5.7	
LANSING	841	983.7	1015.1	81	55	67.8	- 2.4	88	31+	43	3	0	0	57	69	2.38	- 0.67	0.83	10	5	0.0	0	3.7	26	29	W	8	13	7	11	5.4	67
MARQUETTE U	677			72	56	64.0	- 1.8	88	29	51	19+	0	0			3.90	0.87	1.08	14		0.0	0			26	SE	13	9	6	16	6.6	50
MUSKEGON	627	992.6	1015.4	78	58	67.6	- 2.7	85	15+	49	13	0	0	57	72	2.27	- 0.64	1.09	5	4	0.0	0	3.1	25	32	1	15	16	6	9	4.5	
SAULT STE MARIE	721	988.2	1014.4	71	55	63.0	- 1.0	85	29	42	13	0	0	56	81	3.45	0.56	1.00	15	4	0.0	0	2.4	30	29	NW	18	3	13	15	7.2	49
MINNESOTA																																
DULUTH	1428	964.8	1016.0	70	53	61.5	- 2.3	84	26+	43	19	0	0	54	80	6.42	2.61	1.27	14	4	0.0	0	0.5	34	31	NW	8	6	9	16	6.9	47

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	F.	F.	F.	F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	972.6	1015.5	74	52	62.8	- 0.3	88	26	42	20+	0	0	56	81	2.85	- 0.79	1.02	11	3	0.0	0	0.7	27	28	31	17	5	11	15	6.9	
MINNEAPOLIS	834	985.1	1015.3	79	58	68.2	- 1.8	93	6	49	23+	3	0	57	71	4.40	1.22	1.24	8	4	0.0	0	0.7	29	30	W	6	12	5	14	5.4	63
ROCHESTER	1297	968.5	1015.8	77	56	66.2	- 3.6	88	6	46	23	0	0	56	75	3.47	- 0.32	2.21	8	6	0.0	0	3.4	25	23	33	1	11	10	10	5.1	
ST CLOUD	1034	977.7	1015.0	77	55	66.1	- 2.5	91	6	49	24+	1	0		76	4.67	0.94	2.09	9		0.0	0						12	4	15	5.6	
MISSISSIPPI																																
JACKSON	310	1004.4	1016.1	89	68	78.3	- 3.7	94	16	55	26	15	0	68	77	6.65	3.32	3.45	13	14	0.0	0	1.0	15	38	NW	9	4	16	11	6.1	63
MERIDIAN	290	1005.4	1016.5	88	68	77.9	- 3.3	94	1	56	26	12	0	68	77	7.56	4.02	2.41	10	12	0.0	0	0.5	26	21	12	15	4	14	13	6.6	
VICKSBURG U	234			88	70	79.0	- 2.7	93	18+	60	24	9	0			1.28	- 1.73	0.66	7		0.0	0			33	SW	10	9	15	7	5.1	79
MISSOURI																																
COLUMBIA	778	987.8	1015.6	84	63	73.8	- 3.4	92	15	52	23	3	0	61	67	1.46	- 2.35	0.83	8	5	0.0	0	0.2	2	27	NW	7	8	12	11	5.7	87
KANSAS CITY	742	989.2	1015.5	84	66	74.9	- 4.9	94	6	54	24+	7	0	64	70	4.24	0.47	1.48	9	6	0.0	0	1.2	12	42	NE	17	8	12	11	5.7	75
SAINT JOSEPH	811			85	59	71.9	- 5.6	93	6	46	23	7	0	62	78	4.24	0.03	2.15	10	5	0.0	0	0.9	17	40	36	17	15	10	6	4.5	
ST LOUIS	535	995.9	1016.1	85	64	74.2	- 2.6	93	1	53	25	5	0	63	70	3.72	0.70	1.19	8	8	0.0	0	0.7	25	48	NW	15	8	11	12	6.0	64
SPRINGFIELD	1268	971.6	1016.3	85	63	74.0	- 4.0	94	16	51	25	6	0	64	76	4.90	1.58	1.52	10	10	0.0	0	1.8	16	33	W	16	5	16	10	6.3	62
MONTANA																																
BILLINGS	3567	892.3	1014.3	82	55	68.3	- 3.6	99	2	41	22	9	0	43	45	1.09	0.19	0.90	4	3	0.0	0	1.6	34	48	NW	4	13	12	6	4.5	85
GLASGOW	2284			78	52	65.4	- 2.4	96	16	39	22	5	0			3.65	2.16	2.23	8		0.0	0						11	12	8	5.1	
GREAT FALLS	3662	889.9	1015.0	80	50	65.1	- 1.7	97	2	38	12	6	0	40	47	0.77	- 0.49	0.44	5	2	0.0	0	3.4	29	32	W	30+	11	11	9	5.0	85
HAVRE	2582			81	51	65.7	- 1.3	97	2	42	24+	8	0			0.50	- 0.60	0.38	4		0.0	0			33	NW	29	13	9	9	5.6	77
HELENA	3828	882.5	1015.5	84	50	66.7	0.5	100	2	40	22+	8	0	40	43	0.42	- 0.47	0.11	6	5	0.0	0	4.3	30	34	W	26	13	9	9	4.6	79
KALISPELL	2965	912.3	1015.8	79	44	61.6	- 1.5	92	25+	32	31	4	1	44	58	1.05	- 0.04	0.45	8	5	0.0	0	0.6	35	23	2	23+	15	7	9	4.5	
MILES CITY	2629	922.5	1014.1	83	55	69.0	- 3.6	101	16	35	22	9	0	44	46	0.62	- 0.62		7	4	0.0		1.4	1								
MISSOULA	3190	905.5	1015.8	84	49	66.8	2.0	100	2	39	31+	9	0	39	42	1.01	0.29	0.65	6	3	0.0	0	3.0	33	39	NW	19	16	6	9	4.2	73
NEBRASKA																																
GRAND ISLAND	1841	950.2	1015.5	83	58	70.7	- 4.6	97	17	45	23+	8	0	59	71	1.68	- 0.67	0.85	8	7	0.0	0	2.7	18	23	16	12	10	13	8	4.8	
LINCOLN U	1150			82	63	72.6	- 5.1	98	17	49	23	3	0			3.83	0.45	1.74	7		0.0	0			35	NE	6	13	8	10	4.9	71
NORFOLK	1544			81	58	69.6	- 5.6	96	17	46	23	3	0			3.78	1.17	2.57	8		0.0	0						14	10	7	4.6	
NORTH PLATTE	2775	918.7	1014.9	81	55	67.8	- 6.7	92	17	43	22	2	0	58	75	2.74	0.61	0.77	12	10	0.0	0	3.0	14	25	NE	17	12	9	10	4.9	72
OMAHA	977	980.7	1015.6	82	60	71.0	- 5.2	95	17	45	23	2	0	61	73	1.85	- 2.13	0.69	6	4	0.0	0	2.4	16	31	N	6	16	9	6	4.4	85
SCOTTSBLUFF	3957	880.8	1014.1	84	54	68.9	- 3.7	99	16	42	22	8	0	54	65	1.86	0.85	0.64	9	11	0.0	0	4.3	7	25	30	21	19	3	9	3.9	
VALENTINE	2587			81	55	67.9	- 5.0	97	3	46	10	8	0			6.71	4.42	2.30	6		0.0	0			32	N	21+	14	9	8	4.3	76
NEVADA																																
ELKO	5050	845.6		90	48	69.0	2.1	97	17+	33	21	20	0			0.52	0.22	0.42	4	5	0.0	0	1.5	25	35	16	18	16	12	3	3.4	
ELY	6253	811.0	1012.0	86	47	66.3	0.2	94	8	33	27	11	0	35	36	0.61	0.12	0.36	8	12	0.0	0	4.0	21	38	S	29	12	16	3	3.9	79
LAS VEGAS	2162	934.0	1008.2	104	75	89.6	2.4	111	8+	66	28	30	0	44	23	0.09	- 0.39	0.07	2	3	0.0	0	5.4	21	50	SE	1	25	6	0	1.5	95
RENO	4404	866.2	1013.2	90	45	67.5	2.0	99	8	31	31	21	1	39	40	0.02	- 0.15	0.02	1	1	0.0	0	2.2	26	28	W	29+	24	6	1	1.8	95
WINNEMUCCA	4299	867.6	1012.4	91	49	70.0	2.4	100	16	34	30	21	0	28	22	0.01	- 0.14	0.01	1	3	0.0	0	2.2	30	33	SW	29+	16	12	3	3.3	83
NEW HAMPSHIRE																																
CONCORD	342	1002.4	1014.9	83	56	69.6	2.2	94	7	43	29	5	0	60	74	4.05	1.09	1.37	9	3	0.0	0	1.5	26	27	W	12	11	11	9	5.4	69
MT WASHINGTON OBS	6262			53	42	47.4	- 0.3	63	8	33	28	0	0			10.84	4.19	1.76	17	5	T	T			81Y	W	17	2	6	23	8.5	29
NEW JERSEY																																
ATLANTIC CITY	64	1013.9	1016.3	83	64	73.4	- 0.3	95	23	55	4	3	0	64	75	9.04	4.14	6.40	9	6	0.0	0	3.4	21	30	22	11	5	12	14	6.3	63
ATLANTIC CITY U	11			80	68	73.8	0.1	86	17	62	13+	0	0			4.11	- 1.03	1.60	8						31	SSW	2					
NEWARK	7	1014.6	1015.5	85	68	76.5	1.1	95	11	61	4	8	0	62	65	3.08	- 1.35	1.34	8	5	0.0	0	3.6	22	35	24	11	8	13	10	5.6	
TRENTON U	56			85	67	75.9	2.0	93	31+	59	4	9	0			0.72	- 4.05	0.42	8		0.0	0			26	W	11	8	15	8	5.5	65
NEW MEXICO																																
ALBUQUERQUE	5311	839.8	1012.3	89	62	75.7	- 0.5	99	1	55	24	20	0	52	50	1.06	- 0.27	0.42	9	10	0.0	0	2.1	12	42	SE	28+	17	12	2	3.8	79
CLAYTON	4969			81	57	68.8	- 4.5	91	1	49	23	2	0			3.21	1.12	1.27	9		0.0	0						10	14	7	5.0	
RATON	6379			81	52	66.6	- 1.6	90	9	45	25	1	0			2.76	0.13	0.99	14		0.0	0						6	14	11	6.3	
ROSWELL	3617			90	63	76.5	- 0.1	107	1	54	26+	22	0			2.89	1.27	1.71	12	9	0.0	0			42	N	7	8	15	8	5.2	
SILVER CITY	5373			86	61	73.3	- 1.8	93	1	54	26	11	0			2.04	- 0.36	0.61	17		0.0	0						11	15	5	5.1	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1004.4	1014.9	82	57	69.2	- 0.8	89	30+	45	14	0	0	58	71	1.44	- 1.63	0.46	11	6	0.0	0	2.9	25	30	NW	12	10	8	13	6.2	59
BINGHAMTON	1590	957.7	1015.6	80	58	69.4	2.9	90	7	49	14	1	0	56	66	1.41	- 2.16	0.58	9	5	0.0	0	4.0	25	26	W	12	3	15	13	6.4	71
BUFFALO	705	989.8	1015.2	77	60	68.5	0.1	89	9	47	13	0	0	58	70	3.60	0.55	1.28	13	5	0.0	0	5.9	24	31	SW	16	11	8	12	5.6	68
NEW YORK U	132	1011.9	1015.0	86	68	76.9	1.8	94	19	61	15+	8	0	60	62	1.89	- 2.55	0.63	8	4	0.0	0	2.4	24	23	NW	16	12	12	7	5.0	69
J.F. KENNEDY	13	1014.9	1015.6	83	66	74.5	0.0	91	1	58	14+	2	0	63	71	2.99	- 1.98	1.10	10	5	0.0	0	4.0	21	35	24	11	8	15	8	5.5	
NEW YORK LA GUARDIA	11	1013.5	1015.4	85	71	77.7	2.3	94	19	65	14+	6	0	61	61	1.74	- 3.34	0.68	7	4	0.0	0	2.9	23	40	W	11	7	15	9	5.6	
ROCHESTER	547	995.9	1015.8	80	58	68.9	- 0.8	89	9+	49	13	0	0	59	72	2.14	- 0.58	0.49	12	6	0.0	0	4.6	25	25	W	9+	10	13	8	5.4	64
SYRACUSE	410	1000.0	1014.5	81	60	70.4	0.2	92	9+	48	14	3	0	58	68	2.64	- 0.61	1.16	10	6	0.0	0	3.2	26	28	SW	9	9	15	7	5.3	61
NORTH CAROLINA																																
ASHEVILLE	2140	942.4	1017.5	80	60	69.9	- 1.6	86	15	50	27	0	0	64	88	7.73	2.79	2.66	19	17	0.0	0	0.4	30	21	24	20+	2	12	17	7.3	50
CAPE HATTERAS R	7	1016.3	1016.6	84	71	77.6	0.0	89	19	60	2	0	0	72	83	3.61	- 2.81	1.40	13	9	0.0	0	3.0	21	23	SSW	5	7	7	17	6.8	61
CHARLOTTE	736	989.5	1016.4	87	68	77.2	- 1.5	92	22	57	27	9	0	66	74	2.36	- 1.86	0.96	13	10	0.0	0	0.9	26	18	N	23+	5	11	15	6.5	72
GREENSBORO	897	985.8	1016.9	86	67	76.4	0.2	91	22+	56	27	7	0	69	80	3.01	- 1.60	0.77	10	8	0.0	0	0.5	25	24	SW	11	7	11	13	6.5	48
RALEIGH	434	1000.7	1016.4	87	68	77.7	0.8	93	23+	58	27+	9	0	68	77	5.79	0.59	1.45	14	8	0.0	0	1.5	19	20	21	11	4	15	12	6.8	45
WILMINGTON	28	1015.6	1016.8	88	72	80.1	0.7	94	19	62	2	16	0	71	79	5.67	- 1.19	1.86	13	10	0.0	0	1.8	22	27	N	19	7	10	14	6.3	66
NORTH DAKOTA																																
BISMARCK	1647	956.3	1015.4	78	50	64.3	- 5.0	93	30	40	24	2	0	52	68	2.25	0.52	0.95	10	5	0.0	0	1.7	6	33	NW	17	9	12	10	5.5	65
FARGO	896	982.7	1015.1	77	54	65.5	- 4.0	91	31	44	24	2	0	55	72	3.80	0.85	1.51	10	6	0.0	0	0.2	10	27	NW	31+	12	5	14	5.6	57
WILLISTON	1899			80	50	65.3	- 2.9	97	3	38	9	7	0			1.80	0.32	1.50	6		0.0	0			38	NW	17	9	16	6	5.2	72
OHIO																																
AKRON	1208	972.6	1016.3	81	59	69.7	- 1.8	88	10	50	13+	0	0	60	73	2.95	- 0.16	2.08	6	2	0.0	0	2.9	26	29	30	10	9	12	10	5.7	
CINCINNATI OBS	761			85	63	74.1	- 1.6	92	10+	54	24	8	0			2.85	- 0.43	0.91	12	6	0.0	0			16	S	10					61
CLEVELAND	777	987.1	1016.0	79	59	68.8	- 1.1	87	8	46	4	0	0	59	72	3.48	0.20	1.66	8	3	0.0	0	3.0	24	26	SW	15+	10	11	10	5.6	56
COLUMBUS	812	986.8	1016.5	82	61	71.3	- 1.9	88	29	51	24	0	0	61	72	4.90	2.04	1.99	11	8	0.0	0	1.3	20	28	NW	9	9	12	10	5.8	59
DAYTON	1002	980.7	1016.2	83	62	72.3	- 1.4	89	31+	51	24	0	0	62	73	3.49	0.61	1.06	11	8	0.0	0	1.8	23	26	W	7	10	9	12	5.5	73
MANSFIELD	1295			79	57	68.1	- 2.1	85	10+	49	24+	0	0			4.66	1.43	2.51	9	6	0.0	0						8	12	11	5.6	
TOLEDO	676	991.2	1016.1	81	58	69.1	- 1.8	90	7	48	4	1	0	58	71	4.60	1.27	2.01	11	6	0.0	0	2.4	25	24	W	16+	11	12	8	5.1	66
YOUNGSTOWN	1178	974.3	1016.4	80	57	68.2	- 1.8	86	31+	48	13	0	0	59	75	5.05	1.55	1.57	11	6	0.0	0	2.5	25	23	27	15+	8	11	12	5.8	
OKLAHOMA																																
OKLAHOMA CITY	1280	969.2	1014.6	90	68	78.8	- 4.0	103	1	58	26+	19	0	65	68	6.77	4.25	3.34	12	10	0.0	0	4.3	14	42	SW	19	7	12	12	6.2	60
TULSA	650	991.2	1015.2	89	68	78.5	- 3.1	104	1	57	25	14	0	66	70	4.59	1.55	1.31	8	4	0.0	0	3.7	16	26	NE	18	5	15	11	6.4	51
OREGON																																
ASTORIA	8	1018.0	1018.6	71	50	60.3	- 0.7	89	20	43	12	0	0	53	81	1.01	- 0.48	0.80	6	0	0.0	0	4.5	29	22	31	2	11	10	10	5.5	
BURNS U	4151	874.0	1014.6	84	50	67.0	- 0.2	96	2	36	30	8	0	36	36	0.63	0.34	0.42	3		0.0	0	3.9	32				16	9	6	3.7	
EUGENE	359	1003.4	1016.8	84	51	67.2	1.3	95	20+	42	30	6	0	50	60	0.02	- 0.38	0.02	1	0	0.0	0	3.6	35	23	36	20	14	8	9	4.6	
MEACHAM	4050	878.4	1015.0	74	51	62.4	0.7	91	24	38	30	1	0	37	44	0.29	- 0.24	0.22	3		0.0	0	2.8	29				17	5	9	4.3	
MEDFORD	1298	968.2	1015.1	90	53	71.3	0.6	100	21+	46	31	20	0	46	47	0.19	0.01	0.18	2	1	0.0	0	3.7	31	25	30	25	21	4	6	2.7	
PENDLETON	1482	962.1	1014.8	88	57	72.4	0.5	99	2	45	31	15	0	40	35	0.17	- 0.11	0.11	2	0	0.0	0	3.1	27	30	26	8	17	6	8	3.8	
PORTLAND	21	1015.9	1017.0	80	55	67.5	0.9	93	21	48	31	1	0	53	64	0.59	- 0.06	0.40	3	2	0.0	0	5.8	33	26	E	20	13	8	10	5.0	70
SALEM	196	1009.5	1017.0	84	50	66.9	0.8	95	2	44	18	7	0	51	62	0.40	- 0.05	0.20	2	0	0.0	0	3.8	34	23	3	20	17	8	6	3.7	
SEXTON SUMMIT R	3836	885.5	1015.0	76	52	63.7	0.5	89	21	39	29	0	0			0.46	0.21	0.42	3		0.0	0						21	3	7	3.0	
PACIFIC AREA																																
CANTON ISLAND	8			89	78	83.5	0.0	89	31+	76	31+	0	0			0.55	- 1.95	0.18	12		0.0	0						11	16	4	4.6	
ENIWETOK	13	1008.8	1009.6	89	79	84.1	1.1	94	31	74	23+	17	0	76	78	11.66	4.85	4.62	19	0	0.0	0	4.6	9								
TAGUAC GUAM R	361			86	72	79.2	- 0.1	91	21	69	17+	2	0			11.39	- 1.45	5.25	23		0.0	0			23	W	3+					46
JOHNSTON	7	1012.5	1013.0	85	78	81.8	0.3	87	28+	75	31+	0	0	72	75	2.13	- 0.13	0.79	12	2	0.0	0	14.1	10	37	SE	8	7	12	12	6.1	72
KOROR R	94	1006.1	1009.6	88	76	81.7	0.7	90	30+	74	31+	5	0	76	85	9.69	- 6.07	2.11	23	1	0.0	0	2.3	23	19	NW	31+	0	0	31	9.9	55
KWAJALEIN	8	1009.1	1009.8	88	77	82.4	0.5	90	22+	74	6+	2	0	76	81	15.03	5.44	2.75	27	3	0.0	0	3.6	8	23	21	26	1	14	16	7.5	
MAJURO	10	1009.8	1010.0	87	78	82.5	2.3	89	30+	73	7	0	0	75	79	6.52	- 5.16	2.90	17	1	0.0	0	4.7	8	24	E	14	5	10	16	7.1	70
MARCUS ISLAND	20	1009.5	1011.3	89	78	83.5	1.0	92	18	73	29+	18	0	76	78	1.66	- 5.53	0.59	14	2	0.0	0	5.8	12	30	SW	24	3	6	22	8.0	62
PAGO PAGO	12	1012.9	1013.0	83	74	78.4		87	30+	68	1	0	0	72	81	7.62		4.39	13	2	0.0	0	12.0	12	33	SE	12	1	11	19	7.6	40
PONAPE R	123	1004.1	1009.5	89	73	81.1	1.7	91	27+	71	24	11	0	75	87	10.18	- 6.14	2.13	20	0	0.0	0	2.5	12	19	E	16	1	6	24	8.4	55
TRUK MOEN ISLAND	5	1009.1	1009.4	87	75	81.3	0.9	90	29+	73	2	3	0	76	84	12.39	- 0.42	4.54	23	1	0.0	0	0.7	15	24	N	25+	0	11	20	8.2	82
WAKE	11	1010.8	1011.2	87	77	82.1	- 0.3	89	27+	72	30	0	0	74	76	4.85	- 2.23	1.18	18	2	0.0	0	6.3	8	21	9	29+	0	6	25	8.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind						No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
PACIFIC AREA	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
YAP R	62	1007.1	1009.0	87	75	81.2	-0.1	89	28+	73	7	0	0	76	86	9.02	-5.68	2.19	25	2	0.0	0	2.2	22	20	SW	2	0	1	30	9.8	39
PENNSYLVANIA																																
ALLENTOWN	387	1002.0	1015.8	86	62	74.0	2.0	93	11	50	4	12	0	61	69	2.68	-1.79	1.62	9	4	0.0	0	2.5	23	25	30	17	9	12	10	5.5	
ERIE	731	989.5	1015.8	78	61	69.3	-0.5	88	9	50	13	0	0	60	76	3.52	0.54	1.65	12	7	0.0	0	4.0	25	25	30	16	13	9	9	4.9	
HARRISBURG	338	1003.1	1015.5	90	67	78.3	4.2	97	30+	57	4	20	0	62	62	1.53	-2.12	0.88	8	3	0.0	0	2.2	25	22	W	9	9	12	10	5.6	73
PHILADELPHIA	5	1014.9	1015.8	86	63	74.8	1.2	92	29+	52	24	6	0	63	69	1.63	-3.00	0.60	6	3	0.0	0	3.1	25	28	SW	2	8	10	13	5.7	70
PITTSBURGH	1137	973.2	1016.5	81	61	71.1	0.3	89	6	52	25+	0	0	62	76	5.13	1.82	1.44	9	7	0.0	0	3.3	26	33	31	16	5	15	11	6.2	54
READING U	266			86	66	76.3	1.5	93	31	57	4	12	0			2.14	-1.91	1.39	8		0.0	0			36	NW	27	10	14	7	5.0	69
SCRANTON	930	982.4	1016.1	84	61	72.4	2.4	90	11+	51	4	3	0	60	70	4.76	1.18	3.18	11	5	0.0	0	2.4	20	26	S	16	9	15	7	5.5	66
WILLIAMSPORT	524	997.0	1015.7	83	59	70.9	-0.7	89	11+	48	4	0	0	60	74	2.45	-1.17	1.55	9	5	0.0	0	2.7	25	26	18	9	6	18	7	5.5	
RHODE ISLAND																																
BLOCK ISLAND	110			76	63	69.8	0.2	82	31	58	21+	0	0			1.41	-2.45	0.73	8	2	0.0	0						10	10	11	5.9	
PROVIDENCE	51	1012.9	1015.2	81	61	70.7	0.2	92	19	52	14	1	0	59	69	3.37	-0.59	2.06	8	6	0.0	0	4.1	23	23	21	2	12	7	12	5.6	58
SOUTH CAROLINA																																
CHARLESTON	40	1014.9	1016.6	88	72	80.0	0.3	97	23	61	28+	14	0	71	77	3.45	-3.16	1.25	10	10	0.0	0	1.6	20	31Y	S	4	10	11	10	5.5	67
CHARLESTON U	9			87	75	80.6	-0.4	93	21	65	27	8	0			4.97	-1.10	1.32	11		0.0	0			33	SW	4					
COLUMBIA	217	1008.5	1016.3	90	69	79.2	-1.3	97	22	58	27	17	0	68	75	3.22	-2.52	1.44	10	7	0.0	0	1.0	20	25	27	9	6	11	14	6.3	70
GNVLE-SPARTANBURG	957	983.1	1017.0	84	67	75.7	-2.5	89	18+	58	27	0	0	66	75	5.01	0.50	1.12	15	11	0.0	0	1.0	23	30	NE	15	6	11	14	6.5	61
SOUTH DAKOTA																																
ABERDEEN	1296	968.5	1014.8	79	54	66.6	-4.9	91	30+	44	9	3	0	55	68	2.77	0.61	1.60	11	4	0.0	0	1.6	7	29	33	17	11	9	11	5.1	
HURON	1282	968.5	1014.5	79	55	66.9	-5.9	93	5	41	9	1	0	58	76	4.05	1.98	1.53	9	5	0.0	0	1.6	13	50	N	14	12	10	9	4.9	74
RAPID CITY	3162	905.5	1014.9	79	53	65.9	-6.1	96	3	38	22	5	0	49	60	3.24	2.02	1.46	10	7	0.0	0	1.5	35	45	NW	17	10	13	8	5.1	64
SIOUX FALLS	1418	964.4	1015.1	81	57	68.8	-3.0	93	5	43	24	6	0	57	69	2.12	-1.47	1.04	8	7	0.0	0	1.9	22	43	35	14	14	7	10	4.8	
TENNESSEE																																
BRISTOL	1507	964.1	1017.6	82	64	73.3	-1.5	87	14+	54	27	0	0	64	76	7.07	3.27	1.28	18	14	0.0	0	0.4	1	17	24	2	3	13	15	7.0	
CHATTANOOGA	665	992.2	1016.4	85	66	75.5	-4.3	91	16	55	27+	1	0	68	83	4.16	0.40	1.22	15	13	0.0	0	0.8	14	27	N	9	4	10	17	6.8	60
KNOXVILLE	980	982.4	1017.0	84	66	75.0	-2.4	89	18+	55	27	0	0	67	82	4.09	0.63	1.67	16	10	0.0	0	1.3	26	28	W	15	4	9	18	7.0	66
MEMPHIS	258	1006.4	1016.3	85	68	76.9	-3.6	94	1	58	26	5	0	68	77	4.28	1.31	1.19	8	8	0.0	0	1.0	26	30	NW	10	7	10	14	6.3	61
NASHVILLE	590	994.9	1016.2	86	67	76.5	-2.7	92	16	56	26+	5	0	68	78	5.29	2.43	1.55	11	11	0.0	0	1.3	23	36	NW	14	5	12	14	6.6	62
OAK RIDGE	905			84	66	75.0	-1.1	91	16	54	27	1	0			4.73	0.11	1.54	13		0.0	0			29Y		22+	5	9	17	7.0	
TEXAS																																
ABILENE	1762	953.6	1013.6	91	70	80.4	-2.6	103	1	59	26+	20	0	65	64	5.08	3.61	1.83	9	8	0.0	0	5.5	16	40	SE	10	9	11	11	5.9	63
AMARILLO	3604	892.3	1013.0	84	63	73.5	-6.0	100	1	52	23	10	0	61	69	3.77	1.19	1.37	11	11	0.0	0	8.7	17	38	SW	1	10	12	9	5.4	59
AUSTIN	597	992.6	1014.0	92	73	82.2	-2.5	99	1	63	25	25	0	69	69	6.21	4.27	3.32	10	7	0.0	0	4.1	16	27	W	11	7	13	11	6.0	58
BROWNSVILLE	16	1012.5	1013.2	93	76	84.4	0.3	97	17	70	26	30	0	73	75	0.58	-2.19	0.57	2	1	0.0	0	10.3	14	27	S	20	7	20	4	5.3	87
CORPUS CHRISTI	41	1012.2	1013.6	94	76	84.7	0.5	99	17	69	26+	26	0	75	78	4.15	1.38	2.95	4	2	0.0	0	9.8	15	33	S	20	3	15	13	6.5	79
DALLAS	481	997.3	1014.3	91	73	82.0	-3.0	101	1	61	25+	20	0	69	70	5.12	3.19	1.42	10	8	0.0	0	5.5	15	26	SW	29+	7	13	11	6.0	59
DEL RIO	1026	977.0	1012.2	94	73	83.2	-2.6	103	1	64	25	26	0	67	64	2.10	0.58	0.80	8	7	0.0	0	7.3	12	23	5	11	7	12	12	6.3	
EL PASO	3918	882.2	1010.9	.90	68	78.7	-1.7	101	1	58	26	21	0	60	57	1.85	0.66	0.80	7	9	0.0	0	1.7	10	38	N	5	10	10	11	5.5	70
FORT WORTH	537	994.2	1014.3	92	74	82.7	-2.7	100	9+	62	26	22	0	69	67	3.38	1.70	1.64	8	6	0.0	0	4.2	15	23	19	14+	9	9	13	5.9	
GALVESTON U	7			86	77	81.6	-1.7	92	17	67	25	1	0			5.56	1.17	3.70	10		0.0	0			26	SW	20+					55
HOUSTON U	41			89	75	82.2	-1.9	96	17	65	25	20	0			3.91	0.36	0.98	14		0.0	0										
HOUSTON	50	1012.5	1014.8	90	75	82.4	-0.8	95	17+	66	26	24	0	73	77	7.11	2.84	2.45	14	8	0.0	0	4.1	15	25	16	15+	4	12	15	7.1	55
LUBBOCK	3254	904.5	1013.2	87	67	76.8	-2.0	106	1	56	24	15	0	62	64	8.85	7.17	3.78	13	11	0.0	0	4.5	15	30	2	6	5	18	8	6.1	
MIDLAND	2851	916.0	1011.9	90	68	78.9	-3.3	103	1	56	26	21	0	62	63	3.37	1.89	1.94	10	8	0.0	0	5.6	13	37	31	28	8	13	10	5.7	
PORT ARTHUR	16	1014.6	1015.4	90	73	81.7	-0.6	95	17+	65	26+	20	0	74	82	17.26	11.77	8.45	16	11	0.0	0	2.6	16	34	E	11	5	12	14	6.5	58
SAN ANGELO	1903	947.5	1012.6	92	70	81.0	-4.1	104	1	57	26	23	0	65	66	5.05	3.78	2.81	9	9	0.0	0	4.6	16	23	36	29+	6	17	8	6.0	
SAN ANTONIO	788	986.5	1014.0	92	71	81.9	-1.9	99	6+	61	25	25	0	70	75	4.28	1.92	1.39	11	5	0.0	0	5.5	14	30	SW	13	6	13	12	6.0	66
VICTORIA	104	1010.2	1014.3	92	75	83.6	0.2	98	17+	66	25	25	0	72	74	6.05	2.92	3.76	12	8	0.0	0	6.2	14	38Y	NE	6	2	14	15	7.0	
WACO	501	996.6	1014.4	93	75	84.2	-1.3	103	1	63	26	26	0	66	58	4.09	2.41	3.16	9	8	0.0	0	5.6	15	23	34	13+	9	10	12	5.5	
WICHITA FALLS	994	978.3	1014.0	93	69	81.3	-4.4	108	1	56	24	21	0	66	66	5.05	3.26	2.75	11	8	0.0	0	4.9	15	32	26	21	6	12	13	6.4	
UTAH																																
MILFORD	5028			93	54	73.4	1.2	101	8	42	28	24	0			0.40	-0.33	0.18	5		0.0	0						18	10	3	3.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, Sleet		Resultant speed	Resultant direction	Fastest mile			Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
												Max. 90°F. or above	Min. 32 F. or below						.01 inch or more	With thunderstorms	Total	Maximum depth on ground			Speed	Direction	Date					
	Ft.	Mb.	Mb.	°F.	°F.	F.	°F.	F.		F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	871.3	1012.1	92	57	74.1	- 0.4	100	17	44	21	24	0	40	33	0.22	- 0.65	0.15	4	6	0.0	0	1.4	12	42	NW	11	18	10	3	3.0	91
WENDOVER	4237			89	65	76.9	- 0.3	96	25+	56	28	17	0			0.02	- 0.34	0.01	2		0.0	0										
VERMONT																																
BURLINGTON	332	1001.7	1013.8	78	57	67.4	0.7	91	9	47	29	2	0	58	74	4.46	1.09	1.26	13	7	0.0	0	3.2	20	28	NW	2	5	10	16	6.9	69
VIRGINIA																																
LYNCHBURG	916			84	64	73.6	- 1.2	90	31+	55	27	3	0			2.58	- 1.83	1.06	8	3	0.0	0			24	E	31	7	10	14	6.3	62
NORFOLK	22	1015.2	1016.4	82	68	74.9	- 2.6	93	19	60	26+	2	0	69	84	5.24	- 0.73	2.30	13	8	0.0	0	1.8	18	29	NE	3	4	10	17	7.1	53
RICHMOND	162	1010.5	1016.4	84	65	74.6	- 1.4	91	23+	57	6	4	0	66	80	1.31	- 4.23	1.01	6	3	0.0	0	1.5	18	26	SW	11	4	10	17	6.8	57
ROANOKE	1149	975.6	1016.9	83	63	73.0	- 2.4	89	22	56	27+	0	0	63	74	4.73	0.10	1.21	16	8	0.0	0	1.2	28	25	24	22	8	9	14	6.4	
WASHINGTON																																
OLYMPIA	195	1010.8	1017.9	77	47	61.8	- 1.6	91	21	39	17	1	0	49	66	0.68	- 0.21	0.34	5	1	0.0	0	1.8	22	21	20	26+	10	12	9	5.3	
QUILLAYUTE	179	1011.2	1018.6	68	49	58.7	- 1.0	85	19	41	17	0	0	52	80	1.79	- 0.29	1.24	8	0	0.0	0	2.1	29	19	NE	19	7	7	17	6.3	55
SEATTLE TACOMA	400	1001.7	1017.8	75	54	64.5	0.4	88	21	46	29	0	0	52	69	0.42	- 0.53	0.37	4	0	0.0	0	1.2	31	21	22	27	9	10	12	5.3	72
SPOKANE	2356	931.9	1014.3	83	53	68.2	0.2	100	24	40	31	5	0	39	39	0.15	- 0.26	0.07	5	1	0.0	0	1.4	21	28	SW	13+	15	4	12	4.5	76
STAMPEDE PASS R	3958			64	47	55.6	0.0	82	24	39	28	0	0			1.90	- 0.14	1.23	9		0.0	0						12	4	15	5.6	
WALLA WALLA U	949			86	61	73.4	- 0.4	98	2	50	31	9	0			0.29	- 0.01	0.17	2	2	0.0	0			35	NW	10	18	4	9	3.8	83
YAKIMA	1052	976.3	1014.1	87	55	71.2	2.6	97	23+	45	31+	10	0	45	41	T	- 0.20	T	0	0	0.0	0	4.0	30	28	29	13	17	7	7	3.7	
WEST INDIES																																
SAN JUAN P.R.	13	1013.9	1016.2	88	77	82.6	1.7	91	30	74	15+	4	0	74	77	3.41	- 3.72	0.75	16	3	0.0	0	8.0	9	32	N	26	3	18	10	6.3	76
SWAN ISLAND	28			87	78	82.5	- 0.6	89	30+	71	20	0	0			6.41	2.75	3.50	16		0.0	0						6	10	15	6.6	
WEST VIRGINIA																																
BECKLEY	2504	930.6	1017.4	77	58	67.3		84	10	49	26	0	0	60	80	3.99		1.02	13	8	0.0	0	2.2	22	24	13	4	3	10	18	7.4	
CHARLESTON	939	983.1	1016.5	84	63	73.5	- 0.3	93	10	54	26	3	0	63	76	3.31	- 0.64	0.90	10	3	0.0	0	1.8	21	29	23	22	0	14	17	7.4	
ELKINS	1970	947.9	1018.2	79	54	66.6	- 2.2	85	30+	45	26	0	0	59	84	4.84	0.61	0.93	14	8	0.0	0	1.5	28	29	29	11	0	12	19	7.6	
HUNTINGTON	827	986.8	1016.5	81	63	72.0	- 2.0	87	19	53	26	0	0	65	82	4.15	1.33	1.04	10	10	0.0	0	2.0	21	23	24	19	3	16	12	6.9	
PARKERSBURG U	615			84	62	73.1	- 1.3	91	19	54	26+	3	0			1.45	- 2.33	0.50	8		0.0	0			25	S	7					53
WISCONSIN																																
GREEN BAY	682	989.8	1015.0	76	54	64.7	- 4.2	88	29	45	13+	0	0	55	73	2.65	- 0.10	0.96	8	4	0.0	0	2.4	27	24	NE	15+	11	7	13	5.6	56
LA CROSSE	651	990.9	1014.9	82	58	69.8	- 1.8	95	29	46	24	7	0	59	75	1.87	- 1.76	0.59	9	3	0.0	0	1.2	20	21	32	6	14	9	8	5.0	
MADISON	858	984.4	1015.5	79	53	66.2	- 3.3	89	17	43	3	0	0	57	74	3.83	0.46	1.90	6	3	0.0	0	2.6	27	40	S	15	13	10	8	5.1	78
MILWAUKEE	672	991.5	1016.5	76	57	66.8	- 1.0	86	30	49	13+	0	0	59	76	3.27	0.21	1.89	5	4	0.0	0	2.5	25	28	N	2	16	6	9	4.4	75
WYOMING																																
CASPER	5338	839.8	1014.0	83	50	66.6	- 3.5	93	16+	36	22	8	0	38	43	1.03	0.31	0.57	9	5	0.0	0	1.5	29	35	3	11	13	13	5	4.3	
CHEYENNE	6126	815.8	1015.1	81	52	66.2	- 1.5	92	16	39	22	2	0	45	55	2.78	1.34	0.76	10	10	0.0	0	1.9	27	38	W	20+	16	6	9	4.5	72
LANDER	5563	831.4	1014.0	83	53	67.5	- 1.3	94	16	39	22+	7	0	41	44	1.77	1.30	0.85	8	8	0.0	0	2.4	26	52	SW	5	9	14	8	4.9	71
SHERIDAN	3964	880.1	1015.0	81	49	65.3	- 4.2	97	16	34	23	8	0	39	43	0.86	- 0.04	0.37	6	2	0.0	0	2.5	31	41	SW	5	10	11	10	5.2	72

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	994.6	1016.7	30.0	20.6	25.0	-2.3	32.8	16+	12.8	26	4	0	20.6	79	165	41	92	12	8	0	0	0.2	21	13.0	NW	3	5	7	19	6.9	56
HUNTSVILLE	183	993.9	1016.4	30.6	20.6	25.4	-1.3	33.3	16+	13.3	26	9	0	20.6	77	160	76	74	14	8	0	0	0.5	17	13.0	30	14	5	15	11	6.4	
MOBILE	64	1008.5	1016.3	31.7	22.8	27.3	-0.5	34.4	23+	18.9	26+	16	0	21.1	74	165	1	52	18	12	0	0	0.4	16	8.9	23	10	4	12	15	6.6	
MONTGOMERY	59	1009.1	1016.4	32.2	21.1	26.6	-1.1	35.0	15	15.6	27+	18	0	21.1	77	45	- 59	15	14	7	0	0	0.5	20	11.6	S	10	6	11	14	6.7	65
ALASKA												B																				
ANCHORAGE PRK STRIP	26			16.1	9.4	12.7	-0.4	21.1	13	4.4	14	1	0			71	6	17	20		0	0										
ANCHORAGE	35	1004.7	1009.7	15.6	9.4	12.4		20.0	13	3.3	26	0	0	8.9	80	63		21	16	0	0	0	1.3	17	9.8	17	3	1	6	24	8.9	23
ANNETTE	34	1012.9	1017.0	17.8	10.6	14.1	-0.6	25.6	23	6.1	10	7	0	10.0	81	122	- 69	26	16	0	0	0	0.9	19	11.6	16	8	5	3	23	8.0	
BARROW	7	1013.5	1014.1	3.3	0.0	1.6	-1.7	9.4	12	- 2.8	31+	0	22	1.1	95	14	- 8	5	7	0	23	T	4.4	8	14.3	7	29	3	4	24	8.4	
BARTER ISLAND	12	1010.8	1012.8	5.0	0.0	2.5	-1.9	13.9	1	- 2.2	31+	0	17	1.7	93	57	30	21	17	0	43	T	2.9	7	11.6	7	6+	0	3	28	9.3	
BETHEL	38	1001.4	1007.0	15.0	7.2	10.9	-0.4	22.2	14	1.7	19	3	0	8.9	88	66	- 41	18	17	0	0	0	1.1	22	11.2	23	28	1	5	25	8.9	
COLD BAY	29	1004.4	1008.4	11.7	7.8	9.5	-1.2	14.4	10	3.3	6	0	0	7.2	88	95	- 13	20	28	0	0	0	2.0	23	24.1	15	26	0	0	31	9.7	
FAIRBANKS	133	991.9	1008.8	19.4	8.3	13.9	1.6	29.4	8	3.9	15	11	0	5.0	58	15	- 41	8	8	0	0	0	0.4	3	12.5	23	16	4	6	21	7.7	
JUNEAU	4	1014.9	1015.5	15.6	7.2	11.3	-0.9	22.8	6	3.3	5	3	0	9.4	89	162	34	40	20	0	0	0	2.5	9	11.2	11	22+	3	3	25	8.7	23
KING SALMON	13	1005.4	1007.6	13.3	7.2	10.1	-2.4	19.4	26	4.4	20	0	0	8.3	91	145	57	26	23	0	0	0	3.0	17	14.3	17	27+	0	4	27	9.4	
KOTZEBUE	3	1007.1	1007.6	14.4	7.8	11.3	0.9	22.2	6	2.2	18+	4	0	7.2	77	23	- 32	8	13	0	T	T	1.0	8	15.6	32	15	3	6	22	7.8	
MC GRATH	106	995.6	1008.1	16.1	6.1	10.9	-1.4	22.8	9	0.6	26	5	0	6.7	79	52	- 44	12	17	1	0	0	0.7	19	8.9	11	5	2	3	26	8.7	
NOME	4	1005.4	1006.3	13.9	6.1	9.9	0.4	28.3	8	- 2.8	18	2	2	6.1	77	56	- 41	11	13	1	0	0	0.6	6	12.5	8	21	5	6	20	7.6	32
ST. PAUL ISLAND	7	1006.1	1007.2	10.0	6.1	8.2	-0.4	12.8	13	1.7	7	0	0	6.7	90	56	- 27	17	19	0	0	0	1.8	29	15.6	18	27	0	4	27	9.2	
SHEMYA	37	1008.5	1012.2	10.6	7.2	9.0	-0.9	13.3	29	5.6	9	0	0	7.8	94	59	5	26	13	0	0	0	2.2	27	16.5	22	28+	0	4	27	9.4	
YAKUTAT	9	1012.5	1013.7	13.3	6.7	9.9	-2.2	22.2	27	1.1	27+	1	0	8.9	93	430	153	132	25	0	0	0	1.9	12	14.3	15	22	3	2	26	8.6	
ARIZONA																																
FLAGSTAFF	2131	791.1	1015.3	26.7	10.6	18.4	0.7	30.6	5	6.7	29+	0	0	9.4	63	90	18	24	11	19	0	0	1.1	22	9.4	19	30+	7	21	3	4.9	
PHOENIX	340	970.9	1008.4	40.0	25.6	32.7	1.9	43.3	9+	21.7	18	31	0	18.3	45	55	27	44	4	10	0	0	0.6	17	25.9Y	NE	18	23	6	2	2.5	91
TUCSON	788	924.5	1010.0	34.4	22.2	28.3	-0.1	37.8	8+	20.0	22+	26	0	17.2	56	84	11	35	9	14	0	0	1.7	19	21.0	SE	8	15	11	5	4.3	80
WINSLOW	1492	852.4	1012.0	33.3	16.7	25.0	-0.4	37.2	7	12.8	15	26	0	12.2	49	24	- 12	8	10	11	0	0	1.5	22	19.2	24	27	8	18	5	4.9	
YUMA	59	1001.0	1008.1	40.6	27.8	34.0	0.9	43.9	9	22.2	31	31	0	17.8	43	2	- 11	2	1	2	0	0	3.5	19	15.2	E	30	22	8	1	2.1	94
ARKANSAS																																
FORT SMITH	136	999.0	1015.4	31.1	20.0	25.4	-2.6	37.2	9	12.2	25	12	0	18.9	72	73	- 1	19	8	5	0	0	0.8	8	11.2	W	21	6	10	15	6.7	54
LITTLE ROCK	78	1006.8	1016.2	30.6	20.6	25.5	-1.9	36.1	16+	16.7	26+	10	0	20.0	74	367	296	186	12	9	0	0	0.5	17	13.9	NW	18	8	10	13	6.2	55
TEXARKANA	113	1002.7	1015.7	31.1	20.6	25.9	-2.2	35.6	8	13.9	25	14	0	21.1	78	219	141	91	10	8	0	0	0.9	14				7	9	15	6.2	
CALIFORNIA																																
BAKERSFIELD	151	993.9	1010.9	37.2	21.1	29.3	1.7	42.2	9	13.9	31+	26	0	9.4	32	T	0	T	0	0	0	0	1.6	33	8.0	35	29	30	0	1	0.5	
BISHOP	1252			36.7	13.9	25.2	1.7	41.1	6	6.7	30	28	0			3	- 1	2	2		0	0						23	6	2	2.2	
BLUE CANYON	1609			26.1	15.6	20.8	1.5	30.0	17	3.9	26	0	0			0	- 2	0	0		0	0			9.8	19	29	28	2	1	1.0	
EUREKA U	13			16.1	10.6	13.3	-0.4	20.0	25	9.4	24+	0	0			13	10	13	2		0	0			11.2	SW	25	6	13	12	6.3	58
FRESNO	100	999.0	1010.6	37.8	16.7	27.2	1.2	41.1	16+	9.4	30	27	0	11.1	41	0	0	0	0	0	0	0	2.3	29	10.3	NW	28	29	2	0	0.7	99
LONG BEACH	10	1011.2	1012.7	30.6	18.9	24.6	2.2	33.3	25+	15.6	30+	8	0	15.6	64	T	- 1	T	0	0	0	0	1.3	25	7.6	28	13	26	4	1	2.2	
LOS ANGELES	30	1008.8	1012.4	25.6	18.9	22.2	1.6	28.3	25	16.7	30+	0	0	16.7	75	T	- 1	T	0	0	0	0	3.0	26	10.7Y	SW	31+	22	8	1	2.6	
LOS ANGELES U	82			30.0	19.4	24.8	1.9	33.3	25+	17.2	29+	5	0			T	- 1	T	0		0	0			6.3	SW	31+	24	6	1	2.0	88
MT SHASTA R	1080			30.6	10.6	20.4	1.2	36.1	15	4.4	30	14	0			6	1	3	4		0	0										
OAKLAND	2	1013.2	1013.6	22.2	14.4	18.3	0.4	28.9	6	12.8	15	0	0	12.8	75	2	1	1	2	0	0	0	3.9	30	10.7	28	29	17	11	3	3.2	
RED BLUFF	104	998.0	1010.4	36.7	18.9	27.9	0.7	43.3	6	12.8	31	27	0	8.9	34	3	1	3	1	1	0	0	1.0	19	11.6	S	25	25	6	0	1.6	95
SACRAMENTO	5	1010.2	1011.1	35.6	14.4	24.9	1.6	41.7	6	9.4	26	24	0	11.1	52	T	- 1	T	0	0	0	0	2.9	20	11.2	SW	25	26	3	2	1.3	98
SANDBERG R	1377			30.0	18.3	24.2	1.3	35.6	5	7.2	31	11	0			T	- 2	T	0		0	0			13.0	33	31	29	1	1	0.8	
SAN DIEGO	4	1011.5	1012.5	25.6	19.4	22.6	0.4	28.3	2	18.3	22+	0	0	17.2	76	0	- 2	0	0	0	0	0	1.7	27	7.6	NW	23+	24	6	1	2.6	84
SAN FRANCISCO	2	1013.2	1013.9	22.2	11.7	16.8	-0.3	29.4	6	10.0	15+	0	0	11.1	77	2	2	2	1	1	0	0	4.7	30	15.2	W	28+	22	8	1	2.3	
SAN FRANCISCO U	16			18.3	11.7	14.9	-0.3	25.0	16	10.0	4+	0	0			3	2	2	3		0	0			15.2	W	28					72
SANTA CATALINA	478			26.7	17.2	22.1	0.7	34.4	26	13.3	23+	6	0			T	- 1	T	1	1	0	0						26	3	2	1.8	
SANTA MARIA	72			22.8	12.2	17.6	0.7	26.7	27+	9.4	30+	0	0			T	- 1	T	0		0	0						21	10	0	2.8	
STOCKTON	7	1010.8	1011.9	35.0	16.1	25.8	1.2	41.7	6	11.7	20	27	0	10.0	43	0	0	0	0	0	0	0	3.6	30	12.5	28	28	26	4	1	1.1	
COLORADO																																
ALAMOSA	2297			26.1	7.8	17.0	-0.2	29.4	7+	2.8	25	0	0			36	11	23	11		0	0						12	15	4	4.4	
COLORADO SPRINGS	1873	814.8	1014.8	26.1	12.2	19.3	-1.3	33.3	14	8.3	22	2	0	9.4	59	51	- 4	10	13	13	0	0	0.9	8	17.0	36	20	9	12	10	5.5	
DENVER	1610	838.5	1012.8	29.4	13.9	21.6	-0.4	35.6	11	10.0	25	10	0	9.4	53	52	20	16	12	7	0	0	1.0	14	14.8	S	7	12	12	7	4.7	68
GRAND JUNCTION	1480	852.4	1010.7	33.3	16.7	25.0	0.8	37.8	9	11.1	22	24	0	4.4	31	13	- 14	11	4	5	0	0	0.8	13	17.0	NW	12	18	9	4	3.5	80
PUEBLO	1428	857.1	1013.1	30.6	15.0	22.6	-1.1	36.1	17	8.9	24	12	0	11.7	56	34	- 13	28	6	6	0	0	1.2	8	17.9	NW	14+	10	11	10	5.2	72

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	°C.	C.	C.	C.		C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1014.9	1015.6	28.3	19.4	23.8	1.4	32.2	19	13.9	4	1	0	17.2	67	46	- 67	20	7	4	0	0	1.7	23	13.4	26	11	12	10	9	5.5	
HARTFORD	52	1008.5	1014.9	29.4	16.7	23.0	1.2	35.0	30+	10.6	4	8	0	15.6	68	48	- 54	26	6	2	0	0	0.9	25	9.8	NW	3	8	11	12	5.9	68
NEW HAVEN	2			26.7	17.2	21.9	0.4	30.6	31	11.1	4	0	0			32	- 75	12	6		0	0			8.5	SW	12+	8	15	8	5.8	67
DELAWARE																																
WILMINGTON	24	1012.9	1015.8	29.4	17.8	23.8	0.3	33.3	31+	13.9	26+	7	0	17.2	71	36	-106	14	4	4	0	0	1.3	24	14.3	22	11	10	8	13	5.7	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1013.5	1015.8	31.7	20.6	25.9	1.2	34.4	29+	16.7	6+	19	0	17.8	63	42	- 82	31	8	3	0	0	1.2	21	11.2	NW	11	8	10	13	6.2	63
FLORIDA																																
APALACHICOLA U	4			30.6	23.9	27.3	-0.2	35.0	23	21.1	9	6	0			229	33	83	10	11	0	0			11.6	E	1	14	8	9	4.9	63
DAYTONA BEACH	9	1016.3	1017.5	31.7	22.8	27.3	0.3	33.9	26	21.1	28	17	0	21.7	76	201	40	57	15	15	0	0	0.7	13	13.9	20	4	6	14	11	6.1	
FORT MYERS	5	1016.6	1016.9	32.8	23.9	28.2	0.1	33.9	30+	22.2	16	26	0	22.8	77	206	18	52	17	18	0	0	0.8	11	13.0	24	17	3	19	9	6.3	
JACKSONVILLE	6	1015.9	1017.0	32.2	22.2	27.1	-0.8	36.7	23	18.9	28	16	0	21.7	78	99	- 75	27	13	9	0	0	0.9	19	13.4	W	5	8	16	7	5.6	67
KEY WEST	1	1015.6	1016.1	31.7	26.1	28.9	0.3	32.8	27+	22.8	11	9	0	23.3	71	89	- 21	47	11	11	0	0	2.9	11	17.4	SE	10	5	15	11	6.0	81
LAKELAND U	65			32.2	22.8	27.6	-0.1	35.0	23	21.7	24+	21	0			182	2	41	16		0	0						2	22	7	6.0	63
MIAMI	2	1016.3	1016.4	31.1	23.9	27.6	-0.3	33.3	26+	22.2	23+	9	0	23.3	81	194	17	52	19	18	0	0	1.6	11	11.2	33	23	2	15	14	6.8	
ORLANDO	33	1012.9	1017.2	32.2	23.3	27.9	-0.3	33.9	23+	22.2	17	23	0			197	21	41	15	19	0	0	0.8	16	12.1	24	5	3	17	11	6.6	
PENSACOLA	34	1012.5	1016.6	31.1	22.8	26.7	-0.8	33.9	22	18.9	24	6	0	21.7	77	159	- 18	77	11		0	0	0.9	19	15.2	W	4					54
TALLAHASSEE	17	1014.6	1016.8	32.2	21.7	26.8	-0.5	35.6	22	18.3	29+	19	0	21.1	76	226	50	80	12	13	0	0	0.4	21	8.0	24	9+	10	13	8	5.4	
TAMPA	6	1016.6	1016.8	32.8	23.3	28.1	0.3	35.0	30+	21.1	29+	25	0	22.8	77	121	- 89	28	17	20	0	0	0.7	14	13.9	1	19+	4	20	7	5.9	72
WEST PALM BEACH	5	1016.3	1016.9	31.7	23.3	27.6	-0.7	32.8	30+	21.7	17	11	0			248	77	47	21	20	0	0	1.4	12	16.5	27	7	1	20	10	6.0	
GEORGIA																																
ATHENS	244	988.8	1017.1	30.6	19.4	25.0	-1.1	33.3	16	15.0	27	9	0	20.6	81	159	67	44	11	13	0	0	0.2	23	10.3	25	20	4	13	14	6.5	
ATLANTA	308	980.7	1016.9	28.9	19.4	24.1	-1.6	32.2	16+	15.6	27	2	0	19.4	79	100	9	28	10	9	0	0	0.4	23	10.3	SW	16	4	9	18	7.1	60
AUGUSTA	44	1011.2	1016.4	31.1	20.0	25.7	-1.1	35.0	22	15.0	27	14	0	20.6	79	146	47	40	13	11	0	0	0.5	18	12.5	15	3	8	11	12	6.2	
COLUMBUS	117			31.7	21.1	26.3	-0.8	33.9	21+	16.7	27	14	0	21.1	79	182	64	56	12		0	0	0.1	17	13.0	18	11	7	10	14	6.4	
MACON	108	1004.1	1017.0	32.2	20.0	26.1	-1.3	36.7	22	16.1	28	16	0	19.4	72	68	- 38	24	12	8	0	0	0.4	21	13.4	SW	11	9	10	12	6.2	74
ROME	194			30.6	18.9	24.7	-1.1	33.9	1	12.8	28+	10	0			130	34	59	16		0	0										
SAVANNAH	14	1015.2	1016.9	31.7	21.7	26.4	-0.8	35.6	22	16.1	27	12	0	22.2	82	95	- 73	34	10	11	0	0	0.9	20	10.7	W	9	10	9	12	6.0	58
HAWAII																																
HILO	8	1014.6	1015.8	28.9	21.1	25.1	0.7	30.6	28	18.3	21	0	0	21.7	84	183	-107	43	28	0	0	0	0.3	1	7.6	E	4	1	12	18	7.5	24
HONOLULU	2	1014.9	1015.4	31.7	23.9	27.8	1.4	32.8	30+	21.1	1	16	0	19.4	63	21	- 2	13	6	0	0	0	5.6	6	11.6	N	21+	9	14	8	5.4	76
KAHULUI	15	1012.9	1015.3	30.6	22.2	26.4	0.3	32.8	28	18.9	23	2	0			8	- 1	4	10	0	0	0	6.0	6	13.9	NE	5	6	17	8	5.5	64
LIHUE	31	1011.5	1016.7	28.9	22.8	25.9	0.1	30.0	17	20.6	11	0	0	21.7	82	52	- 11	11	20	0	0	0	5.5	6	9.8	E	4	1	19	11	6.8	71
IDAHO																																
BOISE	865	914.7	1012.4	31.1	13.3	22.3	0.0	39.4	2	6.1	31	16	0	4.4	35	T	- 4	T	1	2	0	0	1.3	28	13.0	NW	29	17	7	7	3.7	91
IDAHO FALLS 42NW R	1460			30.0	7.2	18.7	-0.4	35.6	25+	- 3.3	22	9	1			8	- 5	6	5				0.4	20	12.1	S	29					
IDAHO FALLS 46W R	1503			28.9	7.8	18.6	-0.7	34.4	25	1.7	24+	6	0			3	- 9	2	2		0	0										
LEWISTON	431			31.1	13.9	22.7	0.7	41.1	24	7.2	31	16	0			12	1	7	4		0	0						17	5	9	4.0	
POCATELLO	1358	863.5	1013.4	30.6	9.4	19.8	-1.4	36.1	16	1.1	22	11	0	1.7	33	1	- 13	T	2	2	0	0	2.5	23	24.1	SW	4	14	14	3	3.7	81
ILLINOIS																																
CAIRO U	96			28.9	20.0	24.4	-2.2	32.2	18+	15.0	25	4	0			80	1	25	9		0	0			8.9	SW	10	10	9	12	5.9	65
CHICAGO O HARE	201	991.5	1015.8	27.8	13.9	20.9	-0.9	32.2	15	8.9	4+	1	0	14.4	69	25	- 56	10	4	2	0	0	0.9	25	10.7	25	21	10	13	8	5.1	
CHICAGO MIDWAY	185	993.2		27.2	17.2	22.1	-1.4	31.1	31+	11.7	24	0	0	15.0	66	36	- 44	15	4	3	0	0	1.3	23	11.6	SW	21	10	15	6	4.9	75
MOLINE	177	994.2	1015.5	28.3	14.4	21.4	-1.7	33.3	15	10.0	24	3	0	15.6	71	20	- 70	5	5	3	0	0	1.1	25	10.3	NW	1	14	9	8	4.7	79
PEORIA	199	992.6	1016.1	27.2	15.0	21.3	-2.2	33.3	1	9.4	24	2	0	15.6	72	65	- 8	33	6	3	0	0	0.5	25	10.7	W	1	11	9	11	5.0	69
ROCKFORD	221	988.8	1015.4	27.8	14.4	20.9	-1.6	32.2	31+	8.9	24	2	0	15.6	74	38	- 67	19	4	3	0	0	1.2	24	12.5	25	15	11	14	6	4.7	
SPRINGFIELD	179	993.9	1015.8	28.9	15.6	22.2	-1.8	35.0	1	9.4	24	5	0	16.1	72	69	- 1	26	9	7	0	0	0.4	24	17.4	NW	15	14	6	11	5.2	72
INDIANA																																
EVANSVILLE	116	1002.4	1016.2	30.6	16.7	23.6	-1.6	35.0	8+	11.1	26+	8	0	17.2	73	57	- 21	20	10	3	0	0	0.6	27	10.7	S	20	8	11	12	5.8	71
FORT WAYNE	241	986.5	1015.9	25.6	13.9	19.9	-2.6	30.6	7	9.4	24+	0	0	14.4	73	105	28	57	11	6	0	0	0.9	27	16.5	NW	21	11	8	12	5.4	66
INDIANAPOLIS	241	987.5	1016.1	29.4	16.1	22.9	-0.3	32.8	31+	10.0	24	6	0	15.0	65	33	- 44	16	5	4	0	0	0.9	26	11.6	NW	10	10	12	9	5.5	61
SOUTH BEND	236	988.2	1015.9	25.0	14.4	19.6	-2.7	28.9	8+	8.9	4	0	0	14.4	75	139	49	94	11	7	0	0	1.3	27	9.4	27	15	9	14	8	5.2	
IOWA																																
BURLINGTON	211			27.8	15.6	21.7	-2.0	32.2	30	10.0	23	1	0	16.1	72	26	- 66		4	3	0		0.9	30	9.4	32	21+	13	10	8	4.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station		Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
	Elevation (ground)	Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	°C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	981.7	1016.1	27.8	15.6	21.6	-1.8	33.3	17	8.9	23	3	0	15.0	70	53	- 40	21	5	4	0	0	0.8	22	21.5	NW	6	14	12	5	4.4	83
DUBUQUE	322			26.7	13.3	20.1	-1.3	32.8	17	8.3	9	1	0			50	- 45	48	3		0	0						11	11	9	5.1	
SIOUX CITY	334	976.3	1015.4	27.2	15.0	21.2	-2.8	35.0	17	8.3	23	3	0	16.7	79	124	56	46	8	8	0	0	0.7	18	13.4	N	6	14	9	8	4.5	73
WATERLOO	265	984.1	1015.5	26.1	13.3	19.7	-2.3	31.7	17	7.2	19	0	0	15.0	77	152	65	134	6	4	0	0	0.8	25	10.7	18	17	12	13	6	4.9	
KANSAS																																
CONCORDIA	448	962.8	1014.8	29.4	17.2	23.2	-2.9	36.7	17	11.1	22	5	0	16.1	68	88	8	34	8	10	0	0	2.0	15	12.5	S	20	14	10	7	4.6	68
DODGE CITY	787	925.5	1014.4	29.4	17.2	23.4	-2.8	38.9	1	11.7	22	7	0	16.1	70	111	51	43	12	9	0	0	2.9	14	16.1	SE	17	8	10	13	5.9	84
GOODLAND	1111	890.3	1014.5	28.9	15.0	22.1	-1.6	36.1	17	9.4	22	12	0	13.9	65	55	- 3	28	8	8	0	0	2.3	14	20.6	36	9	13	11	7	4.7	
TOPEKA	267	984.4	1015.5	30.0	17.2	23.8	-2.0	36.7	17+	10.6	24	9	0	16.7	68	92	- 17	43	8	8	0	0	1.0	15	24.1	N	18	7	14	10	5.6	71
WICHITA	403	967.8	1014.9	30.6	18.3	24.5	-2.6	39.4	1	13.9	25	9	0	16.7	66	28	- 45	10	6	6	0	0	1.9	15	18.8	N	9	7	13	11	6.0	64
KENTUCKY																																
COVINGTON	265	985.4	1016.4	29.4	17.8	23.6	0.2	33.3	10+	12.8	24	6	0	16.1	65	109	43	55	11	5	0	0	0.8	24	9.4	33	10	6	13	12	6.1	
LEXINGTON	294	981.7	1016.8	27.8	17.2	22.6	-1.9	31.7	10	11.7	24	0	0	17.2	74	116	34	41	11	5	0	0	1.1	19	10.3	20	14	6	12	13	6.4	
LOUISVILLE	145	998.6	1015.9	30.0	18.9	24.2	-0.3	34.4	10	13.3	25+	7	0	17.2	69	132	56	45	11	7	0	0	0.8	21	12.1	N	10	8	7	16	6.2	70
LOUISIANA																																
ALEXANDRIA	28	1011.5	1015.7	31.7	20.6	26.1	-1.8	35.0	1	14.4	26	15	0	21.1	80	194	105	77	9	10	0	0	0.4	12	10.3	31	31	4	16	11	6.2	
BATON ROUGE	20	1013.5	1016.2	31.7	21.7	26.7	-1.3	33.3	22+	16.7	26	18	0	21.1	77	150	17	57	12	12	0	0	0.4	9	13.0	10	17	6	10	15	7.0	
LAKE CHARLES	3	1014.6	1015.7	32.2	23.3	27.8	-0.1	34.4	23+	19.4	26	19	0	22.8	78	168	46	60	14	15	0	0	0.8	13	8.9	13	11	6	14	11	6.5	
NEW ORLEANS	1	1014.9	1015.7	31.7	21.7	26.9	-0.8	35.0	16+	16.7	26	20	0	22.2	79	72	- 64	18	11	7	0	0	0.4	15	9.4	20	9	6	14	11	6.2	
SHREVEPORT	77	1006.4	1015.4	32.8	21.7	27.2	-1.6	36.1	8+	16.1	26	21	0	20.6	72	43	- 21	32	6	8	0	0	1.0	14	11.2	4	18	5	11	15	6.5	55
MAINE																																
CARIBOU	190			22.2	11.1	16.7	-0.3	26.7	18+	5.0	29	0	0			39	- 54	10	12		0	0						2	13	16	7.1	
PORTLAND	14	1011.9	1014.3	25.0	12.8	19.0	-0.3	31.1	19	6.7	27	0	0	14.4	77	127	65	66	11	4	0	0	1.3	23	11.2	SW	12	14	5	12	5.5	66
MARYLAND																																
BALTIMORE	45	1010.5	1016.1	31.7	18.3	24.7	0.8	35.0	22	12.8	4	16	0	16.1	64	47	- 84	20	7	3	0	0	1.2	24	16.5	W	16	7	14	10	6.0	65
MASSACHUSETTS																																
BLUE HILL OBS R	192			26.1	15.6	20.9	0.2	32.2	19+	11.7	4	2	0			63	- 40	24	9		0	0			15.6	W	12					66
BOSTON	5	1013.9	1014.9	26.1	17.8	21.8	-0.2	33.3	19	15.0	29+	3	0	14.4	66	32	- 61	15	9	4	0	0	1.4	24	15.2	NW	12	12	7	12	5.4	68
NANTUCKET	13	1014.9	1015.4	24.4	15.6	19.8	-0.3	28.3	6	10.0	21	0	0	16.7	85	107	14	40	7	3	0	0	2.1	22	10.7	SW	17	6	10	15	6.5	60
PITTSFIELD	357			26.1	11.7	19.0	0.0	30.6	30+	5.0	4	0	0			44	- 55	12	11		0	0										
WORCESTER	301	979.3	1015.6	25.0	15.0	20.1	-0.1	30.6	30+	11.7	24+	0	0	13.3	68	50	- 58	17	10	3	0	0	2.1	26	10.7	28	12	12	9	10	5.3	
MICHIGAN																																
ALPENA	210	989.5	1014.4	25.0	11.7	18.3	0.2	32.8	29	3.9	13	1	0	12.8	73	45	- 32	9	14	9	0	0	0.5	25	9.4	SE	13	7	13	11	6.1	53
DETROIT	189	992.6	1015.1	27.2	16.7	21.8	-0.8	32.2	7	11.1	20	1	0	15.0	67					7	0		1.6	26	10.3	29	23+					
DETROIT M WAYNE CO	193	991.5	1015.3	26.7	14.4	20.6	-1.6	30.6	8+	10.0	3	0	0	16.1	76	128	56	32	11	7	0	0	1.5	24	11.2	NW	18+	10	13	8	5.0	67
DETROIT WILLOW RUN	217	987.8	1015.8	26.1	13.3	19.8	-2.8	31.1	7	8.3	13	0	0	13.9	72	99	26	36	11	6	0	0	1.7	25	10.7	34	2	12	11	8	4.9	
FLINT	235	987.8	1015.2	25.6	12.8	19.1	-1.1	30.6	8+	6.1	3	0	0	13.3	72	62	- 19	21	10	5	0	0	1.7	25	13.9	26	8	12	9	10	5.3	
GRAND RAPIDS	239	986.5	1015.3	27.2	13.3	20.3	-1.1	32.2	7	7.8	4+	1	0	13.9	72	97	28	40	7	5	0	0	1.7	25	11.2	SW	25+	12	10	9	5.1	63
HOUGHTON LAKE	350	973.9	1015.5	24.4	12.2	18.2		28.9	29+	3.9	13	0	0	13.3	74	49		12	12	7	0	0	1.5	26	8.9	29	23	9	11	11	5.7	
LANSING	256	983.7	1015.1	27.2	12.8	19.9	-1.3	31.1	31+	6.1	3	0	0	13.9	69	60	- 17	21	10	5	0	0	1.7	26	13.0	W	8	13	7	11	5.4	67
MARQUETTE U	206			22.2	13.3	17.8	-1.0	31.1	29	10.6	19+	0	0			99	22	27	14		0	0			11.6	SE	13	9	6	16	6.6	50
MUSKEGON	191	992.6	1015.4	25.6	14.4	19.8	-1.5	29.4	15+	9.4	13	0	0	13.9	72	58	- 16	28	5	4	0	0	1.4	25	14.3	1	15	16	6	9	4.5	
SAULT STE MARIE	220	988.2	1014.4	21.7	12.8	17.2	-0.6	29.4	29	5.6	13	0	0	13.3	81	88	14	25	15	4	0	0	1.1	30	13.0	NW	18	3	13	15	7.2	49
MINNESOTA																																
DULUTH	435	964.8	1016.0	21.1	11.7	16.4	-1.3	28.9	26+	6.1	19	0	0	12.2	80	163	66	32	14	4	0	0	0.2	34	13.9	NW	8	6	9	16	6.9	47
INTERNATIONAL FALLS	359	972.6	1015.5	23.3	11.1	17.1	-0.2	31.1	26	5.6	20+	0	0	13.3	81	72	- 20	26	11	3	0	0	0.3	27	12.5	31	17	5	11	15	6.9	
MINNEAPOLIS	254	985.1	1015.3	26.1	14.4	20.1	-1.0	33.9	6	9.4	23+	3	0	13.9	71	112	31	31	8	4	0	0	0.3	29	13.4	W	6	12	5	14	5.4	63
ROCHESTER	395	968.5	1015.8	25.0	13.3	19.0	-2.0	31.1	6	7.8	23	0	0	13.3	75	88	- 8	56	8	6	0	0	1.5	25	10.3	33	1	11	10	10	5.1	
ST CLOUD	315	977.7	1015.0	25.0	12.8	18.9	-1.4	32.8	6	9.4	24+	1	0		76	119	24	53	9		0	0						12	4	15	5.6	
MISSISSIPPI																																
JACKSON	94	1004.4	1016.1	31.7	20.0	25.7	-2.1	34.4	16	12.8	26	15	0	20.0	77	169	84	88	13	14	0	0	0.4	15	17.0	NW	9	4	16	11	6.1	63
MERIDIAN	88	1005.4	1016.5	31.1	20.0	25.5	-1.8	34.4	1	13.3	26	12	0	20.0	77	192	102	61	10	12	0	0	0.2	26	9.4	12	15	4	14	13	6.6	
VICKSBURG U	71			31.1	21.1	26.1	-1.5	33.9	18+	15.6	24	9	0			33	- 44	17	7		0	0			14.8	SW	10	9	15	7	5.1	79

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	987.8	1015.6	28.9	17.2	23.2	-1.9	33.3	15	11.1	23	3	0	16.1	67	37	- 60	21	8	5	0	0	0.1	2	12.1	NW	7	8	12	11	5.7	87
KANSAS CITY	226	989.2	1015.5	28.9	18.9	23.8	-2.7	34.4	6	12.2	24+	7	0	17.8	70	108	12	38	9	6	0	0	0.5	12	18.8	NE	17	8	12	11	5.7	75
SAINT JOSEPH	247			29.4	15.0	22.2	-3.1	33.9	6	7.8	23	7	0	16.7	78	108	1	55	10	5	0	0	0.4	17	17.9	36	17	15	10	6	4.5	
ST LOUIS	163	995.9	1016.1	29.4	17.8	23.4	-1.4	33.9	1	11.7	25	5	0	17.2	70	94	18	30	8	8	0	0	0.3	25	21.5	NW	15	8	11	12	6.0	64
SPRINGFIELD	386	971.6	1016.3	29.4	17.2	23.3	-2.2	34.4	16	10.6	25	6	0	17.8	76	124	40	39	10	10	0	0	0.8	16	14.8	W	16	5	16	10	6.3	62
MONTANA																																
BILLINGS	1087	892.3	1014.3	27.8	12.8	20.2	-2.0	37.2	2	5.0	22	9	0	6.1	45	28	5	23	4	3	0	0	0.7	34	21.5	NW	4	13	12	6	4.5	85
GLASGOW	696			25.6	11.1	18.6	-1.3	35.6	16	3.9	22	5	0			93	55	57	8		0	0						11	12	8	5.1	
GREAT FALLS	1116	889.9	1015.0	26.7	10.0	18.4	-0.9	36.1	2	3.3	12	6	0	4.4	47	20	- 12	11	5	2	0	0	1.5	29	14.3	W	30+	11	11	9	5.0	85
HAVRE	787			27.2	10.6	18.7	-0.7	36.1	2	5.6	24+	8	0			13	- 15	10	4		0	0			14.8	NW	29	13	9	9	5.6	77
HELENA	1167	882.5	1015.5	28.9	10.0	19.3	0.3	37.8	2	4.4	22+	8	0	4.4	43	11	- 12	3	6	5	0	0	1.9	30	15.2	W	26	13	9	9	4.6	79
KALISPELL	904	912.3	1015.8	26.1	6.7	16.4	-0.8	33.3	25+	0.0	31	4	1	6.7	58	27	- 1	11	8	5	0	0	0.3	35	10.3	2	23+	15	7	9	4.5	
MILES CITY	801	922.5	1014.1	28.3	12.8	20.6	-2.0	38.3	16	1.7	22	9	0	6.7	46	16	- 16		7	4	0		0.6	1								
MISSOULA	972	905.5	1015.8	28.9	9.4	19.3	1.1	37.8	2	3.9	31+	9	0	3.9	42	26	7	17	6	3	0	0	1.3	33	17.4	NW	19	16	6	9	4.2	73
NEBRASKA																																
GRAND ISLAND	561	950.2	1015.5	28.3	14.4	21.5	-2.6	36.1	17	7.2	23+	8	0	15.0	71	43	- 17	22	8	7	0	0	1.2	18	10.3	16	12	10	13	8	4.8	
LINCOLN U	351			27.8	17.2	22.6	-2.8	36.7	17	9.4	23	3	0			97	11	44	7		0	0			15.6	NE	6	13	8	10	4.9	71
NORFOLK	471			27.2	14.4	20.9	-3.1	35.6	17	7.8	23	3	0			96	30	65	8		0	0						14	10	7	4.6	
NORTH PLATTE	846	918.7	1014.9	27.2	12.8	19.9	-3.7	33.3	17	6.1	22	2	0	14.4	75	70	15	20	12	10	0	0	1.3	14	11.2	NE	17	12	9	10	4.9	72
OMAHA	298	980.7	1015.6	27.8	15.6	21.7	-2.9	35.0	17	7.2	23	2	0	16.1	73	47	- 54	18	6	4	0	0	1.1	16	13.9	N	6	16	9	6	4.4	85
SCOTTSBLUFF	1206	880.8	1014.1	28.9	12.2	20.5	-2.1	37.2	16	5.6	22	8	0	12.2	65	47	22	16	9	11	0	0	1.9	7	11.2	30	21	19	3	9	3.9	
VALENTINE	789			27.2	12.8	19.9	-2.8	36.1	3	7.8	10	8	0			170	112	58	6		0	0			14.3	N	21+	14	9	8	4.3	76
NEVADA																																
ELKO	1539	845.6		32.2	8.9	20.6	1.2	36.1	17+	0.6	21	20	0			13	6	11	4	5	0	0	0.7	25	15.6	16	18	16	12	3	3.4	
ELY	1906	811.0	1012.0	30.0	8.3	19.1	0.1	34.4	8	0.6	27	11	0	1.7	36	15	3	9	8	12	0	0	1.8	21	17.0	S	29	12	16	3	3.9	79
LAS VEGAS	659	934.0	1008.2	40.0	23.9	32.0	1.3	43.9	8+	18.9	28	30	0	6.7	23	2	- 10	2	2	3	0	0	2.4	21	22.4	SE	1	25	6	0	1.5	95
RENO	1342	866.2	1013.2	32.2	7.2	19.7	1.1	37.2	8	- 0.6	31	21	1	3.9	40	1	- 4	1	1	1	0	0	1.0	26	12.5	W	29+	24	6	1	1.8	95
WINNEMUCCA	1310	867.6	1012.4	32.8	9.4	21.1	1.3	37.8	16	1.1	30	21	0	- 2.2	22	T	- 4	T	1	3	0	0	1.0	30	14.8	SW	29+	16	12	3	3.3	83
NEW HAMPSHIRE																																
CONCORD	104	1002.4	1014.9	28.3	13.3	20.9	1.2	34.4	7	6.1	29	5	0	15.6	74	103	28	35	9	3	0	0	0.7	26	12.1	W	12	11	11	9	5.4	69
MT WASHINGTON OBS	1909			11.7	5.6	8.6	-0.2	17.2	8	0.6	28	0	0			275	106	45	17	5	T	T			36.2Y	W	17	2	6	23	8.5	29
NEW JERSEY																																
ATLANTIC CITY	20	1013.9	1016.3	28.3	17.8	23.0	-0.2	35.0	23	12.8	4	3	0	17.8	75	230	105	163	9	6	0	0	1.5	21	13.4	22	11	5	12	14	6.3	63
ATLANTIC CITY U	3			26.7	20.0	23.2	0.1	30.0	17	16.7	13+	0	0			104	- 26	41	8						13.9	SSW	2					
NEWARK	2	1014.6	1015.5	29.4	20.0	24.7	0.6	35.0	11	16.1	4	8	0	16.7	65	78	- 34	34	8	5	0	0	1.6	22	15.6	24	11	8	13	10	5.6	
TRENTON U	17			29.4	19.4	24.4	1.1	33.9	31+	15.0	4	9	0			18	-103	11	8		0	0			11.6	W	11	8	15	8	5.5	65
NEW MEXICO																																
ALBUQUERQUE	1619	839.8	1012.3	31.7	16.7	24.3	-0.3	37.2	1	12.8	24	20	0	11.1	50	27	- 7	11	9	10	0	0	0.9	12	18.8	SE	28+	17	12	2	3.8	79
CLAYTON	1515			27.2	13.9	20.4	-2.5	32.8	1	9.4	23	2	0			82	28	32	9		0	0						10	14	7	5.0	
RATON	1944			27.2	11.1	19.2	-0.9	32.2	9	7.2	25	1	0			70	3	25	14		0	0						6	14	11	6.3	
ROSWELL	1102			32.2	17.2	24.7	-0.1	41.7	1	12.2	26+	22	0			73	32	43	12	9	0	0			18.8	N	7	8	15	8	5.2	
SILVER CITY	1638			30.0	16.1	22.9	-1.0	33.9	1	12.2	26	11	0			52	- 9	15	17		0	0						11	15	5	5.1	
NEW YORK																																
ALBANY	84	1004.4	1014.9	27.8	13.9	20.7	-0.4	31.7	30+	7.2	14	0	0	14.4	71	37	- 41	12	11	6	0	0	1.3	25	13.4	NW	12	10	8	13	6.2	59
BINGHAMTON	485	957.7	1015.6	26.7	14.4	20.8	1.6	32.2	7	9.4	14	1	0	13.3	66	36	- 55	15	9	5	0	0	1.8	25	11.6	W	12	3	15	13	6.4	71
BUFFALO	215	989.8	1015.2	25.0	15.6	20.3	0.1	31.7	9	8.3	13	0	0	14.4	70	91	14	33	13	5	0	0	2.6	24	13.9	SW	16	11	8	12	5.6	68
NEW YORK U	40	1011.9	1015.0	30.0	20.0	24.9	1.0	34.4	19	16.1	15+	8	0	15.6	62	48	- 65	16	8	4	0	0	1.1	24	10.3	NW	16	12	12	7	5.0	69
J.F. KENNEDY	4	1014.9	1015.6	28.3	18.9	23.6	0.0	32.8	1	14.4	14+	2	0	17.2	71	76	- 50	28	10	5	0	0	1.8	21	15.6	24	11	8	15	8	5.5	
NEW YORK LA GUARDIA	3	1013.5	1015.4	29.4	21.7	25.4	1.3	34.4	19	18.3	14+	6	0	16.1	61	44	- 85	17	7	4	0	0	1.3	23	17.9	W	11	7	15	9	5.6	
ROCHESTER	167	995.9	1015.8	26.7	14.4	20.5	-0.4	31.7	9+	9.4	13	0	0	15.0	72	54	- 15	12	12	6	0	0	2.1	25	11.2	W	9+	10	13	8	5.4	64
SYRACUSE	125	1000.0	1014.5	27.2	15.6	21.3	0.1	33.3	9+	8.9	14	3	0	14.4	68	67	- 15	29	10	6	0	0	1.4	26	12.5	SW	9	9	15	7	5.3	61
NORTH CAROLINA																																
ASHEVILLE	652	942.4	1017.5	26.7	15.6	21.1	-0.9	30.0	15	10.0	27	0	0	17.8	88	196	71	68	19	17	0	0	0.2	30	9.4	24	20+	2	12	17	7.3	50
CAPE HATTERAS R	2	1016.3	1016.6	28.9	21.7	25.3	0.0	31.7	19	15.6	2	0	0	22.2	83	92	- 71	36	13	9	0	0	1.3	21	10.3	SSW	5	7	7	17	6.8	61
CHARLOTTE	224	989.5	1016.4	30.6	20.0	25.1	-0.8	33.3	22	13.9	27	9	0	18.9	74	60	- 47	24	13	10	0	0	0.4	26	8.0	N	23+	5	11	15	6.5	72

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	985.8	1016.9	30.0	19.4	24.7	0.1	32.8	22+	13.3	27	7	0	20.6	80	76	- 41	20	10	8	0	0	0.2	25	10.7	SW	11	7	11	13	6.5	48
RALEIGH	132	1000.7	1016.4	30.6	20.0	25.4	0.4	33.9	23+	14.4	27+	9	0	20.0	77	147	15	37	14	8	0	0	0.7	19	8.9	21	11	4	15	12	6.8	45
WILMINGTON	9	1015.6	1016.8	31.1	22.2	26.7	0.4	34.4	19	16.7	2	16	0	21.7	79	144	- 30	47	13	10	0	0	0.8	22	12.1	N	19	7	10	14	6.3	66
NORTH DAKOTA																																
BISMARCK	502	956.3	1015.4	25.6	10.0	17.9	-2.8	33.9	30	4.4	24	2	0	11.1	68	57	13	24	10	5	0	0	0.8	6	14.8	NW	17	9	12	10	5.5	65
FARGO	273	982.7	1015.1	25.0	12.2	18.6	-2.2	32.8	31	6.7	24	2	0	12.8	72	97	22	38	10	6	0	0	0.1	10	12.1	NW	31+	12	5	14	5.6	57
WILLISTON	579			26.7	10.0	18.5	-1.6	36.1	3	3.3	9	7	0			46	8	38	6		0	0			17.0	NW	17	9	16	6	5.2	72
OHIO																																
AKRON	368	972.6	1016.3	27.2	15.0	20.9	-1.0	31.1	10	10.0	13+	0	0	15.6	73	75	- 4	53	6	2	0	0	1.3	26	13.0	30	10	9	12	10	5.7	
CINCINNATI OBS	232			29.4	17.2	23.4	-0.9	33.3	10+	12.2	24	8	0			72	- 11	23	12	6	0	0			7.2	S	10					61
CLEVELAND	237	987.1	1016.0	26.1	15.0	20.4	-0.6	30.6	8	7.8	4	0	0	15.0	72	88	5	42	8	3	0	0	1.3	24	11.6	SW	15+	10	11	10	5.6	56
COLUMBUS	247	986.8	1016.5	27.8	16.1	21.8	-1.1	31.1	29	10.6	24	0	0	16.1	72	124	52	51	11	8	0	0	0.6	20	12.5	NW	9	9	12	10	5.8	59
DAYTON	305	980.7	1016.2	28.3	16.7	22.4	-0.8	31.7	31+	10.6	24	0	0	16.7	73	89	15	27	11	8	0	0	0.8	23	11.6	W	7	10	9	12	5.5	73
MANSFIELD	395			26.1	13.9	20.1	-1.2	29.4	10+	9.4	24+	0	0			118	36	64	9	6	0	0						8	12	11	5.6	
TOLEDO	206	991.2	1016.1	27.2	14.4	20.6	-1.0	32.2	7	8.9	4	1	0	14.4	71	117	32	51	11	6	0	0	1.1	25	10.7	W	16+	11	12	8	5.1	66
YOUNGSTOWN	359	974.3	1016.4	26.7	13.9	20.1	-1.0	30.0	31+	8.9	13	0	0	15.0	75	128	39	40	11	6	0	0	1.1	25	10.3	27	15+	8	11	12	5.8	
OKLAHOMA																																
OKLAHOMA CITY	390	969.2	1014.6	32.2	20.0	26.0	-2.2	39.4	1	14.4	26+	19	0	18.3	68	172	108	85	12	10	0	0	1.9	14	18.8	SW	19	7	12	12	6.2	60
TULSA	198	991.2	1015.2	31.7	20.0	25.8	-1.7	40.0	1	13.9	25	14	0	18.9	70	117	39	33	8	4	0	0	1.7	16	11.6	NE	18	5	15	11	6.4	51
OREGON																																
ASTORIA	2	1018.0	1018.6	21.7	10.0	15.7	-0.4	31.7	20	6.1	12	0	0	11.7	81	26	- 12	20	6	0	0	0	2.0	29	9.8	31	2	11	10	10	5.5	
BURNS U	1265	874.0	1014.6	28.9	10.0	19.4	-0.1	35.6	2	2.2	30	8	0	2.2	36	16	9	11	3		0	0	1.7	32				16	9	6	3.7	
EUGENE	109	1003.4	1016.8	28.9	10.6	19.6	0.7	35.0	20+	5.6	30	6	0	10.0	60	1	- 10	1	1	0	0	0	1.6	35	10.3	36	20	14	8	9	4.6	
MEACHAM	1234	878.4	1015.0	23.3	10.6	16.9	0.4	32.8	24	3.3	30	1	0	2.8	44	7	- 6	6	3		0	0	1.3	29				17	5	9	4.3	
MEDFORD	396	968.2	1015.1	32.2	11.7	21.8	0.3	37.8	21+	7.8	31	20	0	7.8	47	5	0	5	2	1	0	0	1.7	31	11.2	30	25	21	4	6	2.7	
PENDLETON	452	962.1	1014.8	31.1	13.9	22.4	0.3	37.2	2	7.2	31	15	0	4.4	35	4	- 3	3	2	0	0	0	1.4	27	13.4	26	8	17	6	8	3.8	
PORTLAND	6	1015.9	1017.0	26.7	12.8	19.7	0.5	33.9	21	8.9	31	1	0	11.7	64	15	- 2	10	3	2	0	0	2.6	33	11.6	E	20	13	8	10	5.0	70
SALEM	60	1009.5	1017.0	28.9	10.0	19.4	0.4	35.0	2	6.7	18	7	0	10.6	62	10	- 1	5	2	0	0	0	1.7	34	10.3	3	20	17	8	6	3.7	
SEXTON SUMMIT R	1169	885.5	1015.0	24.4	11.1	17.6	0.3	31.7	21	3.9	29	0	0			12	5	11	3		0	0						21	3	7	3.0	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	25.6	28.6	0.0	31.7	31+	24.4	31+	0	0			14	- 50	5	12		0	0						11	16	4	4.6	
ENIWETOK	4	1008.8	1009.6	31.7	26.1	28.9	0.6	34.4	31	23.3	23+	17	0	24.4	78	296	123	117	19	0	0	0	2.1	9								
TAGUAC GUAM R	110			30.0	22.2	26.2	-0.1	32.8	21	20.6	17+	2	0			289	- 37	133	23		0	0			10.3	W	3+					46
JOHNSTON	2	1012.5	1013.0	29.4	25.6	27.7	0.2	30.6	28+	23.9	31+	0	0	22.2	75	54	- 3	20	12	2	0	0	6.3	10	16.5	SE	8	7	12	12	6.1	72
KOROR R	29	1006.1	1009.6	31.1	24.4	27.6	0.4	32.2	30+	23.3	31+	5	0	24.4	85	246	-154	54	23	1	0	0	1.0	23	8.5	NW	31+	0	0	31	9.9	55
KWAJALEIN	2	1009.1	1009.8	31.1	25.0	28.0	0.3	32.2	22+	23.3	6+	2	0	24.4	81	382	138	70	27	3	0	0	1.6	8	10.3	21	26	1	14	16	7.5	
MAJURO	3	1009.8	1010.0	30.6	25.6	28.1	1.3	31.7	30+	22.8	7	0	0	23.9	79	166	-131	74	17	1	0	0	2.1	8	10.7	E	14	5	10	16	7.1	70
MARCUS ISLAND	6	1009.5	1011.3	31.7	25.6	28.6	0.6	33.3	18	22.8	29+	18	0	24.4	78	42	-140	15	14	2	0	0	2.6	12	13.4	SW	24	3	6	22	8.0	62
PAGO PAGO	4	1012.9	1013.0	28.3	23.3	25.8		30.6	30+	20.0	1	0	0	22.2	81	194		112	13	2	0	0	5.4	12	14.8	SE	12	1	11	19	7.6	40
PONAPE R	37	1004.1	1009.5	31.7	22.8	27.3	0.9	32.8	27+	21.7	24	11	0	23.9	87	259	-156	54	20	0	0	0	1.1	12	8.5	E	16	1	6	24	8.4	55
TRUK MOEN ISLAND	2	1009.1	1009.4	30.6	23.9	27.4	0.5	32.2	29+	22.8	2	3	0	24.4	84	315	- 11	115	23	1	0	0	0.3	15	10.7	N	25+	0	11	20	8.2	82
WAKE	3	1010.8	1011.2	30.6	25.0	27.8	-0.2	31.7	27+	22.2	30	0	0	23.3	76	123	- 57	30	18	2	0	0	2.8	8	9.4	9	29+	0	6	25	8.6	
YAP R	19	1007.1	1009.0	30.6	23.9	27.3	-0.1	31.7	28+	22.8	7	0	0	24.4	86	229	-144	56	25	2	0	0	1.0	22	8.9	SW	2	0	1	30	9.8	39
PENNSYLVANIA																																
ALLENTOWN	118	1002.0	1015.8	30.0	16.7	23.3	1.1	33.9	11	10.0	4	12	0	16.1	69	68	- 45	41	9	4	0	0	1.1	23	11.2	30	17	9	12	10	5.5	
ERIE	223	989.5	1015.8	25.6	16.1	20.7	-0.3	31.1	9	10.0	13	0	0	15.6	76	89	14	42	12	7	0	0	1.8	25	11.2	30	16	13	9	9	4.9	
HARRISBURG	103	1003.1	1015.5	32.2	19.4	25.7	2.3	36.1	30+	13.9	4	20	0	16.7	62	39	- 54	22	8	3	0	0	1.0	25	9.8	W	9	9	12	10	5.6	73
PHILADELPHIA	2	1014.9	1015.8	30.0	17.2	23.8	0.7	33.3	29+	11.1	24	6	0	17.2	69	41	- 76	15	6	3	0	0	1.4	25	12.5	SW	2	8	10	13	5.7	70
PITTSBURGH	347	973.2	1016.5	27.2	16.1	21.7	0.2	31.7	6	11.1	25+	0	0	16.7	76	130	46	37	9	7	0	0	1.5	26	14.8	31	16	5	15	11	6.2	54
READING U	81			30.0	18.9	24.6	0.8	33.9	31	13.9	4	12	0			54	- 49	35	8		0	0			16.1	NW	27	10	14	7	5.0	69
SCRANTON	283	982.4	1016.1	28.9	16.1	22.4	1.3	32.2	11+	10.6	4	3	0	15.6	70	121	30	81	11	5	0	0	1.1	20	11.6	S	16	9	15	7	5.5	66
WILLIAMSPORT	160	997.0	1015.7	28.3	15.0	21.6	-0.4	31.7	11+	8.9	4	0	0	15.6	74	62	- 30	39	9	5	0	0	1.2	25	11.6	18	9	6	18	7	5.5	
RHODE ISLAND																																
BLOCK ISLAND	34			24.4	17.2	21.0	0.1	27.8	31	14.4	21+	0	0			36	- 62	19	8	2	0	0						10	10	11	5.9	
PROVIDENCE	16	1012.9	1015.2	27.2	16.1	21.5	0.1	33.3	19	11.1	14	1	0	15.0	69	86	- 15	52	8	6	0	0	1.8	23	10.3	21	2	12	7	12	5.6	58

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, Sleet		Resultant speed	Resultant direction	Fastest mile (1.6 kilometers)			Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
												Max 32.2 °C or above	Min. 0 C or lower						.25 mm or more	With thunderstorms	Total	Maximum depth on ground			Speed	Direction	Date					
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1014.9	1016.6	31.1	22.2	26.7	0.2	36.1	23	16.1	28+	14	0	21.7	77	88	- 80	32	10	10	0	0	0.7	20	13.9Y	S	4	10	11	10	5.5	67
CHARLESTON U	3			30.6	23.9	27.0	-0.2	33.9	21	18.3	27	8	0			126	- 28	34	11		0	0			14.8	SW	4					
COLUMBIA	66	1008.5	1016.3	32.2	20.6	26.2	-0.7	36.1	22	14.4	27	17	0	20.0	75	82	- 64	37	10	7	0	0	0.4	20	11.2	27	9	6	11	14	6.3	70
GNVLE SPARTANBURG	292	983.1	1017.0	28.9	19.4	24.3	-1.4	31.7	18+	14.4	27	0	0	18.9	75	127	13	28	15	11	0	0	0.4	23	13.4	NE	15	6	11	14	6.5	61
SOUTH DAKOTA																																
ABERDEEN	395	968.5	1014.8	26.1	12.2	19.2	-2.7	32.8	30+	6.7	9	3	0	12.8	68	70	15	41	11	4	0	0	0.7	7	13.0	33	17	11	9	11	5.1	
HURON	391	968.5	1014.5	26.1	12.8	19.4	-3.3	33.9	5	5.0	9	1	0	14.4	76	103	50	39	9	5	0	0	0.7	13	22.4	N	14	12	10	9	4.9	74
RAPID CITY	964	905.5	1014.9	26.1	11.7	18.8	-3.4	35.6	3	3.3	22	5	0	9.4	60	82	51	37	10	7	0	0	0.7	35	20.1	NW	17	10	13	8	5.1	64
SIOUX FALLS	432	964.4	1015.1	27.2	13.9	20.4	-1.7	33.9	5	6.1	24	6	0	13.9	69	54	- 37	26	8	7	0	0	0.8	22	19.2	35	14	14	7	10	4.8	
TENNESSEE																																
BRISTOL	459	964.1	1017.6	27.8	17.8	22.9	-0.8	30.6	14+	12.2	27	0	0	17.8	76	180	83	33	18	14	0	0	0.2	1	7.6	24	2	3	13	15	7.0	
CHATTANOOGA	203	992.2	1016.4	29.4	18.9	24.2	-2.4	32.8	16	12.8	27+	1	0	20.0	83	106	10	31	15	13	0	0	0.4	14	12.1	N	9	4	10	17	6.8	60
KNOXVILLE	299	982.4	1017.0	28.9	18.9	23.9	-1.3	31.7	18+	12.8	27	0	0	19.4	82	104	16	42	16	10	0	0	0.6	26	12.5	W	15	4	9	18	7.0	66
MEMPHIS	79	1006.4	1016.3	29.4	20.0	24.9	-2.0	34.4	1	14.4	26	5	0	20.0	77	109	33	30	8	8	0	0	0.4	26	13.4	NW	10	7	10	14	6.3	61
NASHVILLE	180	994.9	1016.2	30.0	19.4	24.7	-1.5	33.3	16	13.3	26+	5	0	20.0	78	134	62	39	11	11	0	0	0.6	23	16.1	NW	14	5	12	14	6.6	62
OAK RIDGE	276			28.9	18.9	23.9	-0.6	32.8	16	12.2	27	1	0			120	3	39	13		0	0			13.0Y		22+	5	9	17	7.0	
TEXAS																																
ABILENE	537	953.6	1013.6	32.8	21.1	26.9	-1.4	39.4	1	15.0	26+	20	0	18.3	64	129	92	46	9	8	0	0	2.5	16	17.9	SE	10	9	11	11	5.9	63
AMARILLO	1098	892.3	1013.0	28.9	17.2	23.1	-3.3	37.8	1	11.1	23	10	0	16.1	69	96	30	35	11	11	0	0	3.9	17	17.0	SW	1	10	12	9	5.4	59
AUSTIN	182	992.6	1014.0	33.3	22.8	27.9	-1.4	37.2	1	17.2	25	25	0	20.6	69	158	108	84	10	7	0	0	1.8	16	12.1	W	11	7	13	11	6.0	58
BROWNSVILLE	5	1012.5	1013.2	33.9	24.4	29.1	0.2	36.1	17	21.1	26	30	0	22.8	75	15	- 56	14	2	1	0	0	4.6	14	12.1	S	20	7	20	4	5.3	87
CORPUS CHRISTI	12	1012.2	1013.6	34.4	24.4	29.3	0.3	37.2	17	20.6	26+	26	0	23.9	78	105	35	75	4	2	0	0	4.4	15	14.8	S	20	3	15	13	6.5	79
DALLAS	147	997.3	1014.3	32.8	22.8	27.8	-1.7	38.3	1	16.1	25+	20	0	20.6	70	130	81	36	10	8	0	0	2.5	15	11.6	SW	29+	7	13	11	6.0	59
DEL RIO	313	977.0	1012.2	34.4	22.8	28.4	-1.4	39.4	1	17.8	25	26	0	19.4	64	53	15	20	8	7	0	0	3.3	12	10.3	5	11	7	12	12	6.3	
EL PASO	1194	882.2	1010.9	32.2	20.0	25.9	-0.9	38.3	1	14.4	26	21	0	15.6	57	47	17	20	7	9	0	0	0.8	10	17.0	N	5	10	10	11	5.5	70
FORT WORTH	164	994.2	1014.3	33.3	23.3	28.2	-1.5	37.8	9+	16.7	26	22	0	20.6	67	86	43	42	8	6	0	0	1.9	15	10.3	19	14+	9	9	13	5.9	
GALVESTON U	2			30.0	25.0	27.6	-0.9	33.3	17	19.4	25	1	0			141	30	94	10		0	0			11.6	SW	20+					55
HOUSTON U	12			31.7	23.9	27.9	-1.1	35.6	17	18.3	25	20	0			99	9	25	14		0	0										
HOUSTON	15	1012.5	1014.8	32.2	23.9	28.0	-0.4	35.0	17+	18.9	26	24	0	22.8	77	181	72	62	14	8	0	0	1.8	15	11.2	16	15+	4	12	15	7.1	55
LUBBOCK	992	904.5	1013.2	30.6	19.4	24.9	-1.1	41.1	1	13.3	24	15	0	16.7	64	225	182	96	13	11	0	0	2.0	15	13.4	2	6	5	18	8	6.1	
MIDLAND	869	916.0	1011.9	32.2	20.0	26.1	-1.8	39.4	1	13.3	26	21	0	16.7	63	86	48	49	10	8	0	0	2.5	13	16.5	31	28	8	13	10	5.7	
PORT ARTHUR	5	1014.6	1015.4	32.2	22.8	27.6	-0.3	35.0	17+	18.3	26+	20	0	23.3	82	438	299	215	16	11	0	0	1.2	16	15.2	E	11	5	12	14	6.5	58
SAN ANGELO	580	947.5	1012.6	33.3	21.1	27.2	-2.3	40.0	1	13.9	26	23	0	18.3	66	128	96	71	9	9	0	0	2.1	16	10.3	36	29+	6	17	8	6.0	
SAN ANTONIO	240	986.5	1014.0	33.3	21.7	27.7	-1.1	37.2	6+	16.1	25	25	0	21.1	75	109	49	35	11	5	0	0	2.5	14	13.4	SW	13	6	13	12	6.0	66
VICTORIA	32	1010.2	1014.3	33.3	23.9	28.7	0.1	36.7	17+	18.9	25	25	0	22.2	74	154	74	96	12	8	0	0	2.8	14	17.0Y	NE	6	2	14	15	7.0	
WACO	153	996.6	1014.4	33.9	23.9	29.0	-0.7	39.4	1	17.2	26	26	0	18.9	58	104	61	80	9	8	0	0	2.5	15	10.3	34	13+	9	10	12	5.5	
WICHITA FALLS	303	978.3	1014.0	33.9	20.6	27.4	-2.4	42.2	1	13.3	24	21	0	18.9	66	128	83	70	11	8	0	0	2.2	15	14.3	26	21	6	12	13	6.4	
UTAH																																
MILFORD	1533			33.9	12.2	23.0	0.7	38.3	8	5.6	28	24	0			10	- 8	5	5		0	0						18	10	3	3.5	
SALT LAKE CITY	1286	871.3	1012.1	33.3	13.9	23.4	-0.2	37.8	17	6.7	21	24	0	4.4	33	6	- 17	4	4	6	0	0	0.6	12	18.8	NW	11	18	10	3	3.0	91
WENDOVER	1291			31.7	18.3	24.9	-0.2	35.6	25+	13.3	28	17	0			1	- 9	T	2		0	0										
VERMONT																																
BURLINGTON	101	1001.7	1013.8	25.6	13.9	19.7	0.4	32.8	9	8.3	29	2	0	14.4	74	113	28	32	13	7	0	0	1.4	20	12.5	NW	2	5	10	16	6.9	69
VIRGINIA																																
LYNCHBURG	279			28.9	17.8	23.1	-0.7	32.2	31+	12.8	27	3	0			66	- 46	27	8	3	0	0			10.7	E	31	7	10	14	6.3	62
NORFOLK	7	1015.2	1016.4	27.8	20.0	23.8	-1.4	33.9	19	15.6	26+	2	0	20.6	84	133	- 19	58	13	8	0	0	0.8	18	13.0	NE	3	4	10	17	7.1	53
RICHMOND	49	1010.5	1016.4	28.9	18.3	23.7	-0.8	32.8	23+	13.9	6	4	0	18.9	80	33	-107	26	6	3	0	0	0.7	18	11.6	SW	11	4	10	17	6.8	57
ROANOKE	350	975.6	1016.9	28.3	17.2	22.8	-1.3	31.7	22	13.3	27+	0	0	17.2	74	120	3	31	16	8	0	0	0.5	28	11.2	24	22	8	9	14	6.4	
WASHINGTON																																
OLYMPIA	59	1010.8	1017.9	25.0	8.3	16.6	-0.9	92.8	21	3.9	17	1	0	9.4	66	17	- 5	9	5	1	0	0	0.8	22	9.4	20	26+	10	12	9	5.3	
QUILLAYUTE	55	1011.2	1018.6	20.0	9.4	14.8	-0.6	29.4	19	5.0	17	0	0	11.1	80	45	- 7	31	8	0	0	0	0.9	29	8.5	NE	19	7	7	17	6.3	55
SEATTLE TACOMA	122	1001.7	1017.8	23.9	12.2	18.1	0.2	31.1	21	7.8	29	0	0	11.1	69	11	- 13	9	4	0	0	0	0.5	31	9.4	22	27	9	10	12	5.3	72
SPOKANE	718	931.9	1014.3	28.3	11.7	20.1	0.1	37.8	24	4.4	31	5	0	3.9	39	4	- 7	2	5	1	0	0	0.6	21	12.5	SW	13+	15	4	12	4.5	76
STAMPEDE PASS R	1206			17.8	8.3	13.1	0.0	27.8	24	3.9	28	0	0			48	- 4	31	9		0	0						12	4	15	5.6	
WALLA WALLA U	289			30.0	16.1	23.0	-0.2	36.7	2	10.0	31	9	0			7	0	4	2	2	0	0			15.6	NW	10	18	4	9	3.8	83
YAKIMA	321	976.3	1014.1	30.6	12.8	21.8	1.4	36.1	23+	7.2	31+	10	0	7.2	41	T	- 5	T	0	0	0	0	1.8	30	12.5	29	13	17	7	7	3.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	°C.	C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	4	1013.9	1016.2	31.1	25.0	28.1	0.9	32.8	30	23.3	15+	4	0	23.3	77	87	- 94	19	16	3	0	0	3.6	9	14.3	N	26	3	18	10	6.3	76
SWAN ISLAND	9			30.6	25.6	28.1	-0.3	31.7	30+	21.7	20	0	0			163	70	89	16		0	0						6	10	15	6.6	
WEST VIRGINIA																																
BECKLEY	763	930.6	1017.4	25.0	14.4	19.6		28.9	10	9.4	26	0	0	15.6	80	101		26	13	8	0	0	1.0	22	10.7	13	4	3	10	18	7.4	
CHARLESTON	286	983.1	1016.5	28.9	17.2	23.1	-0.2	33.9	10	12.2	26	3	0	17.2	76	84	- 16	23	10	3	0	0	0.8	21	13.0	23	22	0	14	17	7.4	
ELKINS	600	947.9	1018.2	26.1	12.2	19.2	-1.2	29.4	30+	7.2	26	0	0	15.0	84	123	15	24	14	8	0	0	0.7	28	13.0	29	11	0	12	19	7.6	
HUNTINGTON	252	986.8	1016.5	27.2	17.2	22.2	-1.1	30.6	19	11.7	26	0	0	18.3	82	105	34	26	10	10	0	0	0.9	21	10.3	24	19	3	16	12	6.9	
PARKERSBURG U	187			28.9	16.7	22.8	-0.7	32.8	19	12.2	26+	3	0			37	- 59	13	8		0	0			11.2	S	7					53
WISCONSIN																																
GREEN BAY	208	989.8	1015.0	24.4	12.2	18.2	-2.3	31.1	29	7.2	13+	0	0	12.8	73	67	- 3	24	8	4	0	0	1.1	27	10.7	NE	15+	11	7	13	5.6	56
LA CROSSE	198	990.9	1014.9	27.8	14.4	21.0	-1.0	35.0	29	7.8	24	7	0	15.0	75	47	- 45	15	9	3	0	0	0.5	20	9.4	32	6	14	9	8	5.0	
MADISON	262	984.4	1015.5	26.1	11.7	19.0	-1.8	31.7	17	6.1	3	0	0	13.9	74	97	12	48	6	3	0	0	1.2	27	17.9	S	15	13	10	8	5.1	78
MILWAUKEE	205	991.5	1016.5	24.4	13.9	19.3	-0.6	30.0	30	9.4	13+	0	0	15.0	76	83	5	48	5	4	0	0	1.1	25	12.5	N	2	16	6	9	4.4	75
WYOMING																																
CÅSPER	1627	839.8	1014.0	28.3	10.0	19.2	-1.9	33.9	16+	2.2	22	8	0	3.3	43	26	8	14	9	5	0	0	0.7	29	15.6	3	11	13	13	5	4.3	
CHEYENNE	1867	815.8	1015.1	27.2	11.1	19.0	-0.8	33.3	16	3.9	22	2	0	7.2	55	71	34	19	10	10	0	0	0.8	27	17.0	W	20+	16	6	9	4.5	72
LANDER	1696	831.4	1014.0	28.3	11.7	19.7	-0.7	34.4	16	3.9	22+	7	0	5.0	44	45	33	22	8	8	0	0	1.1	26	23.2	SW	5	9	14	8	4.9	71
SHERIDAN	1208	880.1	1015.0	27.2	9.4	18.5	-2.3	36.1	16	1.1	23	8	0	3.9	43	22	- 1	9	6	2	0	0	1.1	31	18.3	SW	5	10	11	10	5.2	72

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

AUGUST 1966

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	0	0	0
HUNTSVILLE	0	0	0
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	324	538	
ANNETTE	227	388	450
BARROW	928	1778	1643
BARTER ISLAND	874	1604	1510
BETHEL	408	773	713
COLD BAY	486	986	899
FAIRBANKS	247	339	503
JUNEAU	382	647	639
KING SALMON	450	831	635
KOTZEBUE	386	758	827
MC GRATH	407	697	546
NOME	468	948	977
ST. PAUL ISLAND	559	1158	1144
SHEMYA	518	1141	1052
YAKUTAT	462	858	685
ARIZONA			
FLAGSTAFF	32	46	114
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	0	0	0
YUMA	0	0	0
ARKANSAS			
FORT SMITH	0	0	0
LITTLE ROCK	0	0	0
TEXARKANA	0	0	0
CALIFORNIA			
BAKERSFIELD	0	0	0
BISHOP	0	0	0
BLUE CANYON	51	133	84
EUREKA U	275	529	527
FRESNO	0	0	0
LONG BEACH	0	0	0
LOS ANGELES	0	0	35
LOS ANGELES U	0	0	0
MT SHASTA R	44	113	59
OAKLAND	25	89	103
RED BLUFF	0	0	0
SACRAMENTO	0	1	0
SANDBERG U	17	22	0
SAN DIEGO	0	0	6
SAN FRANCISCO	89	224	159
SAN FRANCISCO U	188	393	366
SANTA CATALINA	8	15	16
SANTA MARIA	44	157	192
STOCKTON	0	0	0
COLORADO			
ALAMOSA	86	94	164
COLORADO SPRINGS	33	33	34
DENVER	9	9	15
GRAND JUNCTION	2	2	0
PUEBLO	4	4	0
CONNECTICUT			
BRIDGEPORT	0	0	0
HARTFORD	0	0	[illegible]
NEW HAVEN	0	0	12
DELAWARE			
WILMINGTON	0	0	0
DIST.OF COLUMBIA			
WASH NATL AP	0	0	0
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	[illegible]
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	0	0	0
ATLANTA	0	0	0
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	0	0	0
SAVANNAH	0	0	0
IDAHO			
BOISE	18	25	0
IDAHO FALLS 42NW R	50	62	56
IDAHO FALLS 46W R	51	62	50
LEWISTON	12	30	0
POCATELLO	26	28	[illegible]
ILLINOIS			
CAIRO U	0	[illegible]	0
CHICAGO O HARE	12	13	12
CHICAGO MIDWAY	4	4	0
MOLINE	6	6	9
PEORIA	10	10	6
ROCKFORD	7	7	15
SPRINGFIELD	5	5	0
INDIANA			
EVANSVILLE	0	0	0
FORT WAYNE	20	21	9
INDIANAPOLIS	0	0	0
SOUTH BEND	31	35	6
IOWA			
BURLINGTON	6	6	0
DES MOINES	13	13	9
DUBUQUE	22	24	43
SIOUX CITY	14	14	9
WATERLOO	33	33	31
KANSAS			
CONCORDIA	6	6	0
DODGE CITY	5	5	0
GOODLAND	11	11	6
TOPEKA	2	2	0
WICHITA	0	0	0
KENTUCKY			
COVINGTON	0	0	0
LEXINGTON	3	3	0
LOUISVILLE	0	0	0
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	106	170	193
PORTLAND	29	48	65
MARYLAND			
BALTIMORE	0	0	0
MASSACHUSETTS			
BLUE HILL OBS R	7	8	22
BOSTON	1	1	9
NANTUCKET	7	15	34
PITTSFIELD	33	59	84
WORCESTER	19	23	40
MICHIGAN			
ALPENA	60	87	173
DETROIT	0	0	0
DETROIT M WAYNE CO	13	13	0
DETROIT WILLOW RUN	29	31	0
FLINT	41	54	33
GRAND RAPIDS	12	12	35
HOUGHTON LAKE	65	84	
LANSING	25	29	28
MARQUETTE U	84	108	140
MUSKEGON	14	15	40
SAULT STE MARIE	97	132	201
MINNESOTA			
DULUTH	145	181	180
INTERNATIONAL FALLS	112	121	183
MINNEAPOLIS	40	40	53
ROCHESTER	56	61	59
ST CLOUD	68	69	75
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	0	0	0
VICKSBURG U	0	0	0
MISSOURI			
COLUMBIA	1	1	0
KANSAS CITY	2	2	0
ST JOSEPH	12	12	6
ST LOUIS	0	0	0
SPRINGFIELD	2	2	0
MONTANA			
BILLINGS	54	54	21
GLASGOW	78	83	78
GREAT FALLS	85	92	81
HAVRE	72	75	81
HELENA	51	59	90
KALISPELL	128	196	149
MILES CITY	64	64	12
MISSOULA	46	69	108
NEBRASKA			
GRAND ISLAND	20	20	6
LINCOLN U	8	8	6
NORFOLK	22	22	9
NORTH PLATTE	34	34	6
OMAHA	13	13	6
SCOTTSBLUFF	31	31	0
VALENTINE	51	51	21
NEVADA			
ELKO	27	35	43
ELY	35	44	71
LAS VEGAS	0	0	0
RENO	45	90	130
WINNEMUCCA	31	43	34
NEW HAMPSHIRE			
CONCORD	5	11	56
MT WASHINGTON OBS	539	1054	1029
NEW JERSEY			
ATLANTIC CITY	0	0	0
ATLANTIC CITY U	0	0	0
NEWARK	0	0	0
TRENTON U	0	0	0
NEW MEXICO			
ALBUQUERQUE	0	0	0
CLAYTON	22	22	6
RATON	25	25	37
ROSWELL	5	5	0
SILVER CITY	0	0	0
NEW YORK			
ALBANY	5	8	19
BINGHAMTON	16	24	87
BUFFALO	19	26	56
NEW YORK U	0	0	0
J.F. KENNEDY	0	0	0
NEW YORK LA GUARDIA	0	0	0
ROCHESTER	16	16	40
SYRACUSE	7	13	34
NORTH CAROLINA			
ASHEVILLE	1	2	0
CAPE HATTERAS R	0	0	0
CHARLOTTE	0	0	0
GREENSBORO	0	0	0
RALEIGH	0	0	0
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	93	97	62
FARGO	84	84	65
WILLISTON	94	94	74
OHIO			
AKRON	10	13	9
CINCINNATI OBS	1	1	0
CLEVELAND	15	21	34
COLUMBUS	5	6	6
DAYTON	3	3	6
MANSFIELD	20	27	31
TOLEDO	15	16	16
YOUNGSTOWN	19	24	25
OKLAHOMA			
OKLAHOMA CITY	0	0	0
TULSA	0	0	0
OREGON			
ASTORIA	142	302	276
BURNS U	62	107	49
EUGENE	31	56	68
MEACHAM	138	312	208
MEDFORD	11	37	0
PENDLETON	10	29	0
PORTLAND	16	43	53
SALEM	24	68	68
SEXTON SUMMIT R	116	296	162
PENNSYLVANIA			
ALLENTOWN	0	0	0
ERIE	10	15	25
HARRISBURG	0	0	0
PHILADELPHIA	0	0	0
PITTSBURGH	6	8	9
PITTSBURGH U	2	2	6
READING U	0	0	0
SCRANTON	0	1	19
WILLIAMSPORT	4	9	9
RHODE ISLAND			
BLOCK ISLAND	0	0	16
PROVIDENCE	1	2	16
SOUTH CAROLINA			
CHARLESTON	0	0	0
CHARLESTON U	0	0	0
COLUMBIA	0	0	0
GNVLE-SPARTANBURG	0	0	0
SOUTH DAKOTA			
ABERDEEN	60	60	50
HURON	62	62	21
RAPID CITY	83	83	34
SIOUX FALLS	41	41	44
TENNESSEE			
BRISTOL	0	0	0
CHATTANOOGA	0	0	0
KNOXVILLE	0	0	0
MEMPHIS	0	0	0
NASHVILLE	0	0	0
OAK RIDGE	0	0	0
TEXAS			
ABILENE	0	0	0
AMARILLO	23	23	0
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	0
DALLAS	0	0	0
DEL RIO	0	0	0
EL PASO	0	0	0
FORT WORTH	0	0	0
GALVESTON U	0	0	0
HOUSTON U	0	0	0
HOUSTON	0	0	0
LUBBOCK	8	8	0
MIDLAND	3	3	0
PORT ARTHUR	0	0	0
SAN ANGELO	0	0	0
SAN ANTONIO	0	0	0
VICTORIA	0	0	0
WACO	0	0	0
WICHITA FALLS	2	2	0
UTAH			
MILFORD	7	7	0
SALT LAKE CITY	4	4	0
WENDOVER	0	0	0
VERMONT			
BURLINGTON	26	43	93
VIRGINIA			
LYNCHBURG	0	0	0
NORFOLK	0	0	0
RICHMOND	0	0	0
ROANOKE	0	0	0
WASHINGTON			
OLYMPIA	99	228	139
QUILLAYUTE	191	411	334
SEATTLE TACOMA	54	149	118
SPOKANE	42	72	34
STAMPEDE PASS R	294	640	564
WALLA WALLA U	4	22	0
YAKIMA	11	41	12
WEST VIRGINIA			
BECKLEY	27	32	
CHARLESTON	1	1	0
ELKINS	29	44	34
HUNTINGTON	3	3	0
PARKERSBURG U	0	0	0
WISCONSIN			
GREEN BAY	74	84	78
LA CROSSE	18	19	31
MADISON	40	51	65
MILWAUKEE	41	45	90
WYOMING			
CASPER	47	47	22
CHEYENNE	51	51	50
LANDER	47	49	25
SHERIDAN	86	86	56

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

AUGUST 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama	1	1	0	0	3																								
Alaska *																													
Arizona	2	2	0	10	4	0	0	0	4	2	4	4	4	3	2	0	0									0	0	5	0
Arkansas *																													
California *																													
Colorado	4	4	0	0	0	0	0	5	5	0	0	4	4	0	0	4	0									0	0	5	4
Connecticut	1	1	0	0	4									0	0	4	0									0	0	4	0
Delaware *																													
Florida	3			3	4						4	5		1	3	5													
Georgia	2	2	0	2	4					0	0	4	0	0	0	4	0												
Hawaii *																													
Idaho							2		4			4	4																
Illinois	1	1	0	0	2	0	0	0	4																				
Indiana										0	0	5	0																
Iowa	1	1	0	0	0					0	0	5	3	1	0	4	0									0	4	5	0
Kansas	2	2	0	1	4	0	0	5	5	0	0	5	0	1	3	5	3									0	0	4	0
Kentucky	1	1	0	0	4			?	?																			?	?
Louisiana	1	1	0	0	?					0	0	?	0	0	1	?	0									0	0	?	0
Maine						0	0	0	2	0	0	4	0	1	0	4	0												
Maryland										0	2	4	0	1	0	4	0												
Massachusetts	4	2	0	1	5					0	1	4	0	0	0	4	0									0	0	R4	0
Michigan	2	2	0	0	4	0	0	2	?	1	4	4	0	0	0	5	0									0	0	1	0
Minnesota	3	3	0	0	3	0	0	4	5	0	2	5	5	0	0	5	2									0	0	4	5
Mississippi										0	0	4	0	0	0	5	0									0	0	4	0
Missouri						0	0	4	4	0	0	4	0																
Montana						0	0	0	4																				
Nebraska						0	0	0	5																				
Nevada *																													
New Hampshire	1	1	0	0	5	0	0	0	2	0	0	4	0	0	0	4	0									0	0	R3	3
New Jersey														1	3														
New Mexico	5	4	0	0	3	0	0	3	5	0	0	4	0	3	1	0	0									1	0	5	6
New York											3	5			2	4													
North Carolina	W2	2	0	0	5	0	0	0	5	0	0	5	0	1	3	5	0									0	0	4	0
North Dakota	5	1	0	1	6	0	0	4	5																				
Ohio						0	0	4	5	0	0	5		0	10	5										5	0	4	
Oklahoma						0	0	5	5	0	0	5	0	3	0	3	0									0	0	4	5
Oregon	1	1	0	0	4																					0	0	R4	3
Pacific Area *																													
Pennsylvania	1	1	0	1	4					0	0	5	0	0	3	5	0									0	0	5	0
Puerto Rico *																													
Rhode Island														0	1	5	0									0	0	4	0
South Carolina	1	1	0	0	4	0	0	2	0	0	0	2	0	0	0	4	0												
South Dakota	1	1	0	0	3	0	0	4	5	0	0	5	4																
Tennessee						0	0	4	4	0	0	5	4	0	0	5	3									0	0	L°5	C
Texas	8	6	0	0	4	0	0	3	3	0	0	4	0	0	9	5	0									0	0	4	4
Utah										0	0	4	2	0	1	0	0												
Vermont	1	1	0	0	4					0	0	4	0	0	0	4	0									0	0	R4	0
U. S. Virgin Is.*																													
Virginia *																													
Washington *																													
West Virginia	2	2	0	0	3									0	1	4	0												
Wisconsin	2	2	0	2	5	0	0	4	5	0	0	6	5	1	0	6	0												
Wyoming	1	1	0	0	2	0	0	°5	C	0	0	3	0																

°	Includes crop damage
C	Crop damage
R	Rain
L	Local flooding
W	Including a waterspout

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

AUGUST 1966

Elmer R. Nelson, Office of Hydrology

Record to near record flooding occurred on streams in east-central Nebraska during August. Preliminary estimates of damage were placed at over $2.2 million. There was no loss of life. Major flooding occurred in Southeastern New Mexico in Pecos Basin. Hundreds of persons were evacuated. Three counties were declared disaster areas. At least two lives were lost due to drowning. Considerable damage resulted to crops from the flooding in the White Basin. High intensity rains caused severe flash flooding in the Frio River Basin in Texas. Five thousand persons, mostly campers were evacuated. Flooding reported elsewhere in the 48-Contiguous States was mostly light.

ATLANTIC SLOPE DRAINAGE

Very light overflow occurred along the Lumber River at Lumberton, N. C., during the latter part of August. The stream began rising slowly on the 22d, reaching flood stage on the 27th and crested 0.4 foot above bankfull stage on the 28-29th. Minor flooding occurred along the North Fork Edisto at Orangeburg, S. C., on the 4-6th. Along the main stem at Givhans, S. C., there was minor overflow from the 9th to the 11th. No damage resulted from the minor overflows. The heavy intense rain (10.35 inches) at Branchville, S. C., on the 4-5th caused local flash flooding of ditches, small tributaries, and low poorly drained areas. High water and strong currents prevented the use of the stream most of the month.

The Haw River at Haw River, N. C., reached a new low stage of 1.5 feet on the last day of the month. The previous low stage was 1.6 feet in 1963. The Roanoke River at Randolph, Va., reached, but did not exceed, the record low water stage of 3.7 feet set in 1944, on August 30.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Heavy rains (5 inches) during the early morning hours of the 21st caused a 2-foot overflow on the Black Hawk Creek at Hudson, Iowa. Excellent reporting allowed ample time for forecasting flood conditions. No damage resulted from the high water.

Missouri Basin.--East Central Nebraska Floods: Thunderstorms developed in east-central Nebraska during mid-morning of the 12th. Heavy rains followed in the afternoon between 2 and 5 over the middle and lower reaches of the Cedar River and in the lower reaches of the Loup River basin. Another period of heavy rains occurred generally from 6 p.m. to 11 p.m. over the lower reaches of the basin. The heaviest rains, with amounts as high as 16 inches, occurred in Boone and Greely Counties.

Record flooding occurred on the Cedar River at Fullerton, Nebr., on the 13th with a crest of 14.9 feet. The previous highest stage at Fullerton was 9.6 feet on July 19, 1950. Upstream at Spaulding, Nebr., the Cedar reached a near record stage of 6.9 feet. It approached within 0.6 foot of the 7.5-foot record stage set on June 23, 1947. Several communities reported severe damage. Water stood 17 feet deep in low places in Fullerton, Nebr. Many people were stranded in tree tops. The Union Pacific Railroad depot was completely inundated and wrecked by the high water. Livestock losses were enormous. Feedlots near the Cedar River were flooded and farmers reported their stock had perished.

The main stem of the Loup River, and most of its tributaries rose rapidly out of their banks. Record flooding occurred on the Loup River at Genoa, Nebr., on the 13th and at Columbus, Nebr., on the 14th. The crest of 13.5 feet at Genoa, Nebr., exceeded the previous maximum stage of 10.1 feet of June 23, 1947 by 3.4 feet. At Columbus, the crest of 13.0 feet exceeded the previous maximum stage of 12 feet by 1 foot. The crest reached Columbus about 2 a.m. on Sunday, inundating more than one-third of the city.

The Platte River at North Bend, Nebr., went out of its banks at North Bend, Nebr., early on the morning of the 14th. It crested in the early afternoon at a stage of 6.9 feet, 0.9 foot above flood stage. Farther downstream at South Bend, Nebr., the Platte reached a crest of 10.0 feet on the 15th.

The heaviest damage occurred along the Loup River at Columbus, Nebr. More than 600 homes were affected. The total damages in this area was estimated at $1.5 million. Heavy damages were also reported along the Cedar River at Fullerton, Spaulding and Cedar Rapids, Nebraska. The total damages in this basin exceeded $0.5 million. The total urban damages in the Central Nebraska flood of August 12-14 was estimated at over $2.2 million.

Other Floods.--Minor overflows were recorded on the North Fork of the Solomon River at Lenora, Kans., on the 13th and on Chapman Creek near Chapman, Kans., in the lower Smoky Hill River basin on the 21st. This flooding was due to locally heavy rainfall in the immediate drainage areas.

White Basin.--There were two periods of flooding on the Cache River in eastern Arkansas during August. The first was light and continued from July. It crested 0.5 foot above flood stage on the 2d. The second overflow was more serious and lasted from the 13th to the 29th, cresting 2 feet above flood stage on the 19th-21st. This caused considerable damage to crops planted along the flood plain. Nearly 6,000 acres were inundated in Woodruff and Monroe Counties with damages estimated near $0.5 million.

Arkansas Basin.--Over 8 inches of rain was reported in the vicinity of Buffalo, Okla., during the night of the 9th causing flooding in local creeks and partial destruction of several bridges. Heavy rainfall on the 11th in Haskell County, Okla., caused brief flooding on San Bois and Otter Creeks. Several bridges were damaged and two destroyed. Eight to 10 inches of rainfall on the 31st in about 2 hours produced moderate flooding on Deep Creek in Blaine and Major Counties.

Three inches of rain on the 18th in less than 1 hour, in the North Canadian Basin above Woodward, Okla., caused brief flash flooding on the outskirts of Woodward. Several homes were flooded. Some parked cars were also damaged. Telephone service was also interrupted. Some local flooding occurred in the headwaters of Wichita Basin from heavy showers on the 24th. Brief flooding occurred on Deep Red Creek and Dead Man's Creek, Horse Creek and Jack Creek from heavy showers (2.5 to 3.5 inches) on the 28th. Local brief flooding occurred on Cow Creek in the vicinity of Addington, Okla., on the 29th from heavy rains.

Heavy rain on the 12th and 13th caused local flooding in low places in Little Rock and considerable flooding in North Little Rock where evacuation by boat was necessary.

Red Basin.--Heavy rain (8 to 10 inches) on the 21st caused severe flooding along the Caddo River from Amity-Bismarck, Ark., area to DeGray Dam. A major loss was averted when the runoff water from the Caddo River stopped rising just 0.7 foot from the top of the newly constructed DeGray Dam. The pool behind the earthen dam rose 70 feet. Light to moderate flooding occurred along the lower reaches of the Ouachita River. Minor flooding occurred along the Saline River at Benton, Ark., on the 22d and 23d. Approximately 3,000 acres were inundated along the Caddo River in Hot Spring County and 10,000 acres along the Ouachita River in Dallas, Clark, and Ouachita Counties. The total damages were estimated at over $50,000.

Lower Mississippi Basin.--The Mississippi River at Memphis, Tenn., reached a record low stage of -0.3 foot on August 1. Above normal rainfall during August produced minor fluctuations in stage between zero and 3 feet.

WEST GULF OF MEXICO DRAINAGE

Minor flooding occurred along the Salt Fork of the Brazos River near Aspermont, Tex., on the 30th. This was due to heavy rain on the 29th. Minor flooding occurred along the Navasota River near Easterly, Tex., on the 16th and near Bryan, Tex., on the 20th-21st.

Rain damage was extensive in the Beaumont-Port Arthur, Tex., area on the 11th. The Jefferson County Civil Defense Council requested the Governor to declare Jefferson County a disaster area with storm damage estimated near $1.5 million. The Jefferson County Airport recorded a maximum of 6.39 inches in 3 hours; 4.36 inches in 1 hour; 3.05 inches in 30 minutes; 1.75 inches in 15 minutes; and 0.66 inch in 5 minutes.

Very high intensity rains, up to 16 inches, occurred during the early morning of the 13th on the West Nueces, the extreme upper Nueces, the Dry Frio, and the extreme upper Frio in Texas. Flash flooding forced evacuation of about 5,000 persons, mostly campers, along the Frio and the Dry Frio Rivers. At Cocan, Tex., the Frio River reached a stage of 23.7 feet, the highest stage since 1936. This was well below the record height of 34 feet reached in 1932. The Dry Frio at Regan Wells, Tex., reached a stage of 28.3 feet, the highest stage since the record height of 33 feet in 1880. Flash flooding also occurred on the West Nueces and the extreme upper Nueces. Considerable flooding occurred on the Frio River between the 15th and 22d. The flood waters added about 1 foot to the level of Lake Corpus Christi, raising it to a stage of 86.5 feet.

Most of the flood damage occurred along the Frio and Dry Frio Rivers in Uvalde and extreme southern Real Counties. Damage occurred also on the West Neuces in Edwards and Kinney Counties and along the upper Nueces and tributary creeks in Edwards, Real, Uvalde, and Zavala Counties. Resort areas were inundated by flash flooding at Garner Park and near Cocan, Tex., with facilities damaged and camper's equipment lost or damaged, including some cars flooded. Numerous ranch houses and other buildings were flooded. Fences, pens, and earthen dams were washed out. Some livestock were drowned or strayed away. Considerable wild life was lost, mostly deer. The total damages were estimated near $700,000.

The Highway Department staff at Leakey, Tex., on learning of the heavy rains in the headwater area of the Frio and Dry Frio Rivers from the Weather Bureau went through the camping areas warning campers of the impending flash flood. As a result, nearly all the campers were evacuated before the flooding began. Only a few campers were trapped by the flood waters. There was no loss of life.

Southeastern New Mexico Floods.--Heavy rains (up to 10 inches) on the 21st to the 23d caused major flooding in the Pecos River Basin in southeastern New Mexico on the 23d and 24th. A rather long period of almost daily showers preceded this storm setting the stage for heavy runoff. These showers were the heaviest in the upper reaches of the arroyo and stream system on the east slope of the Sacramentos. On the 23d, the heavy rains shifted slowly eastward from the high elevations, adding more water to the flood waters downstream. The streamflow at Carlsbad, N. Mex., reached 80,000 to 100,000 c.f.s. on the 23d.

This was a major flood in the Pecos Basin and approached the severity of the flood of October 2, 1904. During this historic flood, the Avalon Dam, 5 miles upstream from Carlsbad failed.

Property damage was heavy, especially in rural areas along Dark Canyon. At Artesia, N. Mex., many families were evacuated from their homes. Two bridges were washed out on U. S. Highway 285 between Artesia and Carlsbad. Another bridge on U. S. Highway 180 between Carlsbad and El Paso, Tex., was washed away. Two people were rescued from a car which went off the highway. Hundreds of persons were evacuated from Carlsbad, N. Mex., by Civil Defense personnel. Five to six feet of water was reported in some sections of the town. Many families living below Avalon Dam were evacuated as a precaution. Motorized traffic came to a virtual standstill in all directions around Carlsbad, during the height of the flooding.

An employee of Radio Station KSVP was drowned as the vehicle in which he and a state police officer were riding, was swept off the road as they attempted to reach stranded residents in Lakewood, N. Mex., 20 miles north of Carlsbad. The State Policeman managed to reach safety. Carlsbad Caverns National Park was isolated during the flooding. It was reopened to tourists on the 24th. Chaves, Lea, and Eddy Counties were declared disaster areas by the Governor.

There was also flooding in the extreme upper portion of the Colorado Basin in New Mexico and nearby west Texas. At Tatum, N. Mex., several businesses were flooded, even though protected by sand bags. At Lovington, N. Mex., merchants placed sand bags at their stores to prevent flooding. Basements of some homes and the Lovington hospital were flooded. Damage was less extensive than in the Pecos Basin.

Preliminary estimates of damage range from $100,000 to $500,000 in the Carlsbad area and up to $1 million in the flood. At least two lives were lost in the flood.

Other Floods.--The Rio Grande at Presidio, Tex., went out of its banks on the 24th and was nearly 6 feet above flood stage by the end of the month. The flooding continued into September and was due to heavy rain over the Rio Conchos Basin in Mexico. Heavy damages resulted to crops and some damages to levees, dams, and highways. The total damages were estimated at over $500,000.

Colorado Basin.--Flash floods were reported in the Colorado Basin in Arizona during August as follows:

1. Flash flooding occurred on the Agua Fria in West Phoenix and Glendale on the 9th, 12th, and 18th. There was also some stream flooding in Paradise Valley on the 18th.
2. Flash flooding occurred in the lower Gila in Dome Valley on the west side of Kofa Mountains draining into Colorado on the 19th.
3. Flash flooding occurred in the vicinity of Globe and on Fish Creek, a tributary of the Salt River.

FLOOD STAGE DATA

(All dates in August unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
ATLANTIC SLOPE DRAINAGE	Ft.			Ft.	
Lumber: Lumberton, N. C.	8	27	31	#8.4	28-29
North Fork Edisto: Orangeburg,S.C.	8	4	6	#8.6	5
Edisto: Givhans, S. C.	10	9	11	#10.1	10
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Black Hawk Creek: Hudson, Iowa	12	22	23	14.0	22
Missouri Basin					
Cedar: Spaulding, Nebr.				6.9	12
Primrose, Nebr.				13.1	12
Belgrade, Nebr.				13.4	12
Fullerton, Nebr.				14.9	13
Beaver Creek: Genoa, Nebr.				G 19.45	13
Shell Creek: (Newman, Nebr.				G 21.2	12
(Columbus, Nebr.				G 16.5	15
North Loup: Scotia, Nebr.				G7.3	12
St. Paul, Nebr.				G9.4	13
Loup: (Genoa, Nebr.				GH13.5	13
(Columbus, Nebr.	9	13	14	G13.0	14
Platte: North Bend, Nebr.	6	14	15	G6.9	14
South Bend, Nebr.				G10.0	15
North Fork Solomon: Lenora, Kans.	10	13	13	10.0	13
Chapman Creek: Chapman (nr), Kans.	19	21	21	20.2	21
White Basin					
Cache: Patterson, Ark.	7	July 30	8	7.5	2
		13	29	9.0	19-21

River and station	Flood stage	Above flood stages -dates		Crest*	
		From–	To–	Stage	Date
MISSISSIPPI SYSTEM	Ft.			Ft.	
Red Basin					
Caddo: Glenwood, Ark.	15	21	21	15.1	21
Saline: Benton, Ark.	20	22	23	20.8	22
Ouachita: Arkadelphia, Ark.	17	21	24	23.4	22
Nix's Ferry, Ark.	17	23	24	E20.5	23-24
WEST GULF OF MEXICO DRAINAGE					
Salt Fork: Aspermont, Texas	12	30	30	12.45	30
Navasota: (Easterly (nr), Texas	14	16	16	14.7	16
(Bryan 17 NE, Texas	12	20	21	12.5	21
Frio: Derby 1S, Texas	6	15	16	10.2	15
Tilden, Texas	12	19	21	17.8	20
Callihan, Texas	12	20	22	13.2	21
Nueces: Uvalde 9SW, Texas	11	16	16	14.2	16
Crystal City, Texas	4	15	15	5.0	15
Rio Grande: Presidio, Texas	13	24	Sep. 20	(17.0	26
				(18.6	31
				(18.5	Sep. 2

* Provisional
# Highest stage observed
__ Record stage
E Estimated
G Tentative crest stages furnished by Geological Survey
H Recording gage swept away - Peak determined from high water marks

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	86	16.4	90	211	2.7
1000	31	135	16.6	86	227	3.3
950	31	575	16.8	70	270	8.2
900	31	1,034	15.0	68	287	12.8
850	31	1,517	12.2	66	287	15.3
800	31	2,033	9.8	56	286	16.3
750	31	2,559	7.3	52	280	18.3
700	31	3,124	4.7	47	274	20.2
650	31	3,723	2.1	39	272	23.1
600	31	4,369	-1.5	36	269	25.4
550	31	5,051	-5.5	32	268	28.4
500	31	5,800	-9.9	29	267	31.1
450	31	6,600	-14.8	27	269	34.2
400	31	7,489	-21.2	26	268	35.7
350	31	8,461	-28.2	26	265	39.0
300	31	9,549	-36.1	26	264	43.3
250	31	10,790	-45.6		270	45.1
200	30	12,241	-54.8		271	45.8
175	30	13,091	-56.1		270	42.5
150	29	14,068	-57.2		269	35.7
125	29	15,218	-58.4		270	31.1
100	29	16,621	-58.2		270	20.0
80	29	18,035	-55.7		271	9.7
70	29	18,887	-54.3		268	6.8
60	29	19,877	-53.6		273	3.5
50	29	21,054	-51.8		63	2.3
40	28	22,507	-49.9		84	6.0
30	27	24,397	-47.1		83	7.2
25	27	25,609	-45.3		83	9.3
20	27	27,104	-43.4		83	11.8
15	20	29,048	-41.6		81	15.3
10	12	31,826	-38.5			
7						
5						

ALBUQUERQUE, N. MEX.
841 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,619	18.0	67	105	2.9
1000	31	99				
950	31	544				
900	31	1,021				
850	31	1,521				
800	31	2,042	17.5	57	163	2.7
750	31	2,594	14.9	54	231	2.9
700	31	3,173	11.3	56	290	5.8
650	31	3,787	7.0	56	310	7.4
600	31	4,440	2.1	57	320	5.8
550	31	5,130	-3.2	61	337	4.9
500	31	5,885	-8.1	57	303	4.5
450	31	6,691	-12.5	43	291	6.2
400	31	7,588	-18.3	36	290	9.1
350	31	8,573	-24.8	32	283	12.8
300	31	9,676	-33.2	33	279	18.1
250	31	10,933	-42.6		279	25.8
200	31	12,405	-53.4		281	30.3
175	31	13,253	-59.1		284	29.1
150	31	14,206	-65.0		285	25.6
125	31	15,304	-69.2		293	19.0
100	31	16,635	-68.5		310	6.2
80	30	17,985	-63.6		54	4.1
70	30	18,811	-60.2		89	9.1
60	29	19,774	-58.2		86	13.0
50	29	20,927	-55.8		91	18.1
40	29	22,353	-53.8		91	20.0
30	28	24,211	-50.3		89	23.7
25	28	25,406	-48.0		88	25.8
20	26	26,877	-45.7		87	27.2
15	17	28,791	-42.5		85	27.0
10						
7						
5						

AMARILLO, TEXAS
893 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,095	18.1	85	170	6.8
1000	31	110				
950	31	560				
900	31	1,033				
850	31	1,517	18.3	72	210	12.0
800	31	2,035	16.1	63	221	9.3
750	31	2,582	13.0	62	239	5.6
700	31	3,159	9.6	58	266	2.9
650	31	3,770	5.8	53	297	1.9
600	31	4,421	1.5	52	323	3.7
550	31	5,112	-2.8	49	329	5.1
500	31	5,866	-7.4	45	320	5.8
450	31	6,678	-12.5	38	303	7.0
400	31	7,569	-18.4	38	294	8.7
350	31	8,552	-25.1	36	289	13.0
300	31	9,654	-33.4	35	292	17.3
250	31	10,907	-43.1		288	23.1
200	31	12,376	-53.5		295	30.3
175	31	13,225	-58.7		299	32.8
150	31	14,180	-63.9		303	28.0
125	31	15,286	-67.9		309	18.3
100	31	16,627	-67.3		324	6.0
80	31	17,986	-62.8		62	3.9
70	30	18,814	-60.0		80	8.5
60	30	19,780	-57.9		86	12.6
50	30	20,936	-55.6		92	17.7
40	30	22,363	-53.6		89	19.8
30	29	24,227	-50.4		86	23.5
25	29	25,421	-48.3		86	25.1
20	29	26,898	-46.0		87	28.7
15	21	28,815	-43.3		85	31.7
10	7	31,558	-39.5			
7						
5						

ANCHORAGE, ALASKA
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	29	11.1	82	167	3.9
1000	31	85			167	5.6
950	31	513	10.3	71	158	7.8
900	31	962	7.5	73	172	9.7
850	31	1,430	4.3	81	167	9.3
800	31	1,921	1.2	85	159	9.9
750	31	2,440	-1.8	83	164	11.1
700	31	2,984	-5.2	81	174	9.7
650	31	3,562	-8.7	77	179	10.3
600	31	4,180	-12.1	67	179	12.2
550	31	4,842	-16.1	61	188	11.8
500	31	5,553	-20.9	56	196	13.0
450	31	6,324	-26.1	55	206	15.0
400	31	7,166	-31.9	55	216	15.0
350	31	8,096	-38.9	53	225	18.3
300	31	9,136	-46.5		224	22.1
250	31	10,326	-52.[illegible]		230	23.3
200	31	11,773	-49.1		235	20.2
175	31	12,652	-47.7		236	18.3
150	31	13,669	-48.0		236	17.1
125	31	14,871	-48.0		244	14.6
100	31	16,342	-48.0		239	13.4
80	31	17,813	-47.9		236	10.1
70	31	18,694	-47.9		236	9.7
60	31	19,711	-47.[illegible]		237	8.0
50	29	20,913	-47.7		233	6.4
40	29	22,386	-47.6		239	4.7
30	29	24,288	-47.0		269	.6
25	29	25,497	-46.3		29	.8
20	28	26,984	-45.2		94	2.1
15	25	28,925	-42.7		97	4.9
10	16	31,696	-38.6		93	9.7
7						
5						

* ANNETTE, ALASKA
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	37	11.9	86	189	1.0
1000	31	143	12.3	80	195	1.0
950	31	572	10.2	78	188	3.3
900	31	1,021	7.6	78	198	5.[illegible]
850	31	1,491	5.0	78	202	7.6
800	31	1,983	2.2	77	211	7.6
750	31	2,502	-.4	69	225	7.5
700	31	3,053	-2.8	56	231	11.3
650	31	3,635	-5.8	50	238	12.4
600	31	4,261	-9.2	49	241	13.8
550	31	4,928	-13.1	45	245	16.9
500	31	5,651	-17.5	42	248	19.6
450	31	6,430	-22.7	43	250	21.8
400	31	7,288	-28.5	40	251	21.4
350	31	8,231	-35.5	42	255	24.3
300	31	9,287	-43.0	38	250	25.1
250	31	10,496	-50.0		260	27.8
200	31	11,941	-52.0		271	27.6
175	31	12,808	-51.4		268	24.9
150	31	13,809	-51.5		266	22.3
125	31	14,992	-51.8		264	20.8
100	31	16,439	-51.4		257	15.5
80	31	17,889	-50.9		256	11.7
70	31	18,757	-50.9		259	9.5
60	31	19,761	-51.0		268	5.[illegible]
50	31	20,948	-50.8		281	3.9
40	31	22,403	-50.1		308	1.0
30	30	24,288	-48.9		34	2.7
25	29	25,485	-47.9		65	4.9
20	28	26,965	-46.1		63	4.3
15	27	28,889	-43.5		56	3.9
10	21	31,616	-39.7		78	6.8
7	15	34,049	-34.8		43	4.3
5	6	36,412	-29.4			

ATHENS, GA.
989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	246	20.1	96	256	.6
1000	31	149				
950	31	592	21.0	81	299	3.1
900	31	1,061	18.8	77	264	3.3
850	31	1,551	15.8	78	243	4.3
800	31	2,064	12.9	73	244	6.4
750	31	2,603	10.0	63	251	8.4
700	31	3,176	7.4	56	255	10.1
650	31	3,781	4.5	51	257	10.5
600	31	4,433	1.1	49	256	11.5
550	31	5,121	-3.0	47	253	11.3
500	31	5,877	-7.5	44	253	13.0
450	31	6,682	-12.5	38	254	14.4
400	31	7,580	-18.4	33	259	15.7
350	31	8,563	-25.5	30	260	17.7
300	31	9,662	-33.8	28	263	18.1
250	31	10,915	-43.2		268	19.6
200	30	12,386	-53.5		279	21.0
175	30	13,234	-58.8		280	18.8
150	30	14,190	-63.7		282	15.9
125	29	15,301	-66.2		281	11.8
100	28	16,650	-65.6		292	2.5
80	27	18,015	-62.6		64	7.6
70	27	18,843	-60.3		72	11.3
60	26	19,808	-58.0		80	17.1
50	25	20,963	-55.2		87	21.8
40	25	22,396	-52.5		90	23.3
30	22	24,265	-49.9		93	25.8
25	17	25,473	-48.0		86	29.7
20	15	26,958	-45.1		87	32.4
15	8	28,877	-42.1			
10						
7						
5						

* BARROW, ALASKA
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	8	.8	98	81	8.9
1000	31	109	.8	93	87	9.9
950	31	525	2.5	79	93	10.9
900	31	960	1.8	70	93	8.4
850	31	1,420	-.4	70	97	6.8
800	31	1,903	-3.0	74	105	5.1
750	31	2,411	-5.4	64	108	2.7
700	31	2,952	-8.3	60	230	.6
650	31	3,521	-11.8	58	224	1.6
600	31	4,133	-15.6	55	227	2.9
550	31	4,780	-19.7	55	221	4.5
500	31	5,487	-24.6	52	226	4.7
450	31	6,239	-30.0	50	241	6.0
400	31	7,076	-36.0	48	237	7.2
350	31	7,992	-42.1	50	253	8.7
300	31	9,019	-49.0		257	11.8
250	31	10,205	-51.8		259	13.0
200	31	11,667	-47.2		261	9.1
175	31	12,554	-45.9		268	6.4
150	31	13,580	-45.6		269	5.2
125	31	14,795	-45.6		274	3.7
100	31	16,281	-45.7		266	2.1
80	31	17,767	-45.7		224	1.6
70	31	18,655	-45.7		225	1.4
60	31	19,681	-45.7		75	.6
50	31	20,895	-45.7		95	1.7
40	31	22,382	-45.5		94	2.7
30	30	24,298	-44.[illegible]		79	3.7
25	30	25,519	-44.0		79	3.7
20	29	27,011	-43.1		75	3.7
15	27	28,950	-41.2		87	2.7
10	25	31,711	-37.5		82	4.5
7	15	34,228	-32.9		74	4.5
5	7	36,639	-29.2			

BARTER IS., ALASKA
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	15	1.5	95	79	4.7
1000	31	101	2.0	95	84	5.8
950	31	518	3.9	83	92	6.8
900	31	956	3.8	68	85	4.5
850	31	1,420	2.3	66	152	.8
800	31	1,908	-.4	69	244	2.7
750	31	2,420	-3.4	69	259	4.5
700	31	2,964	-6.9	67	258	5.4
650	31	3,535	-10.5	62	259	7.6
600	31	4,150	-14.4	61	262	10.5
550	31	4,801	-18.6	57	262	12.6
500	31	5,509	-23.3	52	256	13.6
450	31	6,266	-28.7	49	257	14.2
400	31	7,107	-34.7	45	254	15.2
350	31	8,026	-41.5	40	249	18.6
300	31	9,056	-48.9		248	22.1
250	31	10,238	-53.1		256	21.6
200	31	11,694	-47.8		256	16.7
175	31	12,578	-46.4		257	13.4
150	31	13,603	-45.9		255	11.1
125	31	14,817	-46.0		247	7.2
100	31	16,301	-45.9		243	6.0
80	31	17,786	-45.8		232	4.7
70	31	18,674	-45.9		236	3.5
60	31	19,700	-45.9		212	2.9
50	31	20,913	-45.7		220	1.7
40	31	22,400	-45.5		151	.6
30	31	24,320	-44.9		63	2.1
25	31	25,542	-44.0		67	3.3
20	30	27,046	-42.6		90	2.9
15	28	29,000	-40.5		92	2.7
10	20	31,768	-37.8		4	2.9
7	5	33,991	-37.8			
5						

BETHEL, ALASKA
1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	39	8.9	95	240	2.5
1000	31	58			241	4.3
950	31	485	8.1	84	203	4.3
900	31	928	5.8	78	203	4.7
850	31	1,394	3.2	82	188	5.[illegible]
800	31	1,883	.4	78	177	5.4
750	31	2,398	-2.7	74	182	5.4
700	31	2,943	-5.7	69	181	5.2
650	31	3,516	-9.4	67	158	4.7
600	31	4,135	-13.0	65	179	4.9
550	31	4,789	-17.0	62	194	4.5
500	31	5,502	-21.6	59	191	4.7
450	31	6,266	-26.8	54	184	5.1
400	31	7,109	-32.8	52	197	6.8
350	31	8,035	-39.8	48	197	7.4
300	31	9,072	-46.9		198	8.7
250	31	10,265	-51.2		221	[illegible].7
200	31	11,728	-46.7		246	10.3
175	31	12,614	-46.3		250	11.[illegible]
150	31	13,637	-46.7		254	12.0
125	31	14,845	-47.2		255	11.1
100	31	16,319	-47.7		255	8.5
80	31	17,792	-47.5		247	7.6
70	31	18,674	-47.4		246	6.6
60	31	19,692	-47.3		237	6.0
50	30	20,899	-47.2		231	5.1
40	30	22,376	-46.7		233	3.9
30	30	24,285	-46.3		234	1.2
25	27	25,500	-45.8		138	.6
20	25	26,980	-45.2		74	.6
15	19	28,892	-43.6		45	1.9
10	11	31,634	-40.6			
7						
5						

BISMARCK, N. DAK.
956 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	505	11.8	86	35	1.0
1000	31	127				
950	31	559	13.4	81	66	1.6
900	31	1,019	16.2	59	208	3.3
850	31	1,504	13.8	53	266	3.7
800	31	2,012	10.7	55	280	6.0
750	31	2,542	7.5	54	290	9.5
700	31	3,113	4.2	53	295	11.8
650	31	3,708	.5	54	293	13.8
600	31	4,351	-3.1	44	294	17.9
550	31	5,027	-7.2	38	292	19.4
500	31	5,771	-12.1	41	282	21.8
450	31	6,560	-17.6	40	275	22.5
400	31	7,440	-23.7	36	278	26.0
350	31	8,402	-31.1	34	275	29.3
300	31	9,475	-39.4	31	277	33.0
250	31	10,700	-47.6		276	39.[illegible]
200	31	12,155	-52.6		276	42.0
175	31	13,015	-53.8		275	40.0
150	31	13,999	-56.1		279	34.0
125	31	15,153	-57.6		282	23.9
100	31	16,562	-57.3		284	15.9
80	31	17,978	-55.9		291	8.9
70	31	18,831	-54.5		304	5.4
60	31	19,818	-53.4		331	2.5
50	31	20,995	-51.6		43	1.9
40	31	22,447	-50.2		54	4.1
30	30	24,332	-48.1		72	5.1
25	30	25,539	-46.3		84	5.8
20	28	27,028	-44.5		76	6.2
15	26	28,968	-42.2		83	6.4
10	14	31,753	-38.8			
7						
5						

BOISE, IDAHO
915 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	868	16.2	47	141	3.1
1000	31	102				
950	31	547				
900	31	1,041	19.8	39	120	1.6
850	31	1,504	20.4	30	328	2.9
800	31	2,024	16.9	31	296	4.1
750	31	2,570	12.9	32	279	7.2
700	31	3,145	8.7	33	276	10.3
650	31	3,752	4.3	36	269	12.6
600	31	4,400	-.5	37	263	15.9
550	31	5,085	-5.5	40	258	18.6
500	31	5,831	-10.7	36	260	18.6
450	31	6,629	-16.5	35	257	21.6
400	31	7,508	-23.0	35	257	25.1
350	31	8,473	-30.2	37	255	27.2
300	31	9,551	-38.6	38	252	31.3
250	31	10,780	-47.3		255	35.7
200	31	12,232	-53.9		257	40.4
175	31	13,086	-55.5		257	40.4
150	31	14,064	-57.5		260	35.4
125	31	15,210	-59.5		262	25.4
100	31	16,604	-60.2		269	15.3
80	31	18,000	-58.1		268	6.0
70	31	18,843	-56.4		270	2.1
60	31	19,824	-55.0		67	1.0
50	31	20,993	-53.5		89	4.1
40	31	22,434	-51.5		85	5.8
30	30	24,309	-49.1		83	9.5
25	29	25,507	-47.7		80	12.0
20	27	26,983	-45.7		83	12.4
15	16	28,883	-43.2		90	10.9
10						
7						
5						

* BOOTHVILLE, LA.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1	24.9	91	152	1.4
1000	31	137	25.4	87	188	2.3
950	31	590	22.6	82	191	5.1
900	31	1,058	20.0	76	193	5.6
850	31	1,550	17.4	71	199	6.0
800	31	2,066	14.4	68	211	6.2
750	31	2,609	11.4	67	215	6.2
700	31	3,184	8.3	61	235	4.9
650	31	3,793	5.0	58	238	5.4
600	31	4,443	1.4	55	263	5.8
550	31	5,134	-2.7	55	270	6.2
500	31	5,889	-7.2	49	281	5.2
450	31	6,701	-11.6	42	298	4.5
400	31	7,597	-17.4	38	307	3.7
350	31	8,584	-24.4	36	331	4.9
300	31	9,688	-32.6	30	357	3.7
250	31	10,946	-42.6		4	7.6
200	31	12,414	-54.0		357	6.0
175	31	13,260	-59.8		350	6.6
150	31	14,210	-65.2		355	7.6
125	30	15,308	-68.7		30	8.4
100	30	16,643	-67.8		61	[illegible].7
80	30	17,996	-63.9		83	15.9
70	30	18,817	-61.9		83	19.6
60	30	19,776	-59.1		82	26.0
50	29	20,925	-56.6		86	31.1
40	29	22,348	-54.1		94	33.0
30	28	24,205	-51.0		90	33.2
25	28	25,396	-48.7		87	35.0
20	26	26,867	-46.4		86	38.9
15	22	28,789	-42.7		89	43.1
10	15	31,546	-38.0		87	43.7
7						
5						

* BROWNSVILLE, TEXAS
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	7	24.7	93	135	4.3
1000	31	114	25.1	92	153	9.5
950	31	570	23.3	87	170	19.4
900	31	1,038	21.2	70	173	19.0
850	31	1,532	18.6	60	171	16.1
800	31	2,051	15.8	53	164	12.6
750	31	2,596	12.8	51	158	9.9
700	31	3,174	9.4	49	144	7.2
650	31	3,787	5.8	45	137	6.6
600	31	4,437	1.9	46	143	5.2
550	31	5,127	-2.2	49	134	2.9
500	31	5,886	-6.8	48	86	2.9
450	31	6,699	-11.7	40	73	4.9
400	31	7,596	-17.0	35	58	7.2
350	31	8,585	-23.8	32	46	7.8
300	31	9,693	-32.1	29	34	10.1
250	31	10,953	-42.2		27	13.0
200	31	12,424	-54.2		27	17.9
175	31	13,267	-60.6		31	18.3
150	31	14,213	-66.8		35	19.6
125	31	15,299	-71.6		49	16.5
100	31	16,613	-71.5		65	16.9
80	31	17,948	-66.6		83	22.3
70	31	18,761	-63.7		88	24.9
60	29	19,713	-61.2		85	29.9
50	29	20,852	-58.7		86	34.8
40	29	22,261	-56.3		88	38.7
30	29	24,104	-52.3		90	40.4
25	29	25,290	-49.7		87	40.4
20	29	26,760	-46.9		86	41.4
15	29	28,681	-43.4		85	43.3
10	29	31,438	-38.1		88	49.3
7	24	33,909	-35.7		95	45.8
5	9	36,286	-32.7			

BUFFALO, N. Y.
990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	218	16.4	84	208	3.9
1000	31	132				
950	31	574	17.5	71	262	9.3
900	31	1,032	15.3	67	267	13.2
850	31	1,514	12.2	66	265	14.4
800	31	2,020	9.4	60	266	16.7
750	31	2,551	7.1	51	272	19.4
700	31	3,118	4.4	46	272	20.2
650	31	3,716	1.3	42	272	22.1
600	31	4,358	-2.0	35	275	24.1
550	31	5,043	-5.8	33	276	24.3
500	31	5,786	-10.3	32	275	27.8
450	31	6,586	-15.6	29	274	28.2
400	31	7,469	-21.6	29	273	30.5
350	31	8,439	-28.7	27	272	33.4
300	31	9,523	-37.0	27	272	35.7
250	31	10,759	-46.0		275	38.9
200	31	12,212	-54.7		280	42.0
175	31	13,063	-56.0		282	39.4
150	31	14,039	-57.7		278	32.1
125	31	15,186	-58.7		272	25.1
100	31	16,589	-58.0		278	20.2
80	28	18,001	-56.0		282	11.1
70	28	18,851	-55.0		291	6.[illegible]
60	28	19,838	-53.5		312	1.7
50	28	21,015	-52.1		56	2.9
40	28	22,466	-50.2		87	6.6
30	28	24,356	-47.4		86	[illegible].2
25	27	25,567	-45.8		81	9.9
20	23	27,060	-43.8		77	9.9
15	17	29,008	-41.0		82	11.3
10	6	31,793	-37.1			
7						
5						

*CANTON IS., PACIFIC AREA
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	4	30.4	65	76	12.0
1000	31	89	28.5	64	75	12.8
950	31	529	23.0	69	79	14.8
900	31	1,011	20.0	63	89	16.7
850	31	1,503	17.6	54	96	16.9
800	31	2,020	16.0	39	95	16.5
750	31	2,560	13.9	31	94	17.3
700	31	3,145	10.6	29	88	16.9
650	31	3,752	6.9	27	86	17.1
600	31	4,410	3.1	25	85	17.5
550	31	5,105	-.5	24	86	18.5
500	31	5,867	-4.5	22	87	19.6
450	31	6,685	-9.4	21	89	20.0
400	31	7,591	-15.3	20	88	16.9
350	31	8,586	-22.2	20	95	13.2
300	31	9,700	-31.0	20	83	8.2
250	31	10,966	-41.4		66	4.1
200	31	12,442	-53.6		357	2.9
175	31	13,288	-60.4		334	4.7
150	31	14,232	-67.7		295	6.2
125	31	15,310	-74.6		259	4.3
100	31	16,592	-77.5		103	8.5
80	30	17,898	-69.0		94	10.5
70	30	18,706	-63.6		66	3.1
60	30	19,658	-60.6		268	3.9
50	30	20,800	-58.0		265	8.0
40	30	22,216	-55.4		270	19.8
30	29	24,065	-51.9		268	35.4
25	29	25,252	-49.8		268	39.0
20	29	26,721	-47.1		267	38.5
15	28	28,641	-43.6		276	25.4
10	20	31,383	-40.8		84	14.4
7	14	33,845	-34.0		90	38.1
5	6	36,245	-27.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	23.5	91	238	2.1
1000	31	140	23.7	83	254	4.9
950	31	587	21.4	76	267	8.2
900	31	1,056	18.8	72	260	8.0
850	31	1,546	16.1	69	250	8.5
800	31	2,062	12.9	68	251	9.1
750	31	2,598	10.3	62	248	11.7
700	31	3,173	7.5	58	252	13.0
650	31	3,775	4.1	57	251	14.8
600	31	4,428	.6	54	252	15.7
550	31	5,114	- 3.3	49	252	15.2
500	31	5,871	- 7.5	46	251	15.3
450	30	6,678	-12.2	41	253	17.5
400	30	7,576	-18.1	37	253	16.7
350	30	8,561	-25.0	36	254	19.0
300	30	9,664	-33.1	33	252	19.4
250	30	10,921	-42.9		252	20.4
200	30	12,388	-54.4		262	20.8
175	30	13,233	-59.8		269	22.1
150	30	14,189	-62.9		275	15.3
125	30	15,305	-65.0		266	14.6
100	30	16,667	-63.6		298	6.4
80	29	18,045	-61.1		70	3.7
70	29	18,877	-59.1		76	7.8
60	29	19,847	-57.2		84	12.8
50	29	21,006	-55.1		91	17.1
40	28	22,439	-52.2		95	21.4
30	28	24,315	-48.8		94	23.7
25	27	25,522	-46.4		89	24.5
20	26	27,007	-44.5		83	27.2
15	19	28,939	-41.4		86	28.7
10	7	31,703	-38.4			
7						

* CARIBOU, ME.
991 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	191	12.9	90	222	3.9
1000	31	110				
950	31	544	13.8	71	270	9.9
900	31	998	12.1	66	272	12.8
850	31	1,475	9.2	64	273	15.2
800	31	1,975	6.5	60	272	18.3
750	31	2,503	4.3	51	273	21.6
700	31	3,062	1.7	48	270	24.3
650	31	3,655	- 1.5	45	270	26.2
600	31	4,290	- 4.9	41	273	31.1
550	31	4,964	- 8.7	39	273	35.0
500	31	5,702	-13.3	36	271	37.9
450	31	6,487	-18.7	34	269	42.5
400	31	7,364	-24.4	31	270	49.7
350	31	8,323	-31.9	28	270	52.6
300	31	9,396	-39.5	27	269	58.9
250	31	10,623	-47.1		268	62.7
200	31	12,079	-52.4		265	58.9
175	31	12,941	-52.7		264	48.0
150	31	13,935	-53.3		261	41.0
125	31	15,106	-54.3		269	32.8
100	31	16,537	-53.9		268	21.8
80	31	17,972	-52.8		274	13.4
70	30	18,833	-51.9		271	8.7
60	30	19,832	-51.2		270	5.1
50	30	21,018	-50.4		247	1.4
40	30	22,478	-48.7		236	1.0
30	29	24,380	-46.6		99	7.2
25	29	25,592	-45.3		89	10.5
20	29	27,086	-43.4		87	11.1
15	26	29,029	-40.6		84	12.4
10	9	31,825	-36.5			
7						

CHARLESTON, S. C.
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	14	22.8	86	286	1.6
1000	31	145	23.4	87	271	2.5
950	31	595	22.0	76	259	5.1
900	31	1,062	19.1	73	254	5.6
850	31	1,552	16.5	65	247	5.1
800	31	2,066	13.6	60	242	5.8
750	31	2,607	10.8	54	252	7.0
700	31	3,181	7.7	55	255	8.7
650	31	3,790	4.7	49	256	11.3
600	31	4,438	1.1	43	253	11.8
550	31	5,135	- 2.8	39	252	13.0
500	31	5,884	- 7.3	37	248	13.4
450	31	6,698	-12.1	33	245	13.6
400	31	7,591	-18.2	31	244	11.3
350	31	8,575	-25.2	29	249	12.0
300	31	9,676	-33.7	27	255	12.6
250	31	10,928	-43.6		262	12.6
200	31	12,392	-54.6		273	15.5
175	31	13,236	-59.8		281	14.4
150	31	14,188	-64.5		283	12.0
125	30	15,293	-67.2		265	7.0
100	30	16,640	-66.3		347	2.3
80	30	18,003	-62.6		73	8.4
70	30	18,830	-60.9		80	12.6
60	30	19,792	-58.6		82	19.6
50	28	20,938	-55.8		91	25.6
40	28	22,369	-52.7		97	28.2
30	27	24,240	-49.3		93	28.0
25	27	25,441	-47.2		89	29.1
20	25	26,921	-45.0		65	32.6
15	19	28,842	-42.3		88	34.8
10	6	31,589	-38.7			
7						

CHIHUAHUA, MEXICO
858 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,428	19.0	84	352	.6
1000	31	85				
950	31	534				
900	31	1,009				
850	31	1,506	19.0	79	292	.8
800	31	2,027	17.8	69	295	1.2
750	31	2,577	14.3	71	178	1.2
700	31	3,157	10.6	72	152	3.5
650	31	3,766	6.5	74	124	4.1
600	31	4,423	2.3	73	123	4.3
550	31	5,113	- 1.9	74	106	4.7
500	31	5,873	- 5.9	68	109	3.3
450	31	6,687	-10.5	59	121	1.0
400	31	7,589	-16.3	53	14	1.0
350	31	8,580	-22.8	49	316	3.1
300	31	9,690	-31.2	43	284	4.5
250	31	10,954	-41.5	31	309	6.2
200	31	12,430	-53.3		330	9.5
175	30	13,276	-59.8		350	11.5
150	29	14,225	-66.3		5	12.0
125	28	15,307	-71.7		41	11.5
100	26	16,621	-71.5		61	10.1
80	20	17,953	-66.6		75	15.7
70	19	18,766	-63.6		72	21.8
60	19	19,721	-61.2		90	25.8
50	19	20,861	-58.5		88	30.5
40	15	22,275	-55.3		85	32.6
30	15	24,126	-51.9		89	33.2
25	15	25,313	-50.1		88	36.3
20	14	26,783	-47.1		85	39.4
15	9	28,704	-44.2			
10						
7						

* COLD BAY, ALASKA
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	8.5	90	224	5.8
1000	31	70			212	6.4
950	31	491	6.3	90	244	8.4
900	31	936	4.2	88	261	9.3
850	31	1,400	2.1	82	262	10.5
800	31	1,888	.2	75	264	10.3
750	31	2,400	- 2.0	72	260	11.1
700	31	2,950	- 5.0	66	251	11.3
650	31	3,523	- 8.0	61	251	13.6
600	31	4,147	-11.6	59	258	15.5
550	31	4,802	-15.4	45	260	16.1
500	31	5,523	-20.2	41	264	17.3
450	31	6,286	-25.4	38	266	20.0
400	31	7,141	-31.0	36	272	22.5
350	31	8,076	-37.3	40	276	24.1
300	31	9,125	-44.0		267	20.6
250	30	10,337	-48.7		265	26.0
200	30	11,810	-46.4		261	28.6
175	30	12,647	-46.6		263	28.2
150	30	13,717	-47.8		262	24.3
125	30	14,917	-48.8		257	20.2
100	30	16,380	-49.4		254	16.5
80	28	17,844	-48.8		245	9.1
70	28	18,721	-48.6		243	7.8
60	28	19,732	-48.3		236	6.4
50	28	20,934	-48.0		225	5.1
40	28	22,406	-47.6		203	2.9
30	27	24,310	-47.0		148	1.4
25	27	25,519	-46.3		95	1.9
20	24	27,005	-45.5		91	3.9
15	21	28,931	-43.7		66	4.7
10	16	31,665	-40.0		73	3.5
7	7	34,196	-35.8			

COLUMBIA, MO.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	238	18.0	87	157	1.4
1000	31	134				
950	31	575	19.6	72	248	3.5
900	31	1,040	17.3	67	290	6.2
850	31	1,527	14.4	66	296	6.6
800	31	2,037	11.6	61	279	8.2
750	31	2,572	9.4	46	281	9.5
700	31	3,146	7.1	40	287	10.1
650	31	3,746	3.7	36	283	9.7
600	31	4,398	- .1	37	283	10.9
550	31	5,079	- 4.2	33	284	11.5
500	31	5,835	- 8.7	34	283	13.0
450	31	6,637	-13.5	31	289	14.6
400	31	7,532	-19.5	34	293	16.3
350	31	8,511	-26.3	31	295	20.2
300	31	9,607	-34.7	33	296	23.9
250	31	10,856	-44.2		298	28.0
200	31	12,319	-54.0		292	31.1
175	31	13,167	-58.1		289	31.9
150	31	14,132	-60.8		290	26.4
125	31	15,259	-63.3		289	19.0
100	31	16,628	-63.2		284	10.9
80	31	18,010	-60.1		343	4.5
70	31	18,847	-57.9		14	2.7
60	31	19,821	-56.1		66	5.1
50	31	20,985	-54.3		81	8.9
40	30	22,423	-52.2		92	11.3
30	27	24,296	-49.5		86	14.0
25	26	25,494	-47.8		84	16.3
20	26	26,973	-45.8		83	19.6
15	17	28,909	-43.0		84	25.3
10	5	31,685	-36.6			
7						

DAYTON, OHIO
982 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	297	16.8	92	189	1.6
1000	31	139				
950	31	582	19.4	74	230	4.7
900	31	1,045	16.8	70	265	7.6
850	31	1,531	13.7	70	266	8.9
800	31	2,040	11.2	60	262	11.1
750	31	2,573	8.6	53	260	13.4
700	31	3,146	6.1	42	262	14.6
650	31	3,746	3.3	39	263	16.3
600	31	4,395	- .3	35	262	17.7
550	31	5,080	- 4.5	36	262	17.7
500	31	5,831	- 9.0	36	263	19.4
450	31	6,634	-14.4	30	265	20.8
400	30	7,521	-20.6	30	267	22.3
350	30	8,495	-27.6	31	267	23.1
300	30	9,585	-35.9	30	266	23.5
250	30	10,826	-45.5		274	27.2
200	30	12,281	-54.7		279	33.2
175	30	13,129	-58.0		283	30.9
150	30	14,095	-60.3		277	27.4
125	30	15,227	-61.7		277	25.1
100	30	16,609	-61.2		278	15.3
80	30	18,002	-58.8		298	5.8
70	30	18,841	-57.4		340	2.1
60	30	19,819	-55.5		60	4.5
50	30	20,987	-53.7		82	7.6
40	29	22,429	-51.6		79	10.9
30	29	24,309	-48.7		84	13.6
25	28	25,513	-46.5		80	13.2
20	27	27,001	-44.4		82	16.3
15	26	28,940	-42.0		89	19.8
10	16	31,687	-38.8		82	15.7
7						

DEL RIO, TEXAS
977 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	314	23.7	81	112	6.4
1000	31	109				
950	31	563	23.1	82	133	13.2
900	31	1,032	20.8	83	162	17.3
850	31	1,527	19.0	76	165	15.3
800	31	2,047	16.0	74	164	12.2
750	31	2,593	13.3	61	158	9.1
700	31	3,172	9.9	55	170	5.4
650	31	3,783	6.3	51	184	3.1
600	31	4,438	2.1	51	193	1.4
550	31	5,126	- 2.2	50	307	.6
500	31	5,887	- 6.5	41	223	.8
450	31	6,696	-11.2	39	290	1.7
400	31	7,600	-16.9	34	300	3.5
350	31	8,589	-23.4	34	330	7.2
300	31	9,698	-31.9	37	327	9.9
250	31	10,960	-41.8	33	333	14.4
200	31	12,436	-53.4		339	18.3
175	31	13,282	-59.9		346	18.3
150	31	14,229	-66.4		351	17.5
125	30	15,319	-71.4		10	13.2
100	30	16,633	-70.9		54	9.7
80	30	17,975	-65.4		77	16.3
70	30	18,792	-62.9		85	18.8
60	29	19,744	-60.7		85	23.7
50	27	20,885	-58.1		89	28.4
40	27	22,299	-55.2		88	33.8
30	27	24,150	-51.4		88	36.5
25	27	25,340	-48.8		87	37.3
20	24	26,821	-45.9		87	38.7
15	20	28,745	-43.1		86	40.0
10	7	31,504	-39.1			
7						

DENVER, COLO.
840 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,611	15.1	70	224	2.9
1000	31	103				
950	31	545				
900	31	1,018				
850	31	1,509				
800	31	2,026	17.2	54	267	4.7
750	31	2,570	14.8	51	301	4.5
700	31	3,156	11.4	46	297	5.4
650	31	3,764	6.8	45	283	7.8
600	31	4,423	1.7	45	287	10.3
550	31	5,109	- 3.7	49	289	14.0
500	31	5,864	- 8.9	48	286	16.1
450	31	6,672	-14.1	41	288	16.1
400	31	7,558	-20.0	36	282	19.6
350	31	8,535	-26.9	30	276	24.1
300	31	9,629	-35.0	28	273	29.3
250	31	10,876	-44.0		272	36.5
200	31	12,341	-53.6		275	40.6
175	31	13,192	-57.5		278	41.8
150	31	14,155	-61.6		280	35.0
125	31	15,277	-64.4		283	23.5
100	31	16,639	-64.3		278	12.8
80	31	18,017	-59.9		281	4.9
70	31	18,856	-57.5		350	1.0
60	31	19,835	-55.6		87	3.9
50	31	21,002	-53.9		82	8.5
40	31	22,442	-51.5		87	11.7
30	30	24,321	-49.2		86	13.0
25	30	25,524	-47.1		78	15.3
20	30	27,009	-45.0		82	17.7
15	21	28,939	-42.7		83	19.2
10						
7						

DODGE CITY, KANS.
925 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	792	18.1	87	169	4.5
1000	31	120				
950	31	567				
900	31	1,030	18.7	74	190	11.5
850	31	1,522	17.5	64	203	10.9
800	31	2,038	14.8	60	223	6.6
750	31	2,580	11.8	55	237	5.4
700	31	3,156	8.3	52	250	3.9
650	31	3,762	4.7	46	273	3.7
600	31	4,413	.4	45	294	6.4
550	31	5,098	- 3.6	39	304	9.3
500	31	5,853	- 8.2	38	298	11.1
450	31	6,657	-13.5	35	289	12.0
400	31	7,551	-19.5	33	285	14.6
350	31	8,529	-26.8	34	282	16.5
300	31	9,624	-34.9	32	280	20.6
250	31	10,872	-44.3		282	24.3
200	31	12,332	-54.9		288	28.6
175	31	13,178	-59.0		289	32.4
150	31	14,135	-62.9		290	28.9
125	31	15,249	-66.2		290	20.6
100	31	16,600	-65.6		290	10.1
80	31	17,969	-61.1		304	2.9
70	31	18,801	-59.0		78	3.5
60	31	19,772	-57.1		86	8.2
50	31	20,929	-55.4		83	11.5
40	31	22,358	-53.2		87	14.6
30	31	24,223	-49.9		86	17.1
25	31	25,419	-48.0		84	18.8
20	30	26,896	-46.0		83	21.4
15	25	28,814	-43.3		84	22.3
10	10	31,562	-39.2			
7	5	34,026	-37.7			

EL PASO, TEXAS
882 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,193	20.4	76	43	.8
1000	31	93				
950	31	538				
900	31	1,016				
850	31	1,514	20.6	62	110	1.9
800	31	2,037	18.3	58	171	2.7
750	31	2,586	15.1	57	230	1.4
700	31	3,172	11.2	60	311	1.4
650	31	3,782	6.7	67	35	3.3
600	31	4,441	2.2	65	67	6.0
550	31	5,128	- 2.4	62	62	7.0
500	31	5,891	- 6.8	60	59	5.2
450	31	6,705	-11.2	50	321	1.4
400	31	7,605	-16.6	44	295	4.9
350	31	8,596	-23.3	42	284	8.2
300	31	9,708	-31.5	39	287	11.3
250	31	10,974	-41.3	41	288	16.3
200	31	12,454	-52.9		292	20.4
175	31	13,303	-59.3		297	20.4
150	31	14,255	-65.6		308	17.5
125	31	15,348	-71.2		323	11.1
100	31	16,666	-70.5		39	3.9
80	31	18,011	-64.6		73	9.3
70	31	18,830	-62.5		88	15.5
60	31	19,786	-59.8		86	19.8
50	31	20,931	-57.5		91	24.3
40	31	22,349	-54.7		89	26.4
30	31	24,204	-51.1		88	30.9
25	29	25,393	-49.2		89	32.2
20	26	26,862	-46.7		89	34.0
15	22	28,785	-43.1		88	39.0
10	10	31,528	-39.8			
7						
5						

ELY, NEV.
811 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,908	11.2	53	193	6.8
1000	31	117				
950	31	561				
900	31	1,031				
850	31	1,514				
800	31	2,028	16.5	39	192	4.9
750	31	2,577	15.8	33	183	4.1
700	31	3,160	11.6	35	219	6.4
650	31	3,771	6.7	40	235	9.3
600	31	4,426	1.5	46	235	12.8
550	31	5,113	- 4.3	50	237	14.0
500	31	5,865	- 9.6	46	245	15.9
450	31	6,664	-14.8	34	256	17.7
400	31	7,554	-21.3	34	257	21.4
350	31	8,525	-28.5	32	253	24.5
300	31	9,612	-36.6	26	252	30.5
250	31	10,853	-45.3		255	40.8
200	31	12,315	-53.5		254	47.6
175	31	13,165	-58.1		255	45.1
150	31	14,125	-62.3		255	40.4
125	31	15,242	-65.1		260	28.2
100	31	16,599	-64.6		263	12.6
80	31	17,971	-61.2		272	1.0
70	31	18,804	-58.6		93	2.5
60	31	19,776	-56.8		85	6.2
50	31	20,935	-55.4		84	9.9
40	31	22,364	-53.4		82	12.0
30	30	24,227	-50.5		88	15.9
25	30	25,420	-48.6		85	17.7
20	30	26,895	-46.4		87	18.8
15	27	28,811	-43.7		87	21.6
10	18	31,563	-38.9		87	23.5
7	12	34,229	-35.7		93	24.7
5	10	36,371	-31.3			

EMPALME, MEXICO
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	26.3	87	61	4.7
1000	31	106	26.5	84	90	4.3
950	31	555	24.6	80	145	6.2
900	31	1,034	22.4	72	167	5.8
850	31	1,530	19.8	73	134	4.5
800	31	2,051	16.8	73	133	3.9
750	31	2,598	13.5	73	97	4.3
700	31	3,178	10.4	69	133	4.7
650	31	3,789	6.5	67	93	6.4
600	31	4,445	2.4	69	92	4.9
550	31	5,139	- 1.9	67	103	3.9
500	31	5,897	- 6.0	61	65	3.9
450	31	6,714	-10.7	47	46	4.9
400	31	7,613	-16.3	43	56	2.5
350	31	8,605	-22.8	37	66	1.2
300	31	9,717	-30.8	33	144	.7
250	31	10,983	-41.0	42	149	5.1
200	31	12,460	-53.2		127	3.9
175	31	13,307	-59.9		105	4.1
150	31	14,254	-66.7		90	5.1
125	31	15,339	-72.4		69	8.2
100	27	16,643	-72.1		78	10.1
80	17	17,978	-66.3		95	14.6
70	16	18,790	-63.5		93	22.7
60	15	19,740	-61.0		89	25.6
50	11	20,877	-58.1		91	29.5
40	10	22,282	-56.6		83	32.6
30	9	24,120	-52.8			
25	7	25,308	-49.6			
20	5	26,769	-45.7			
15						
10						
7						
5						

* FAIRBANKS, ALASKA
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	135	10.7	67	7	2.9
1000	31	70				
950	31	501	11.3	56	113	5.4
900	31	949	8.9	55	184	5.2
850	31	1,420	5.5	59	193	6.2
800	31	1,913	2.0	63	193	7.0
750	31	2,425	- 1.7	64	203	8.5
700	31	2,976	- 5.4	67	209	8.7
650	31	3,548	- 9.1	67	207	8.2
600	31	4,170	-12.9	63	223	8.2
550	31	4,820	-17.3	59	220	9.5
500	31	5,535	-22.1	59	225	10.7
450	31	6,294	-27.5	58	232	14.6
400	31	7,137	-33.6	53	244	15.3
350	31	8,061	-40.6	51	234	15.9
300	31	9,094	-47.9		236	19.2
250	31	10,281	-52.9		235	22.9
200	31	11,732	-49.3		236	18.6
175	31	12,612	-47.6		241	16.3
150	31	13,632	-47.0		246	14.2
125	31	14,839	-47.2		246	12.2
100	31	16,317	-46.7		240	10.1
80	31	17,796	-46.9		245	8.5
70	31	18,680	-46.8		237	7.2
60	31	19,702	-46.8		242	5.4
50	31	20,910	-46.6		233	4.7
40	31	22,391	-46.3		240	4.7
30	31	24,304	-45.8		114	1.0
25	30	25,515	-45.0		336	1.2
20	30	27,010	-43.6		82	2.1
15	28	28,952	-41.0		55	2.3
10	23	31,712	-37.5		59	3.9
7	11	34,302	-31.7			

FLINT, MICH.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	234	14.2	90	233	2.9
1000	31	131				
950	31	571	17.0	70	278	7.0
900	31	1,029	14.6	67	283	10.4
850	31	1,540	11.7	71	279	12.0
800	31	2,016	9.3	60	275	13.2
750	31	2,550	7.2	48	273	15.7
700	31	3,115	4.8	44	270	18.1
650	31	3,714	2.1	42	271	20.0
600	31	4,359	- 1.5	38	273	21.6
550	31	5,043	- 5.5	35	269	23.1
500	31	5,789	-10.3	31	271	25.8
450	31	6,585	-15.7	31	272	26.4
400	31	7,471	-21.7	28	272	28.2
350	31	8,441	-28.6	28	271	33.3
300	31	9,527	-36.7	27	271	36.3
250	31	10,764	-45.9		276	40.6
200	31	12,220	-54.0		280	43.5
175	31	13,073	-55.5		281	40.4
150	31	14,051	-57.5		280	34.2
125	31	15,197	-58.8		276	26.0
100	31	16,598	-58.5		285	17.4
80	31	18,008	-56.3		287	9.3
70	31	18,858	-55.1		194	4.1
60	31	19,845	-53.5		31	1.4
50	31	21,021	-52.1		6	3.3
40	31	22,472	-50.0		79	6.0
30	31	24,364	-47.4		83	8.7
25	30	25,577	-45.4		83	9.9
20	25	27,073	-43.2		93	11.5
15	14	29,047	-40.4			
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

FORT WORTH, TEXAS
995 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	180	22.9	85	197	2.3
1000	31	132				
950	31	584	22.3	76	202	11.3
900	31	1,050	20.3	71	206	12.2
850	31	1,542	17.6	68	203	8.4
800	31	2,058	14.6	65	225	5.1
750	31	2,604	11.7	61	224	3.5
700	31	3,177	8.[illegible]	60	225	3.1
650	31	3,786	4.4	58	255	2.9
600	31	4,433	.6	57	242	5.1
550	31	5,120	- 3.1	48	258	5.2
500	31	5,877	- 7.2	42	283	6.0
450	31	6,687	-12.2	41	289	6.4
400	31	7,583	-17.9	37	292	9.5
350	31	8,568	-24.8	39	295	12.2
300	31	9,670	-33.2	35	298	14.6
250	31	10,927	-42.8		305	18.1
200	31	12,396	-53.6		309	21.2
175	30	13,244	-59.2		308	20.8
150	30	14,198	-64.2		315	18.3
125	30	15,302	-68.1		327	11.5
100	30	16,641	-67.2		5	4.3
80	30	17,998	-63.2		75	9.5
70	30	18,823	-61.0		85	13.6
60	29	19,785	-59.0		91	16.5
50	28	20,935	-56.7		90	21.2
40	27	22,355	-54.1		89	25.4
30	26	24,214	-50.4		87	28.0
25	26	25,408	-48.2		87	30.3
20	24	26,882	-46.0		88	32.4
15	15	28,814	-42.6		90	37.1
10	6	31,596	-38.8			
7						
5						

GLASGOW, MONT.
935 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	696	12.6	73	62	3.5
1000	31	119				
950	31	557				
900	31	1,014	16.0	50	196	1.2
850	31	1,498	14.4	45	289	6.8
800	31	2,007	11.3	45	283	7.6
750	31	2,537	7.7	50	285	10.5
700	31	3,109	4.3	48	279	13.6
650	31	3,703	.2	50	274	15.0
600	31	4,344	- 3.9	46	274	18.8
550	31	5,019	- 8.3	45	274	21.0
500	31	5,758	-13.2	45	274	22.5
450	31	6,543	-18.6	41	274	24.5
400	31	7,419	-25.0	37	273	28.2
350	31	8,376	-32.1	34	271	30.1
300	31	9,446	-40.4	33	272	34.4
250	31	10,666	-48.6		271	42.5
200	30	12,119	-52.9		273	39.4
175	30	12,979	-53.5		268	38.5
150	30	13,967	-55.1		271	33.8
125	30	15,127	-56.7		276	24.7
100	30	16,542	-56.5		282	15.5
80	30	17,960	-55.5		297	8.5
70	30	18,811	-54.7		303	4.1
60	30	19,799	-53.3		310	2.1
50	29	20,976	-51.9		8	1.4
40	29	22,427	-50.2		53	2.9
30	28	24,316	-47.8		71	4.1
25	28	25,522	-46.4		78	4.5
20	28	27,009	-44.8		78	6.2
15	25	28,945	-42.1		84	6.0
10	22	31,709	-37.9		92	7.4
7	14	34,160	-34.2		68	6.0
5	11	36,582	-28.4			

* GRAND JUNCTION, COLO.
853 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,474	19.2	42	113	5.8
1000	31	75				
950	31	524				
900	31	1,003				
850	31	1,502			120	5.8
800	31	2,026	19.8	34	134	7.2
750	31	2,575	16.4	35	196	3.5
700	31	3,162	12.0	38	266	8.2
650	31	3,772	7.1	42	279	10.9
600	31	4,431	1.9	47	276	13.0
550	31	5,120	- 3.7	55	275	16.1
500	31	5,873	- 9.0	54	273	17.3
450	31	6,677	-14.5	48	278	18.3
400	31	7,566	-20.0	37	268	19.8
350	31	8,543	-26.9	33	266	25.6
300	31	9,636	-35.2	34	264	32.6
250	31	10,884	-44.0		264	38.5
200	30	12,348	-53.5		268	45.6
175	30	13,178	-58.1		269	45.3
150	30	14,158	-62.8		271	40.8
125	30	15,272	-65.6		275	25.3
100	30	16,625	-65.7		271	11.5
80	30	17,993	-61.1		246	1.2
70	30	18,847	-58.4		75	2.9
60	30	19,802	-56.4		88	7.0
50	30	20,962	-55.0		80	10.5
40	30	22,394	-52.8		86	14.0
30	29	24,263	-49.7		89	16.7
25	28	25,460	-48.2		84	17.1
20	27	26,935	-45.8		87	18.8
15	24	28,863	-43.3		88	21.6
10	23	31,610	-38.8		88	23.9
7	17	34,059	-35.5		92	24.9
5	6	36,409	-30.0			

* GREAT FALLS, MONT.
889 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,123	11.6	68	233	5.1
1000	31	121				
950	31	562				
900	31	1,024				
850	31	1,500	13.6	51	242	5.8
800	31	2,009	11.0	52	246	7.4
750	31	2,542	7.8	49	255	8.9
700	31	3,111	4.3	48	261	11.8
650	31	3,705	.3	48	262	18.6
600	31	4,348	- 3.8	42	264	22.1
550	31	5,024	- 8.0	38	269	23.9
500	31	5,765	-13.1	40	267	24.5
450	31	6,552	-18.5	35	267	27.8
400	31	7,430	-24.7	33	265	27.4
350	31	8,388	-31.9	34	264	29.3
300	31	9,460	-39.8	37	264	34.8
250	31	10,685	-48.1		264	38.3
200	31	12,134	-53.5		261	39.6
175	31	12,992	-53.7		261	39.6
150	31	13,981	-55.0		262	33.0
125	30	15,143	-56.8		265	24.1
100	30	16,556	-57.2		268	15.0
80	30	17,971	-55.8		283	6.6
70	30	18,822	-54.9		279	3.3
60	30	19,809	-53.6		254	3.3
50	28	20,984	-52.1		3	1.0
40	28	22,433	-50.4		47	2.7
30	26	24,316	-47.8		69	5.1
25	26	25,523	-46.4		80	8.0
20	25	27,009	-44.7		80	7.6
15	24	28,948	-41.9		70	10.9
10	23	31,713	-37.1		80	10.9
7	12	34,197	-34.2		90	8.4
5						

GREEN BAY, WIS.
990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	210	13.4	85	285	2.5
1000	31	124				
950	31	561	16.3	77	298	7.6
900	31	1,019	14.3	70	289	9.5
850	31	1,500	11.5	74	282	10.5
800	31	2,005	9.1	62	279	10.9
750	31	2,534	6.7	52	274	14.2
700	31	3,102	3.9	46	279	17.1
650	31	3,695	.8	43	279	19.2
600	31	4,341	- 2.5	35	278	22.3
550	31	5,017	- 6.4	35	277	24.3
500	31	5,766	-11.1	35	278	27.0
450	31	6,561	-16.4	32	280	29.3
400	31	7,443	-22.5	32	280	31.5
350	31	8,410	-29.5	32	279	35.5
300	31	9,493	-37.7	32	279	39.2
250	31	10,727	-46.1		282	46.6
200	31	12,187	-53.3		285	52.3
175	31	13,044	-54.6		288	46.0
150	31	14,028	-56.1		283	36.9
125	31	15,181	-58.0		282	29.7
100	31	16,588	-57.5		283	18.6
80	31	18,003	-55.8		295	11.7
70	31	18,853	-54.5		309	7.0
60	30	19,849	-53.3		353	2.7
50	29	21,026	-51.9		77	2.9
40	28	22,474	-49.8		80	7.4
30	28	24,371	-47.1		85	9.5
25	28	25,582	-45.8		88	10.5
20	27	27,077	-43.7		84	12.8
15	24	29,031	-40.4		81	15.0
10	6	31,801	-37.5			
7						
5						

GREENSBORO, N. C.
986 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	273	20.2	94	263	1.6
1000	29	149				
950	29	596	20.9	76	294	4.3
900	29	1,062	18.6	73	295	6.4
850	29	1,551	15.9	72	282	6.6
800	29	2,065	12.9	70	280	8.0
750	29	2,604	10.3	63	275	9.9
700	29	3,178	7.4	58	274	11.5
650	29	3,784	4.0	54	271	11.7
600	29	4,432	.6	48	270	13.4
550	29	5,120	- 3.2	45	265	14.2
500	29	5,875	- 7.6	41	265	14.4
450	29	6,686	-12.9	37	263	16.1
400	29	7,577	-18.8	38	262	17.7
350	29	8,559	-25.6	32	259	18.5
300	29	9,658	-34.1	28	260	20.4
250	29	10,909	-43.7		262	22.0
200	29	12,374	-54.2		275	23.1
175	29	13,222	-58.8		279	21.6
150	29	14,180	-62.8		276	21.0
125	29	15,296	-65.0		270	14.6
100	29	16,657	-64.4		296	7.2
80	29	18,030	-61.2		27	3.1
70	29	18,862	-59.2		72	5.6
60	29	19,833	-57.1		81	11.1
50	29	20,993	-54.7		39	15.5
40	29	22,429	-52.1		94	18.5
30	26	24,305	-48.7		97	20.2
25	24	25,506	-46.9		90	22.7
20	22	26,992	-44.7		92	25.1
15	10	28,942	-41.8			
10						
7						

GUAM, MARIANA IS.
998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	111	24.8	95	129	1.9
1000	31	88				
950	31	543	23.8	89	174	3.1
900	31	1,013	21.0	86	173	3.3
850	31	1,507	18.3	86	158	3.1
800	31	2,026	15.7	80	155	2.5
750	31	2,571	12.9	73	138	3.5
700	31	3,151	9.9	67	135	4.5
650	31	3,763	6.4	66	142	4.9
600	31	4,416	2.4	70	130	5.6
550	31	5,112	- 1.4	65	116	5.4
500	31	5,869	- 5.6	63	113	4.7
450	31	6,685	-10.4	60	104	5.6
400	31	7,588	-15.8	56	106	6.6
350	31	8,581	-22.3	50	84	6.6
300	31	9,696	-30.5	48	69	7.4
250	31	10,965	-40.5	49	61	10.9
200	31	12,443	-53.2		54	14.6
175	31	13,288	-60.6		55	15.7
150	31	14,229	-68.9		51	16.9
125	31	15,296	-76.9		56	21.8
100	20	16,573	-76.4		74	27.4
80	16	17,874	-70.8		86	31.3
70	16	18,672	-66.9		88	31.9
60	16	19,609	-64.3		89	29.3
50	16	20,733	-60.8		88	28.6
40	16	22,135	-56.4		92	29.3
30	13	23,975	-53.4		85	29.3
25	12	25,155	-50.6		86	30.7
20	11	26,614	-48.5		84	29.5
15	9	28,528	-46.4			
10						
7						

HILO, HAWAII
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	11	22.0	88	227	4.1
1000	31	138	22.8	82	244	3.7
950	31	587	19.6	86	60	3.5
900	31	1,049	16.4	89	68	6.8
850	31	1,534	13.5	93	73	7.8
800	31	2,045	12.4	63	82	8.9
750	31	2,592	10.9	43	88	8.5
700	31	3,158	8.6	39	89	7.6
650	31	3,771	5.6	37	89	6.2
600	31	4,419	2.4	33	75	3.5
550	31	5,112	- 1.2	27	45	1.2
500	31	5,872	- 5.5	24	325	2.5
450	31	6,690	-10.9	23	297	4.9
400	31	7,586	-17.2	22	278	5.8
350	31	8,572	-24.4	24	286	8.9
300	31	9,676	-33.1	25	285	14.2
250	31	10,932	-42.9		283	21.8
200	31	12,398	-54.7		277	24.1
175	31	13,240	-61.1		273	25.8
150	31	14,182	-67.9		267	24.5
125	31	15,262	-72.8		257	12.8
100	31	16,575	-70.7		109	6.8
80	31	17,908	-67.8		98	22.9
70	30	18,715	-65.4		96	28.4
60	30	19,659	-62.4		91	30.9
50	30	20,791	-60.1		89	36.9
40	30	22,193	-56.6		93	39.0
30	29	24,037	-52.6		88	37.5
25	29	25,221	-50.2		89	41.2
20	28	26,685	-47.7		92	45.3
15	26	28,599	-44.9		94	45.5
10	8	31,344	-41.8			
7						

HUNTINGTON, w. VA.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	246	17.4	96	163	2.3
1000	31	145				
950	31	592	19.8	72	244	4.9
900	31	1,052	17.2	72	268	7.2
850	31	1,538	13.6	76	264	8.7
800	31	2,048	11.1	65	262	11.3
750	31	2,588	8.9	56	262	13.4
700	31	3,155	6.6	48	265	13.2
650	31	3,758	3.7	45	262	12.8
600	31	4,406	.0	39	261	13.4
550	31	5,093	- 4.1	40	261	13.6
500	31	5,844	- 8.6	38	263	15.3
450	31	6,653	-13.8	42	264	15.3
400	31	7,539	-20.2	39	265	17.5
350	31	8,515	-27.2	36	264	18.6
300	31	9,607	-35.4	31	266	21.2
250	31	10,852	-44.7		271	25.1
200	31	12,314	-54.0		280	28.7
175	31	13,162	-58.2		279	28.9
150	31	14,126	-60.8		273	23.7
125	31	15,254	-62.5		270	19.0
100	31	16,629	-62.3		272	11.7
80	31	18,015	-59.5		308	4.3
70	31	18,853	-57.7		29	2.9
60	31	19,832	-55.8		71	6.2
50	31	20,998	-53.9		85	10.9
40	31	22,437	-51.6		86	13.8
30	31	24,318	-48.4		87	16.1
25	31	25,523	-46.4		85	19.2
20	29	27,012	-44.1		89	21.4
15	18	28,941	-41.4		88	20.0
10						
7						

* INTERNAT. FALLS, MINN.
973 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	360	12.3	93	179	.8
1000	31	126				
950	31	556	15.1	74	252	1.4
900	31	1,016	13.4	69	294	2.9
850	31	1,495	10.5	67	313	4.5
800	31	1,998	7.7	61	307	6.8
750	31	2,521	4.6	60	308	9.5
700	31	3,088	2.1	53	311	12.6
650	31	3,673	- .9	53	311	14.8
600	31	4,318	- 4.6	47	306	16.1
550	31	4,988	- 8.5	45	307	17.1
500	31	5,732	-13.1	45	299	18.5
450	31	6,518	-18.3	41	293	21.2
400	31	7,397	-24.4	38	293	23.3
350	31	8,355	-31.6	37	294	27.4
300	31	9,427	-39.9	33	292	31.5
250	31	10,649	-48.5		292	39.0
200	31	12,097	-53.3		285	44.3
175	30	12,956	-53.1		290	41.6
150	30	13,948	-54.1		287	35.0
125	30	15,113	-55.4		291	26.6
100	30	16,536	-55.1		290	17.3
80	30	17,965	-53.7		300	12.2
70	30	18,823	-53.1		316	7.2
60	30	19,819	-52.5		310	5.6
50	30	21,000	-51.1		344	3.7
40	29	22,457	-49.6		63	2.9
30	28	24,346	-47.3		70	5.1
25	28	25,556	-45.8		72	6.0
20	28	27,048	-43.8		86	7.4
15	24	28,996	-41.4		76	9.9
10	18	31,792	-36.4		80	14.4
7	[illegible]	34,286	-32.7			

JACKSON, MISS.
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	94	21.6	92	262	.6
1000	31	139	21.8	89	256	1.0
950	31	587	22.0	75	241	4.3
900	31	1,056	19.2	74	238	5.2
850	31	1,546	16.4	74	242	7.0
800	31	2,061	13.5	70	246	8.2
750	31	2,598	10.7	66	247	7.8
700	31	3,176	7.8	57	256	7.4
650	31	3,780	4.6	52	262	6.0
600	31	4,433	.9	49	263	7.2
550	31	5,122	- 2.8	49	265	8.9
500	31	5,878	- 7.0	45	272	9.7
450	31	6,688	-12.0	34	268	9.5
400	31	7,585	-17.8	37	276	11.1
350	31	8,569	-24.8	38	281	13.2
300	31	9,672	-33.0	32	290	14.4
250	31	10,928	-42.9		295	15.3
200	31	12,395	-53.9		308	16.1
175	31	13,241	-59.6		309	15.2
150	31	14,192	-65.0		306	14.8
125	30	15,292	-68.3		315	7.2
100	30	16,632	-66.8		38	3.5
80	30	17,992	-63.3		74	9.5
70	30	18,816	-61.3		82	13.2
60	30	19,777	-59.1		84	18.1
50	30	20,926	-56.4		86	23.5
40	30	22,349	-54.1		93	27.4
30	30	24,209	-50.8		92	28.6
25	30	25,400	-49.0		89	31.7
20	29	26,871	-46.4		86	34.0
15	27	28,792	-43.7		88	38.5
10	9	31,553	-40.4			
7						
5						

* JACKSONVILLE, FLA.
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	23.4	93	263	1.9
1000	31	156	23.9	85	250	2.7
950	31	605	22.4	78	236	3.7
900	31	1,075	19.8	72	228	4.3
850	31	1,567	17.0	65	230	6.4
800	31	2,082	14.1	60	238	8.2
750	31	2,620	10.9	58	241	7.6
700	31	3,197	7.9	49	245	8.2
650	30	3,800	4.5	48	238	8.7
600	30	4,452	.9	51	240	8.9
550	30	5,137	- 3.0	47	246	9.1
500	30	5,896	- 7.1	43	243	8.9
450	30	6,704	-11.9	34	238	6.8
400	30	7,602	-17.9	30	247	7.8
350	30	8,587	-24.8	25	252	6.8
300	30	9,690	-33.1	25	262	5.6
250	30	10,945	-42.9		282	7.6
200	30	12,413	-54.2		291	8.9
175	30	13,258	-59.9		308	6.8
150	30	14,208	-64.8		337	4.7
125	30	15,311	-67.7		50	1.7
100	30	16,652	-67.5		64	6.0
80	30	18,008	-63.7		79	14.8
70	30	18,830	-61.5		82	19.6
60	30	19,791	-59.3		85	25.8
50	30	20,939	-56.9		91	30.7
40	30	22,359	-54.2		95	33.2
30	30	24,218	-50.6		94	32.2
25	30	25,410	-48.7		91	32.4
20	30	26,885	-45.9		86	36.9
15	26	28,807	-43.1		87	39.0
10	14	31,547	-38.9		89	39.6
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JOHN F. KENNEDY INT. ARPT.NY
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	20.4	80	307	2.7
1000	31	140	20.1	72	294	3.7
950	31	586	18.8	64	296	8.5
900	31	1,046	16.6	60	287	9.9
850	31	1,530	13.6	59	279	11.3
800	31	2,039	10.7	57	273	13.2
750	31	2,578	8.4	51	273	15.7
700	31	3,143	5.7	45	275	18.3
650	31	3,744	2.5	45	273	20.6
600	31	4,390	- .5	38	272	22.1
550	31	5,073	- 4.4	37	270	23.3
500	31	5,826	- 8.8	35	268	25.8
450	31	6,636	-14.0	33	268	28.6
400	31	7,519	-20.1	30	266	28.2
350	31	8,495	-27.3	29	266	31.9
300	31	9,586	-35.7	30	263	35.7
250	31	10,828	-45.5		264	39.6
200	31	12,282	-55.0		268	42.7
175	30	13,129	-58.1		269	42.5
150	30	14,094	-60.1		269	38.3
125	29	15,233	-60.8		268	30.9
100	29	16,621	-60.3		271	21.2
80	29	18,019	-58.0		289	7.2
70	29	18,862	-56.5		285	1.4
60	29	19,844	-54.9		76	2.9
50	29	21,014	-53.1		82	5.8
40	29	22,459	-50.8		85	10.3
30	29	24,346	-47.7		90	14.2
25	28	25,553	-45.8		89	15.5
20	21	27,039	-44.2		85	18.6
15	11	28,990	-40.3			
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JOHNSTON IS., PACIFIC AREA
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	3	26.6	78	94	11.8
1000	31	120	25.5	80	90	13.8
950	31	571	21.7	89	87	15.9
900	31	1,040	19.0	83	88	17.1
850	31	1,530	16.3	76	88	14.8
800	31	2,045	14.0	67	89	10.3
750	31	2,586	12.1	48	91	9.3
700	31	3,164	9.7	40	94	7.6
650	31	3,775	6.4	34	91	6.8
600	31	4,429	2.8	31	103	4.1
550	31	5,119	- 1.3	31	108	4.9
500	31	5,881	- 5.6	31	112	5.8
450	31	6,692	-10.8	33	116	3.7
400	31	7,595	-16.8	29	169	3.5
350	31	8,584	-23.8	28	226	6.2
300	31	9,691	-32.2	28	241	11.1
250	31	10,950	-42.6		241	15.2
200	31	12,416	-55.0		238	19.4
175	31	13,255	-62.0		236	20.4
150	31	14,192	-69.2		238	22.5
125	31	15,264	-74.6		241	17.1
100	28	16,564	-73.0		128	6.0
80	27	17,885	-69.0		88	22.9
70	27	18,688	-66.2		91	28.4
60	25	19,629	-63.4		90	30.5
50	25	20,759	-59.7		88	32.1
40	25	22,163	-57.3		90	34.4
30	25	24,003	-52.8		89	35.4
25	25	25,185	-50.8		89	35.2
20	25	26,647	-48.2		90	38.9
15	20	28,560	-45.4		88	46.2
10	7	31,266	-40.7			
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KEY WEST, FLORIDA
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	27.5	82	108	5.4
1000	30	144	26.3	83	113	7.0
950	30	592	22.7	83	118	8.0
900	30	1,066	20.2	72	111	8.2
850	30	1,558	17.4	67	107	7.0
800	30	2,074	14.7	62	128	5.6
750	30	2,610	11.6	57	124	4.5
700	30	3,192	8.3	53	119	4.9
650	30	3,797	4.8	54	129	4.5
600	30	4,449	1.2	49	132	4.3
550	30	5,136	- 2.7	45	136	2.7
500	30	5,893	- 7.4	44	106	3.7
450	30	6,698	-12.5	38	105	4.1
400	30	7,596	-18.3	39	102	5.8
350	30	8,578	-25.1	38	75	5.2
300	30	9,681	-33.4	33	78	4.5
250	30	10,935	-43.4		54	5.2
200	30	12,397	-55.4		62	6.8
175	30	13,237	-61.5		74	6.4
150	30	14,180	-66.8		73	8.7
125	30	15,273	-69.9		71	15.2
100	30	16,601	-69.2		82	21.0
80	30	17,942	-66.8		85	24.1
70	29	18,754	-64.7		84	30.1
60	29	19,700	-61.8		88	35.9
50	29	20,838	-58.8		93	37.9
40	28	22,247	-56.1		94	37.7
30	28	24,097	-51.6		92	37.9
25	27	25,289	-48.4		91	37.9
20	27	26,767	-46.3		90	37.9
15	26	28,692	-43.5		88	44.9
10	21	31,447	-39.1		69	44.5
7	12	33,883	-37.5		92	52.8
5	6	36,166	-34.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KING SALMON, ALASKA
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	15	8.2	96	154	6.0
1000	31	64			173	7.2
950	31	490	7.2	88	176	8.5
900	31	932	5.4	82	183	7.6
850	31	1,398	3.0	82	172	6.8
800	31	1,887	.2	84	173	7.6
750	31	2,403	- 2.4	79	171	6.8
700	31	2,948	- 5.6	79	168	6.6
650	31	3,525	- 8.7	72	179	6.8
600	31	4,143	-12.2	72	183	7.6
550	31	4,802	-16.5	66	182	10.3
500	31	5,514	-21.0	58	192	11.1
450	31	6,284	-26.0	53	186	12.6
400	31	7,129	-31.8	44	190	14.0
350	31	8,059	-38.7	45	187	15.9
300	31	9,101	-46.1		199	19.6
250	30	10,297	-51.2		215	18.5
200	30	11,758	-47.1		240	17.7
175	30	12,643	-46.9		250	17.1
150	30	13,664	-47.2		248	16.7
125	30	14,868	-47.8		251	15.2
100	30	16,338	-48.3		245	13.4
80	30	17,807	-48.3		244	10.3
70	29	18,685	-48.1		235	8.7
60	29	19,702	-48.1		236	7.8
50	29	20,904	-48.0		230	6.6
40	28	22,376	-47.7		231	3.7
30	28	24,277	-47.3		262	1.6
25	26	25,485	-46.7		278	.8
20	21	26,964	-45.6		320	.8
15	13	28,874	-44.0		331	2.9
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KOROR, CAROLINE IS.
+ 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	28.0	82	229	1.9
1000	31	90	27.2	79	215	1.9
950	31	539	23.6	77	217	4.5
900	31	1,014	20.8	73	210	4.1
850	31	1,507	18.1	70	205	3.9
800	31	2,025	15.4	66	178	3.1
750	31	2,569	12.6	61	157	3.3
700	31	3,148	9.7	58	133	4.9
650	31	3,757	6.0	57	119	6.0
600	31	4,412	2.2	54	113	8.4
550	31	5,106	- 1.6	50	102	8.9
500	31	5,864	- 5.7	45	100	9.3
450	31	6,683	-10.4	40	100	12.2
400	31	7,582	-15.8	37	93	13.6
350	31	8,575	-22.7	32	89	15.9
300	31	9,688	-30.9	28	84	19.6
250	31	10,954	-41.1		80	26.0
200	31	12,429	-53.4		75	32.4
175	31	13,274	-60.5		72	35.2
150	31	14,217	-68.1		71	37.7
125	31	15,290	-75.9		73	36.9
100	30	16,566	-77.4		80	30.7
80	30	17,872	-69.6		85	28.4
70	30	18,676	-65.1		86	23.7
60	29	19,621	-62.0		89	20.4
50	29	20,754	-59.5		82	14.0
40	29	22,161	-56.0		88	11.7
30	29	24,004	-52.5		92	8.0
25	29	25,189	-50.2		87	8.2
20	28	26,655	-48.3		101	13.0
15	28	28,560	-45.9		103	19.0
10	24	31,269	-42.6		96	35.2
7	15	33,681	-39.1			
5	5	35,974	-36.1			

KOTZEBUE, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	9.8	83	68	3.3
1000	31	62	9.9	77	74	3.7
950	31	489	8.7	68	[illegible]	5.2
900	31	934	5.7	72	146	5.8
850	31	1,400	2.8	71	156	5.6
800	31	1,888	- .3	72	167	6.2
750	31	2,400	- 3.6	67	169	6.2
700	31	2,944	- 7.0	65	172	6.4
650	31	3,515	-10.3	59	170	6.4
600	31	4,131	-14.3	53	176	5.6
550	31	4,782	-18.6	50	184	5.6
500	31	5,489	-23.6	54	179	6.6
450	31	6,245	-28.9	53	196	7.4
400	31	7,085	-35.0	52	204	8.7
350	31	8,004	-41.6	38	214	8.2
300	31	9,034	-48.2		233	9.9
250	31	10,223	-51.5		242	8.5
200	30	11,688	-48.1		252	6.8
175	30	12,571	-46.6		262	7.4
150	30	13,595	-46.2		260	6.2
125	30	14,806	-46.6		258	5.4
100	30	16,286	-46.7		267	4.7
80	30	17,765	-46.7		237	2.1
70	30	18,650	-46.7		237	3.1
60	30	19,673	-46.6		251	2.3
50	30	20,883	-46.5		215	1.2
40	30	22,364	-46.4		294	1.0
30	29	24,273	-45.9		167	1.0
25	29	25,489	-45.0		80	1.2
20	29	26,984	-44.0		74	2.1
15	22	28,952	-41.5		80	4.5
10	8	31,754	-38.0			
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KWAJALEIN, MARSHALL IS.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	27.3	83	86	1.9
1000	31	99	26.8	85	92	4.1
950	31	552	23.8	90	94	6.6
900	31	1,024	20.7	88	97	8.0
850	31	1,518	18.1	85	93	9.5
800	31	2,035	15.5	79	90	11.3
750	31	2,581	13.0	73	89	11.5
700	31	3,161	9.9	67	88	12.6
650	31	3,771	6.3	62	86	13.0
600	31	4,423	2.7	54	87	14.2
550	31	5,122	- 1.2	55	91	15.2
500	31	5,880	- 5.4	46	87	15.0
450	31	6,695	-10.1	40	92	14.2
400	31	7,599	-15.7	36	88	12.6
350	31	8,587	-23.0	33	91	10.7
300	31	9,703	-31.6	34	93	8.7
250	31	10,966	-41.9		93	7.4
200	31	12,435	-54.4		91	3.5
175	31	13,270	-61.4		106	1.9
150	31	14,215	-69.1		308	.6
125	31	15,279	-75.8		130	.8
100	29	16,567	-77.4		88	12.8
80	26	17,867	-70.3		93	22.7
70	25	18,667	-66.7		92	18.1
60	25	19,607	-63.4		88	18.8
50	25	20,742	-59.2		86	16.5
40	25	22,144	-56.2		87	16.1
30	25	23,994	-52.7		78	15.7
25	24	25,165	-51.5		85	13.4
20	24	26,625	-48.7		86	17.9
15	22	28,512	-46.5		87	24.3
10	19	31,224	-43.2		89	45.1
7	5	33,641	-39.7			
5						

LAKE CHARLES, LA.
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	23.9	89	106	1.7
1000	31	136	24.7	86	141	2.9
950	31	588	22.0	81	193	5.6
900	31	1,054	19.2	76	202	5.4
850	31	1,545	16.5	72	215	5.6
800	31	2,060	13.8	67	224	4.9
750	31	2,600	11.0	61	241	4.5
700	31	3,176	7.9	61	262	4.7
650	31	3,785	4.7	56	259	5.8
600	31	4,434	1.0	52	259	6.2
550	31	5,126	- 2.9	53	258	6.0
500	31	5,885	- 7.1	44	261	4.9
450	31	6,694	-11.9	36	284	3.5
400	31	7,588	-17.7	39	295	5.6
350	31	8,575	-24.4	32	301	6.6
300	31	9,679	-32.8	29	305	7.6
250	31	10,937	-42.6		314	10.7
200	31	12,406	-54.2		335	12.2
175	31	13,251	-59.9		343	10.9
150	31	14,200	-65.7		347	10.3
125	31	15,295	-69.5		2	8.2
100	31	16,627	-67.7		57	6.8
80	31	17,981	-64.1		76	13.6
70	31	18,801	-62.0		85	18.6
60	31	19,759	-59.6		82	23.7
50	31	20,906	-56.7		87	28.9
40	30	22,328	-54.4		91	30.3
30	29	24,183	-50.9		90	34.6
25	29	25,375	-48.8		89	36.3
20	28	26,847	-46.1		86	37.9
15	24	28,774	-43.1		85	41.4
10	7	31,497	-38.9			
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LANDER, WYO.
832 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,696	13.6	55	237	2.3
1000	31	110				
950	31	550				
900	31	1,019				
850	31	1,511				
800	31	2,026	15.8	44	281	2.5
750	31	2,566	13.0	43	242	4.9
700	31	3,148	9.6	40	263	8.5
650	31	3,753	5.3	40	267	13.0
600	31	4,407	.2	43	270	16.5
550	31	5,085	- 5.1	44	270	20.6
500	31	5,841	-10.3	40	272	22.9
450	31	6,639	-15.7	35	270	25.3
400	31	7,524	-21.9	35	266	28.4
350	31	8,493	-29.1	33	265	31.5
300	31	9,575	-37.7	33	262	35.9
250	31	10,809	-46.4		259	42.9
200	31	12,263	-54.1		259	51.3
175	31	13,115	-56.4		263	50.3
150	31	14,087	-59.2		265	41.6
125	30	15,224	-62.2		271	24.5
100	30	16,601	-61.7		276	11.8
80	30	17,990	-59.1		289	5.4
70	30	18,831	-56.9		276	2.1
60	30	19,811	-55.5		81	2.3
50	30	20,977	-53.8		79	4.7
40	28	22,413	-51.7		78	7.6
30	26	24,291	-48.7		81	11.8
25	26	25,494	-47.0		88	13.2
20	24	26,977	-44.9		86	11.8
15	18	28,891	-42.2		83	14.2
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LAS VEGAS, NEV.
935 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	660	26.5	31	222	5.2
1000	31	57				
950	31	516				
900	31	996	28.7	28	223	8.2
850	31	1,502	25.9	29	235	8.9
800	31	2,031	22.0	30	223	8.7
750	31	2,582	17.6	33	207	9.3
700	31	3,172	12.8	35	191	9.9
650	31	3,783	7.8	41	183	8.9
600	31	4,442	2.5	45	167	7.2
550	31	5,131	- 2.8	43	170	6.0
500	31	5,887	- 7.3	30	237	7.6
450	31	6,695	-12.5	26	253	12.8
400	31	7,589	-18.9	23	258	17.9
350	31	8,570	-25.7	23	256	21.8
300	31	9,669	-33.6	26	253	27.8
250	31	10,925	-42.3		249	32.8
200	31	12,401	-52.3		247	38.1
175	31	13,254	-57.6		249	37.7
150	31	14,214	-63.1		250	32.8
125	30	15,324	-67.3		261	23.5
100	30	16,665	-67.3		270	9.7
80	29	18,023	-62.4		98	2.1
70	29	18,852	-59.6		94	6.0
60	28	19,819	-57.2		92	10.3
50	28	20,978	-55.2		89	12.4
40	26	22,408	-53.0		86	16.9
30	25	24,273	-50.5		88	21.4
25	24	25,465	-48.5		89	24.3
20	23	26,939	-46.1		87	25.3
15	15	28,848	-43.3		87	25.4
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* LIHUE, HAWAII
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	36	24.0	87	63	10.1
1000	31	147	23.6	84	65	12.8
950	31	589	20.2	90	71	16.1
900	31	1,060	16.8	90	72	15.7
850	31	1,546	13.8	92	70	14.0
800	31	2,057	12.3	54	79	13.6
750	31	2,596	10.8	36	85	10.7
700	31	3,170	8.5	32	93	6.8
650	31	3,773	5.1	33	96	4.5
600	31	4,428	2.3	28	96	1.9
550	31	5,119	- 1.6	25	129	.4
500	31	5,879	- 6.3	21	291	3.1
450	31	6,691	-11.6	22	286	4.3
400	31	7,587	-17.8	24	279	8.2
350	31	8,571	-25.1	26	273	13.4
300	31	9,672	-33.8	29	273	19.4
250	31	10,923	-43.9		273	24.5
200	31	12,382	-55.6		268	34.2
175	31	13,219	-62.0		266	36.9
150	31	14,158	-67.9		264	30.1
125	30	15,244	-71.4		247	15.5
100	28	16,568	-69.1		120	4.3
80	27	17,909	-66.5		93	20.2
70	27	18,720	-64.2		92	26.0
60	26	19,670	-62.3		87	32.6
50	26	20,862	-59.6		91	37.1
40	24	22,207	-56.3		90	37.7
30	24	24,049	-52.9		89	38.9
25	24	25,229	-51.0		89	41.0
20	21	26,688	-48.2		93	40.8
15	21	28,599	-44.5		88	44.5
10	19	31,342	-40.7		89	46.4
7	16	33,786	-36.8		90	53.0
5	13	36,125	-34.2			

LITTLE ROCK, ARK.
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	21.3	89	245	1.4
1000	31	138	21.5	86	249	1.4
950	31	588	21.7	70	241	5.4
900	31	1,054	18.9	71	258	7.0
850	31	1,543	15.9	72	267	6.4
800	31	2,057	13.3	64	278	7.2
750	31	2,593	10.4	61	286	7.8
700	31	3,171	7.5	56	276	7.6
650	31	3,773	4.0	60	268	7.4
600	31	4,426	.5	54	265	8.2
550	31	5,110	- 3.3	50	266	9.7
500	31	5,869	- 7.7	53	269	10.5
450	31	6,675	-12.6	51	280	10.9
400	31	7,572	-18.6	44	284	12.0
350	31	8,555	-25.5	44	281	13.0
300	31	9,655	-33.4	38	287	15.9
250	31	10,910	-42.9		298	21.6
200	30	12,377	-53.8		304	22.3
175	30	13,225	-58.8		302	18.6
150	30	14,183	-63.1		299	15.0
125	30	15,294	-66.3		302	8.4
100	30	16,645	-65.3		325	5.6
80	30	18,011	-62.4		59	9.4
70	30	18,840	-60.4		70	9.3
60	30	19,804	-58.2		81	12.8
50	30	20,957	-55.8		91	16.5
40	30	22,384	-53.5		90	20.8
30	30	24,247	-50.3		89	24.1
25	29	25,443	-48.1		87	25.6
20	27	26,924	-46.1		87	29.7
15	24	28,842	-43.7		92	31.7
10	18	31,588	-40.1		89	33.2
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MCGRATH, ALASKA
996 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	103	8.1	89	225	1.6
1000	31	65				
950	31	490	9.9	75	185	3.5
900	31	939	7.7	71	198	6.6
850	31	1,408	4.8	75	189	8.2
800	31	1,900	1.4	80	188	10.1
750	31	2,413	- 1.8	77	183	8.7
700	31	2,963	- 5.1	72	182	9.1
650	31	3,535	- 8.8	71	179	9.3
600	31	4,158	-12.5	65	177	9.7
550	31	4,810	-16.6	60	178	10.3
500	31	5,527	-21.6	58	177	10.9
450	31	6,285	-26.9	53	190	11.7
400	31	7,136	-32.7	56	195	12.8
350	31	8,063	-39.4	51	207	15.0
300	31	9,102	-47.0		213	15.0
250	31	10,293	-52.1		218	18.5
200	31	11,749	-47.6		241	12.8
175	31	12,634	-46.6		239	13.0
150	31	13,657	-46.4		244	12.4
125	31	14,866	-47.0		248	11.7
100	31	16,345	-47.0		245	8.9
80	31	17,821	-47.0		232	7.0
70	31	18,705	-46.9		222	6.0
60	31	19,726	-46.7		222	5.2
50	31	20,934	-46.5		223	5.4
40	31	22,414	-46.2		235	3.7
30	30	24,324	-45.8		233	1.4
25	30	25,538	-45.2		215	.8
20	30	27,030	-44.2		315	.8
15	26	28,970	-42.1		69	1.9
10	13	31,780	-37.9			
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MAJURO, MARSHALL IS.
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	28.9	79	95	4.5
1000	31	96	27.5	74	99	5.2
950	31	543	23.4	73	102	8.0
900	31	1,020	20.8	67	107	9.3
850	31	1,513	18.1	64	101	10.1
800	31	2,031	15.6	60	93	11.5
750	31	2,578	13.1	54	92	11.8
700	31	3,155	9.8	52	88	13.2
650	31	3,767	6.3	50	85	14.6
600	31	4,420	2.5	50	85	15.2
550	31	5,115	- 1.2	45	90	16.1
500	31	5,874	- 5.1	35	91	16.3
450	31	6,693	- 9.7	31	89	15.7
400	31	7,598	-15.2	29	88	14.4
350	31	8,594	-22.0	26	90	14.0
300	31	9,710	-30.3	26	80	11.5
250	31	10,981	-40.5	25	88	10.7
200	31	12,460	-53.3		86	7.0
175	31	13,306	-60.3		78	4.3
150	30	14,249	-67.8		150	1.7
125	30	15,327	-74.4		171	1.4
100	30	16,613	-76.6		92	12.2
80	30	17,920	-69.7		88	20.6
70	30	18,725	-64.7		90	17.3
60	30	19,673	-61.8		97	15.2
50	30	20,811	-58.5		97	11.7
40	30	22,224	-55.4		102	10.3
30	28	24,076	-51.6		131	5.2
25	28	25,266	-49.1		103	8.4
20	26	26,740	-47.0		91	10.3
15	25	28,661	-43.6		97	17.7
10	16	31,411	-41.0			
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MARCUS IS., N. PACIFIC
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	9	29.7	75	105	6.2
1000	31	100	28.3	75	108	5.8
950	31	552	23.8	76	120	6.2
900	31	1,026	21.1	70	118	5.8
850	31	1,520	18.3	68	122	5.2
800	31	2,038	15.7	63	126	5.2
750	31	2,583	12.9	56	119	5.2
700	31	3,162	9.8	52	105	4.3
650	31	3,772	6.3	46	116	3.3
600	31	4,427	2.5	46	117	3.3
550	31	5,120	- 1.4	42	123	4.1
500	31	5,880	- 5.8	39	129	4.9
450	31	6,692	-10.6	37	117	3.9
400	31	7,596	-16.2	34	103	3.3
350	31	8,588	-22.9	32	46	2.3
300	31	9,699	-31.1	28	6	3.7
250	31	10,965	-41.1	28	339	5.8
200	30	12,440	-53.2		348	11.5
175	30	13,288	-59.8		356	13.0
150	30	14,237	-65.7		24	15.2
125	30	15,330	-70.5		50	19.2
100	30	16,653	-69.9		70	23.7
80	29	17,995	-65.9		80	27.0
70	29	18,809	-63.8		85	31.5
60	29	19,759	-61.6		89	35.9
50	29	20,897	-58.5		88	38.7
40	29	22,312	-55.1		88	41.0
30	27	24,163	-51.6		90	44.9
25	25	25,358	-49.3		92	48.0
20	18	26,836	-46.1		95	46.6
15	9	28,757	-43.7			
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* MEDFORD, OREG.
969 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	401	13.7	68	283	1.4
1000	31	135				
950	31	574	16.7	53	294	2.1
900	31	1,032	15.9	52	317	1.7
850	31	1,516	14.4	51	65	1.4
800	31	2,027	13.1	41	155	.4
750	31	2,564	10.5	37	240	5.4
700	31	3,138	7.0	36	236	9.5
650	31	3,740	3.3	31	240	12.6
600	31	4,388	- .7	28	235	14.8
550	31	5,070	- 5.3	26	243	16.3
500	31	5,818	-10.7	25	245	17.3
450	31	6,613	-16.8	26	250	18.1
400	31	7,493	-23.5	30	255	21.2
350	31	8,455	-31.0	30	254	24.1
300	31	9,531	-39.0	28	254	28.2
250	31	10,759	-47.2		250	34.0
200	31	12,214	-53.2		249	37.7
175	31	13,072	-54.5		252	37.7
150	31	14,054	-57.2		255	33.8
125	31	15,200	-59.5		259	24.5
100	31	16,593	-60.2		261	13.8
80	31	17,988	-58.9		277	5.2
70	31	18,829	-57.1		301	1.2
60	31	19,849	-55.5		68	3.5
50	31	20,975	-54.1		84	4.3
40	31	22,413	-52.5		90	7.0
30	30	24,283	-50.1		82	9.1
25	30	25,479	-48.5		79	11.8
20	30	26,955	-46.3		85	15.2
15	29	28,881	-43.7		87	16.5
10	26	31,638	-39.5		92	17.3
7	19	34,109	-35.0		88	21.4
5	6	36,463	-30.4			

MERIDA, MEXICO
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	23.1	98	98	4.9
1000	31	142	24.5	95	108	10.5
950	31	591	23.2	81	124	15.9
900	31	1,064	20.9	67	124	15.3
850	31	1,558	18.4	58	121	13.4
800	31	2,075	15.5	53	121	10.9
750	31	2,612	12.3	49	122	11.5
700	31	3,196	9.0	45	122	10.3
650	31	3,799	5.2	46	120	10.7
600	31	4,455	1.3	50	108	9.3
550	31	5,138	- 2.5	49	89	8.0
500	31	5,902	- 6.8	42	86	8.7
450	31	6,709	-11.7	36	83	8.7
400	31	7,611	-17.4	37	81	7.2
350	31	8,597	-24.4	30	69	6.2
300	31	9,701	-32.7	24	54	5.2
250	31	10,958	-42.5		33	2.3
200	30	12,426	-54.3		8	1.2
175	30	13,268	-60.7		4	1.9
150	30	14,212	-67.1		46	8.5
125	30	15,301	-70.4		59	15.3
100	29	16,620	-71.0		77	22.9
80	29	17,951	-67.8		89	28.0
70	29	18,759	-64.8		89	31.1
60	28	19,707	-62.0		90	37.9
50	28	20,843	-58.6		92	40.8
40	28	22,257	-54.9		96	39.0
30	27	24,107	-51.5		97	37.1
25	21	25,299	-48.2		93	36.3
20	19	26,777	-45.8		88	37.1
15	15	28,694	-43.6		87	46.6
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* MIAMI, FLA.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	24.7	93	88	1.4
1000	31	142	25.9	85	112	3.1
950	31	593	22.9	84	126	7.6
900	31	1,065	20.1	76	127	6.8
850	31	1,557	17.3	66	121	6.2
800	31	2,073	14.2	65	115	5.1
750	31	2,613	11.4	57	119	4.1
700	31	3,191	8.3	52	132	4.1
650	31	3,796	4.8	49	140	3.3
600	31	4,449	1.2	44	136	3.9
550	31	5,136	- 2.9	38	119	3.5
500	31	5,894	- 7.6	41	145	2.9
450	31	6,702	-12.5	40	95	2.7
400	31	7,598	-18.2	36	102	3.3
350	31	8,582	-25.0	35	76	3.7
300	31	9,684	-33.3	31	80	3.3
250	31	10,939	-43.3		44	4.9
200	31	12,402	-55.1		44	9.3
175	29	13,239	-61.5		47	11.7
150	29	14,182	-66.1		48	10.9
125	29	15,283	-68.7		59	11.8
100	29	16,612	-69.0		74	15.5
80	27	17,956	-66.1		78	20.6
70	27	18,768	-64.1		80	28.2
60	27	19,718	-61.7		86	35.4
50	27	20,854	-59.1		91	39.8
40	27	22,263	-55.7		94	42.0
30	27	24,114	-50.7		97	41.0
25	27	25,308	-48.3		93	39.2
20	25	26,788	-45.8		87	37.7
15	21	28,715	-42.7		85	42.3
10	13	31,478	-38.9		90	51.5
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See reference note at end of table

RAWINSONDE DATA

Average monthly values

	* MIDLAND, TEXAS 916 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	874	20.5	79	106	4.5
1000	31	106				
950	31	555				
900	31	1,026	20.3	76	128	7.6
850	31	1,520	19.2	70	176	14.4
800	31	[illegible]	16.6	67	188	9.1
750	31	2,591	13.5	63	207	5.1
700	31	3,167	10.1	55	222	2.9
650	31	3,781	6.1	57	236	3.7
600	31	4,432	1.6	63	241	2.1
550	31	5,124	- 2.8	58	212	.8
500	31	5,879	- 7.0	54	277	2.1
450	31	6,692	-11.6	42	285	3.9
400	31	7,589	-17.2	45	300	6.6
350	31	8,578	-23.8	35	301	8.9
300	31	9,685	-32.3	35	308	13.2
250	31	10,945	-42.1		311	19.6
200	31	12,417	-53.5		316	23.1
175	29	13,264	-59.5		318	22.7
150	29	14,217	-65.3		323	19.6
125	29	15,312	-69.9		336	12.6
100	28	16,638	-69.6		35	4.9
80	28	17,985	-64.5		83	10.3
70	27	18,807	-61.5		86	16.1
60	27	19,767	-59.3		90	20.2
50	27	20,915	-56.9		93	23.9
40	27	22,336	-54.2		92	27.0
30	26	24,194	-50.8		88	31.9
25	26	25,387	-48.5		89	32.2
20	26	26,863	-45.9		88	35.4
15	25	28,794	-42.4		90	35.9
10	11	31,552	-39.3			
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	MONTERREY, MEXICO 965 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	423	22.7	88	114	1.7
1000	31	109				
950	31	560	22.2	88	110	2.7
900	31	1,029	20.1	86	132	8.0
850	31	1,523	18.8	68	138	13.0
800	31	2,042	16.7	56	141	12.8
750	31	2,590	13.6	54	147	7.4
700	31	3,169	9.9	56	146	4.5
650	31	3,782	6.0	59	136	2.7
600	31	4,433	1.8	59	108	3.1
550	31	5,119	- 2.6	63	94	3.7
500	31	5,880	- 7.1	56	87	5.4
450	31	6,692	-11.7	46	79	6.4
400	31	7,590	-17.0	38	71	6.6
350	31	8,579	-23.9	32	55	6.0
300	31	9,687	-32.1	31	36	8.0
250	31	10,947	-42.4		24	10.5
200	31	12,416	-54.6		27	13.4
175	31	13,259	-61.0		29	17.3
150	31	14,201	-67.4		32	19.2
125	31	15,288	-71.8		46	16.9
100	30	16,600	-71.3		65	17.5
80	28	17,936	-66.4		79	23.1
70	27	18,749	-64.0		83	23.9
60	25	19,700	-61.6		81	28.6
50	22	20,835	-58.7		83	33.4
40	20	22,244	-55.9		83	37.5
30	16	24,093	-51.2		85	40.8
25	15	25,286	-48.9		84	40.0
20	9	26,750	-46.4			
15						
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	MONTGOMERY, ALA. 1010 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	21.5	95	104	.8
1000	31	144	22.0	90	110	.6
950	31	594	22.2	79	242	3.5
900	31	1,062	19.5	75	237	4.5
850	31	1,553	16.9	71	239	5.4
800	31	2,069	14.0	66	256	6.2
750	31	2,610	11.2	61	262	7.0
700	31	3,185	8.0	57	253	7.6
650	31	3,795	5.0	48	255	7.6
600	31	4,443	1.2	48	264	8.7
550	31	5,135	- 2.7	46	259	9.1
500	31	5,890	- 6.9	42	259	9.7
450	31	6,705	-11.6	35	262	9.1
400	31	7,599	-17.5	32	268	10.7
350	31	8,585	-24.4	32	271	11.7
300	31	9,689	-32.8	31	283	11.3
250	31	10,946	-42.7		284	13.0
200	31	12,415	-53.8		292	13.8
175	31	13,262	-59.3		295	13.8
150	31	14,215	-64.3		298	11.5
125	31	15,321	-67.3		291	6.6
100	31	16,665	-66.0		16	1.7
80	31	18,028	-62.1		80	10.3
70	31	18,857	-60.3		77	12.4
60	29	19,813	-58.2		81	16.7
50	28	20,973	-55.8		86	22.3
40	28	22,402	-53.1		91	25.6
30	28	24,271	-49.5		91	28.7
25	28	25,469	-47.7		86	29.3
20	27	26,949	-45.4		83	31.9
15	22	28,875	-42.2		88	35.0
10	18	31,642	-37.4		85	34.8
7	16	34,113	-34.6		89	38.9
5	13	36,464	-29.4			

	* NANTUCKET, MASS. 1014 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	14	18.9	90	244	1.9
1000	31	134	18.8	80	243	5.1
950	31	571	18.0	62	271	9.5
900	31	1,036	15.7	59	273	10.9
850	31	1,520	12.8	60	270	14.4
800	31	2,027	10.5	51	270	15.3
750	31	2,560	8.1	47	271	18.1
700	31	3,130	5.5	46	271	18.6
650	31	3,727	2.4	41	270	22.9
600	31	4,375	- 1.1	33	269	23.5
550	31	5,056	- 5.1	34	266	25.8
500	31	5,808	- 9.3	33	266	28.4
450	31	6,608	-14.5	30	266	31.1
400	31	7,498	-20.5	30	265	32.8
350	31	8,473	-27.4	24	262	36.5
300	31	9,564	-35.7	25	262	40.6
250	31	10,806	-45.3		259	45.8
200	31	12,261	-55.1		261	46.8
175	31	13,106	-58.1		260	44.7
150	31	14,073	-59.5		261	38.9
125	31	15,210	-60.7		263	33.4
100	31	16,601	-59.3		265	23.5
80	31	18,002	-57.7		266	8.7
70	31	18,847	-55.8		266	3.9
60	31	19,833	-54.0		127	.8
50	30	21,006	-52.5		81	5.1
40	30	22,454	-50.5		82	7.4
30	29	24,340	-47.8		87	12.6
25	25	25,550	-46.2		84	15.5
20	24	27,041	-44.3		85	18.1
15	22	28,977	-41.5		86	21.4
10	15	31,765	-37.0		95	19.2
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	* NASHVILLE, TENN. 996 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	177	19.6	94	124	1.7
1000	31	144				
950	31	589	20.5	75	229	2.9
900	31	1,054	17.7	78	252	5.4
850	31	1,541	14.5	78	261	6.6
800	31	2,052	11.9	68	266	9.3
750	31	2,591	9.6	61	263	9.7
700	31	3,161	6.8	56	260	9.5
650	31	3,766	3.6	47	266	10.5
600	31	4,413	.0	47	270	10.7
550	31	5,099	- 4.0	42	267	10.7
500	31	5,851	- 8.3	43	266	12.0
450	31	6,657	-13.4	37	268	13.4
400	31	7,547	-19.3	39	273	14.4
350	31	8,527	-26.2	33	276	15.5
300	31	9,623	-34.2	29	273	18.6
250	31	10,874	-43.6		281	21.6
200	31	12,341	-53.6		287	24.9
175	31	13,190	-58.3		288	23.3
150	30	14,148	-62.1		283	21.6
125	29	15,266	-64.4		276	14.6
100	29	16,631	-63.5		272	8.2
80	29	18,010	-60.6		322	1.6
70	29	18,843	-59.1		69	5.4
60	29	19,812	-57.1		83	10.1
50	29	20,973	-54.5		88	14.2
40	29	22,410	-51.9		91	15.9
30	29	24,286	-49.2		93	18.1
25	28	25,487	-47.4		86	20.2
20	26	26,971	-45.1		82	23.3
15	25	28,902	-42.5		90	26.0
10	21	31,664	-38.6		83	28.0
7	8	34,111	-35.5			
5						

	NOME, ALASKA 1006 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	7	8.3	83	357	3.1
1000	31	51			338	2.9
950	31	476	7.6	73	79	5.2
900	31	919	4.8	75	120	4.7
850	31	1,383	2.2	70	115	4.7
800	31	1,871	- .5	72	128	5.6
750	31	2,384	- 3.3	66	131	4.1
700	31	2,929	- 6.2	60	152	3.5
650	31	3,503	- 9.7	55	130	2.9
600	31	4,119	-13.7	53	150	2.9
550	31	4,774	-18.0	56	148	3.5
500	31	5,482	-22.9	52	162	2.9
450	31	6,244	-28.1	52	192	2.3
400	31	7,083	-33.9	49	239	3.7
350	31	8,006	-40.7	41	241	4.9
300	31	9,040	-47.6		255	5.2
250	31	10,231	-51.6		243	5.1
200	31	11,692	-47.4		261	5.4
175	31	12,577	-46.3		266	6.6
150	31	13,601	-46.6		269	5.2
125	31	14,810	-46.8		264	5.8
100	31	16,288	-47.0		271	5.1
80	31	17,765	-47.1		247	3.1
70	31	18,648	-47.1		242	2.9
60	30	19,669	-46.9		243	2.5
50	30	20,877	-46.8		261	1.7
40	30	22,357	-46.5		215	1.4
30	30	24,269	-45.9		105	1.2
25	29	25,481	-45.3		175	.8
20	27	26,975	-44.1		109	1.2
15	23	28,924	-42.1		101	3.1
10	12	31,685	-38.8			
7						

	* NORTH PLATTE, NEBR. 919 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	848	14.0	92	120	1.7
1000	31	123				
950	31	561				
900	31	1,022	16.2	77	160	3.5
850	31	1,510	16.8	64	222	8.4
800	31	2,025	14.5	58	239	8.5
750	31	2,565	11.4	52	262	10.1
700	31	3,142	7.7	51	275	11.1
650	31	3,746	3.7	50	284	11.8
600	31	4,394	- .5	43	293	13.8
550	31	5,079	- 5.0	41	298	16.1
500	31	5,827	- 9.7	41	292	18.1
450	31	6,631	-15.0	36	285	19.8
400	31	7,514	-21.0	34	281	22.0
350	31	8,487	-28.0	33	279	27.4
300	31	9,576	-36.1	35	277	31.5
250	31	10,817	-45.3		271	36.3
200	31	12,275	-54.3		279	40.8
175	30	13,116	-58.2		282	40.6
150	30	14,080	-60.7		286	34.8
125	29	15,210	-63.4		286	24.9
100	29	16,582	-62.5		283	13.2
80	29	17,966	-59.4		267	4.9
70	29	18,805	-57.2		296	2.1
60	29	19,785	-55.8		69	3.3
50	29	20,949	-54.1		76	6.2
40	28	22,387	-52.1		80	9.3
30	28	24,261	-49.3		81	10.5
25	28	25,462	-47.5		79	12.4
20	27	26,943	-45.2		88	15.3
15	24	28,878	-42.5		92	17.1
10	10	31,647	-39.1			
7						

	* OAKLAND, CALIF. 1013 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	15.3	82	307	4.5
1000	31	111	13.4	87	288	4.5
950	31	552	16.9	59	269	6.0
900	31	1,011	22.2	24	284	7.4
850	31	1,505	20.4	24	272	5.2
800	31	2,025	17.4	24	256	4.9
750	31	2,567	14.0	24	244	5.6
700	31	3,150	10.2	24	240	6.2
650	31	3,756	6.0	26	238	6.8
600	31	4,411	1.4	27	242	8.4
550	31	5,099	- 3.4	27	251	10.1
500	31	5,853	- 8.8	34	250	13.2
450	31	6,655	-14.9	32	252	16.7
400	31	7,542	-21.7	30	249	18.8
350	31	8,511	-28.6	28	254	25.6
300	31	9,597	-36.5	27	256	30.1
250	31	10,839	-44.6		251	35.5
200	31	12,304	-53.0		247	41.6
175	31	13,156	-57.3		248	40.8
150	31	14,120	-61.6		251	35.5
125	31	15,238	-65.2		256	27.0
100	31	16,596	-64.9		263	12.8
80	31	17,966	-61.4		55	1.6
70	31	18,797	-59.4		88	3.9
60	31	19,765	-57.5		89	6.8
50	31	20,921	-55.6		89	9.5
40	31	22,347	-53.7		88	13.6
30	31	24,204	-51.3		86	18.6
25	30	25,392	-49.6		88	20.4
20	28	26,859	-47.0		87	21.6
15	28	28,775	-44.3		88	22.3
10	22	31,516	-40.2		88	22.9
7	8	33,986	-36.0			

	OKLAHOMA CITY, OKLA. 969 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	392	20.9	86	135	3.3
1000	31	121				
950	31	571	21.0	78	166	7.4
900	31	1,035	19.6	69	205	10.9
850	31	1,526	17.0	66	220	8.7
800	31	2,042	14.3	67	245	6.8
750	31	2,581	11.3	63	260	6.8
700	31	3,159	7.8	62	277	6.8
650	31	3,762	4.2	63	287	5.8
600	31	4,415	.4	59	288	5.2
550	31	5,101	- 3.5	51	286	6.6
500	31	5,856	- 7.7	49	296	6.6
450	31	6,662	-12.7	51	306	8.0
400	31	7,559	-18.4	42	311	9.1
350	31	8,541	-25.6	44	298	13.2
300	31	9,641	-33.8	39	294	17.5
250	31	10,895	-43.3		294	20.6
200	31	12,363	-53.6		302	22.9
175	31	13,212	-58.5		303	23.9
150	31	14,169	-63.2		305	24.1
125	31	15,281	-66.1		305	14.8
100	31	16,632	-66.1		309	6.4
80	31	18,000	-61.4		49	3.1
70	31	18,830	-59.6		78	8.5
60	31	19,798	-57.5		89	12.0
50	31	20,955	-55.2		89	16.5
40	31	22,387	-52.7		89	20.0
30	31	24,260	-49.3		86	22.5
25	31	25,459	-47.7		85	25.8
20	29	26,945	-45.0		87	29.3
15	24	28,880	-41.6		86	29.5
10	8	31,624	-37.5			
7						

	OMAHA, NEBR. 969 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	403	16.5	89	187	2.7
1000	31	131				
950	31	570	18.5	78	209	4.5
900	31	1,035	17.4	68	247	7.6
850	31	1,521	14.9	63	268	7.0
800	31	2,033	12.1	58	278	10.5
750	31	2,567	9.8	48	290	11.7
700	31	3,142	7.0	46	285	12.6
650	31	3,740	3.3	46	282	15.3
600	31	4,393	- .7	43	288	18.1
550	31	5,075	- 4.6	37	290	18.5
500	31	5,828	- 9.3	32	288	19.0
450	31	6,629	-14.6	33	286	21.2
400	31	7,518	-20.9	30	282	24.9
350	31	8,492	-27.7	29	282	31.1
300	31	9,582	-35.7	26	282	37.3
250	31	10,827	-44.7		282	41.2
200	31	12,291	-53.7		278	41.2
175	31	13,141	-57.5		282	38.9
150	31	14,109	-60.0		285	32.6
125	31	15,241	-62.1		287	23.7
100	31	16,620	-61.2		287	14.4
80	30	18,012	-58.6		301	5.4
70	30	18,853	-56.7		347	2.9
60	30	19,834	-54.8		61	2.5
50	29	21,002	-53.3		73	5.4
40	29	22,445	-51.3		84	8.4
30	28	24,328	-48.7		88	11.1
25	28	25,531	-47.1		89	12.4
20	25	27,013	-44.9		85	12.8
15	17	28,951	-41.9		83	16.7
10	6	31,743	-36.8			
7						

	+ PAGO PAGO AMERICAN SAMOA 1013 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	27.3	76	116	11.[illegible]
1000	31	120	25.7	73	114	13.0
950	31	569	21.6	76	102	13.6
900	31	1,038	18.2	76	91	13.4
850	31	1,527	16.6	62	82	10.3
800	31	2,043	15.1	51	46	7.2
750	31	2,589	12.9	42	36	4.7
700	31	3,165	10.0	36	26	2.9
650	31	3,778	6.5	35	350	3.7
600	31	4,430	3.0	29	346	5.2
550	31	5,124	- 1.2	29	320	5.1
500	31	5,884	- 5.7	28	306	8.0
450	31	6,698	-10.7	26	307	10.5
400	31	[illegible]	-16.4	26	289	13.2
350	31	8,591	-23.4	24	278	15.5
300	31	9,701	-31.6	23	277	21.8
250	31	10,964	-41.7		275	26.2
200	31	12,438	-53.4		273	29.5
175	31	13,285	-59.9		269	28.4
150	31	14,262	-66.8		271	24.3
125	31	15,318	-72.3		271	18.1
100	31	16,618	-74.1		275	11.3
80	31	17,930	-69.7		282	8.5
70	31	18,731	-66.2		275	7.8
60	31	19,676	-62.1		280	9.3
50	29	20,812	-58.8		274	14.6
40	26	22,222	-56.2		275	15.9
30	22	24,068	-51.6		275	15.3
25	18	25,259	-48.4		273	12.6
20	12	26,743	-44.8		265	11.5
15	5	28,685	-41.0			
10						
7						
5						

	* PEORIA, ILL. 993 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	200	15.9	87	183	1.0
1000	31	137				
950	31	581	18.5	68	273	4.3
900	31	1,039	16.0	64	284	5.8
850	31	1,523	12.9	65	289	7.4
800	31	2,030	10.8	49	278	10.5
750	31	2,567	8.9	40	276	11.1
700	30	3,137	6.5	35	275	11.5
650	30	3,739	3.2	37	278	13.4
600	30	4,385	- .5	33	278	14.0
550	30	5,072	- 4.5	29	292	15.9
500	30	5,820	- 8.9	27	276	17.5
450	30	6,625	-14.2	29	278	17.7
400	30	7,512	-20.4	26	281	20.2
350	30	8,486	-27.6	28	280	21.8
300	30	9,577	-35.7	28	284	25.8
250	30	10,820	-45.0		286	28.9
200	30	12,283	-54.1		286	33.4
175	30	13,130	-57.3		288	32.6
150	30	14,098	-60.0		282	27.6
125	29	15,227	-61.4		278	19.8
100	29	16,611	-60.9		286	15.0
80	29	18,007	-58.0		304	4.9
70	28	18,849	-56.6		357	2.5
60	28	19,832	-54.8		72	4.1
50	28	21,003	-52.7		78	8.2
40	27	22,449	-50.6		84	9.5
30	27	24,333	-48.3		85	10.5
25	27	25,538	-46.6		86	12.2
20	27	27,024	-44.7		86	15.0
15	25	28,966	-41.8		86	19.4
10	23	31,737	-38.0		87	20.6
7	20	34,205	-34.0		89	23.9
5						

	* PITTSBURGH, PA. 975 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	353	16.5	90	246	2.1
1000	31	140				
950	31	585	18.4	74	258	4.9
900	31	1,043	16.3	68	274	9.3
850	31	1,527	13.2	68	268	11.3
800	31	2,035	10.4	63	268	13.6
750	31	2,572	8.1	50	268	13.8
700	31	3,137	5.4	44	268	15.3
650	31	3,736	2.6	38	269	17.1
600	31	4,383	- .8	33	270	18.8
550	31	5,066	- 4.7	33	272	19.6
500	31	5,817	- 9.3	32	269	22.0
450	31	6,621	-14.7	30	268	24.1
400	31	7,506	-20.7	28	270	25.6
350	31	8,481	-27.6	30	269	27.0
300	31	9,571	-35.9	25	268	28.9
250	31	10,812	-45.5		272	33.4
200	31	12,268	-54.8		277	35.0
175	31	13,115	-57.9		280	34.4
150	31	14,082	-59.9		278	29.5
125	31	15,216	-61.3		274	23.9
100	31	16,602	-60.4		273	13.4
80	31	18,001	-57.9		292	4.9
70	31	18,844	-56.3		312	2.9
60	31	19,825	-54.8		41	3.1
50	31	20,996	-53.0		71	4.5
40	31	22,441	-51.2		80	6.0
30	30	24,322	-48.5		87	8.5
25	30	25,527	-46.7		85	10.7
20	29	27,016	-44.2		86	13.2
15	29	28,958	-41.3		89	14.6
10	21	31,729	-37.7		92	14.6
7						
5						

	+ PONAPE, CAROLINE IS. 1005 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	39	28.9	78	76	2.9
1000	31	84	28.5	77	84	3.3
950	31	535	24.5	74	102	6.4
900	31	1,011	21.3	74	114	8.0
850	31	1,506	18.5	70	106	9.5
800	31	2,024	15.7	66	103	8.9
750	31	2,568	12.9	60	100	9.9
700	31	3,148	10.0	56	101	11.8
650	31	3,758	6.5	54	99	14.2
600	31	4,415	2.8	53	99	16.3
550	31	5,111	- 1.0	49	96	16.9
500	31	5,871	- 4.8	41	97	16.1
450	31	6,688	- 9.5	35	92	15.9
400	31	7,595	-15.0	31	94	14.6
350	31	8,591	-21.7	29	89	12.6
300	31	9,708	-30.1	28	78	12.4
250	31	10,978	-40.4	29	79	10.3
200	31	12,458	-52.9		60	10.1
175	31	13,306	-59.9		45	11.5
150	31	14,251	-67.3		40	9.7
125	31	15,330	-74.0		21	6.8
100	31	16,619	-76.5		78	17.1
80	31	17,928	-68.8		86	22.0
70	31	18,735	-64.4		89	19.8
60	30	19,682	-61.6		91	17.3
50	29	20,821	-58.4		94	13.0
40	28	22,232	-55.8		95	10.7
30	28	24,083	-51.6		111	9.3
25	28	25,270	-49.6		117	5.8
20	27	26,738	-47.2		97	7.4
15	27	28,653	-44.8		97	15.7
10	26	31,383	-41.7		93	35.2
7	19	33,808	-37.6		92	56.7
5	5	36,075	-36.3			

	PORTLAND, ME. 1013 MB					
Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	20	16.5	88	265	3.1
1000	31	131	17.0	74	267	3.7
950	31	567	17.0	61	290	6.4
900	31	1,030	14.6	61	285	9.1
850	31	1,512	12.0	59	273	12.6
800	31	2,018	9.5	50	271	15.3
750	31	2,549	7.1	50	270	19.2
700	31	3,116	4.1	45	269	21.6
650	31	3,708	1.1	40	268	24.3
600	31	4,357	- 2.2	37	271	27.2
550	31	5,034	- 6.1	35	269	29.5
500	31	5,784	-10.7	30	268	31.3
450	31	6,579	-16.0	31	266	36.1
400	31	7,465	-22.2	31	264	38.1
350	31	8,434	-29.0	28	264	40.6
300	31	9,519	-37.0	30	262	45.3
250	31	10,756	-46.3		264	49.1
200	31	12,208	-54.7		265	49.0
175	31	13,059	-55.9		265	45.3
150	31	14,037	-57.2		265	39.6
125	31	15,190	-57.5		265	30.3
100	31	16,597	-57.1		269	22.0
80	31	18,013	-55.6		272	10.5
70	31	18,865	-54.5		274	6.0
60	31	19,855	-53.2		298	1.7
50	31	21,033	-51.8		68	1.2
40	31	22,486	-49.7		75	4.5
30	31	24,378	-47.3		84	7.0
25	28	25,585	-45.9		82	9.9
20	27	27,077	-43.7		85	11.5
15	20	29,028	-40.5		90	12.2
10	14	31,794	-37.3		90	9.1
7	10	34,241	-34.2			
5	5	36,521	-33.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

RAPID CITY, S. DAK.
965 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	966	14.2	74	325	2.7
1000	31	114				
950	31	552				
900	31	1,014			323	3.3
850	31	1,502	17.1	52	274	4.5
800	31	2,017	14.6	50	279	5.4
750	31	2,550	11.2	46	288	8.4
700	31	3,132	7.3	46	290	10.1
650	31	3,729	3.0	44	294	13.2
600	31	4,381	- 1.3	41	290	14.8
550	31	5,060	- 5.9	43	282	18.6
500	31	5,808	-11.0	39	280	21.4
450	31	6,602	-16.4	36	277	23.9
400	31	7,486	-22.4	34	278	28.0
350	31	8,453	-29.5	39	276	31.5
300	31	9,535	-37.7	36	276	34.4
250	31	10,767	-46.7		273	40.0
200	31	12,221	-53.7		274	45.5
175	31	13,074	-56.4		273	42.2
150	31	14,047	-58.6		276	36.7
125	30	15,190	-60.8		278	26.0
100	30	16,577	-60.5		279	14.8
80	30	17,975	-57.8		286	7.0
70	30	18,819	-56.2		309	2.3
60	28	19,803	-54.8		316	1.6
50	28	20,974	-53.0		43	3.1
40	28	22,418	-51.0		74	6.2
30	27	24,303	-48.7		73	8.5
25	23	25,510	-47.0		90	9.7
20	[illegible]	26,997	-44.7		78	11.3
15	21	28,931	-42.5		85	12.2
10	12	31,722	-38.9			

ST. CLOUD, MINN.
977 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	316	14.2	92	143	1.4
1000	31	122				
950	31	561	16.8	79	226	1.9
900	31	1,018	15.2	71	267	4.9
850	31	1,501	12.5	67	277	7.6
800	31	2,008	9.6	67	287	9.7
750	31	2,540	6.8	55	294	12.6
700	31	3,107	4.2	50	295	14.2
650	31	3,703	.9	47	[illegible]	14.4
600	31	4,347	- 2.6	42	297	17.1
550	31	5,027	- 6.6	41	295	19.0
500	31	5,771	-11.[illegible]	40	291	19.8
450	31	6,565	-16.6	34	290	22.0
400	31	7,448	-22.9	30	293	24.9
350	31	8,412	-30.2	28	292	26.6
300	31	9,491	-38.3	25	288	29.7
250	31	10,722	-46.3		287	36.1
200	31	12,184	-51.8		285	42.9
175	31	13,045	-54.2		286	41.0
150	31	14,029	-56.0		287	35.0
125	31	15,182	-57.9		290	28.2
100	31	16,589	-57.1		286	19.4
80	31	18,006	-55.4		294	11.3
70	31	18,858	-54.6		306	6.0
60	31	19,847	-53.4		319	3.3
50	31	21,025	-51.9		56	2.9
40	30	22,474	-50.1		77	3.7
30	30	24,364	-47.8		82	5.6
25	30	25,572	-46.1		76	7.6
20	28	27,055	-44.7		75	8.5
15	16	28,966	-42.2		85	11.7
10	10	31,729	-38.4			

ST. PAUL IS., ALASKA
1006 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	7.5	93	264	3.1
1000	31	[illegible]			301	4.5
950	[illegible]	[illegible]	5.4	[illegible]	274	5.6
900	31	925	3.8	86	274	5.4
850	31	1,388	2.1	75	285	5.2
800	31	1,876	.1	72	283	4.1
750	31	[illegible]	- 2.2	69	[illegible]	4.7
700	31	2,938	- 4.6	66	296	5.6
650	31	3,514	- 8.1	60	[illegible]	[illegible]
600	31	4,126	-11.7	55	296	8.7
550	31	4,795	-15.7	[illegible]	[illegible]	[illegible]
500	[illegible]	5,511	-20.6	48	297	10.5
450	31	[illegible],276	-25.9	40	303	12.4
400	31	7,127	-31.7	34	298	14.0
350	31	8,058	-38.4	30	300	16.1
300	31	9,102	-45.1		299	19.6
250	31	10,307	-49.0		301	22.1
200	[illegible]	11,780	-46.[illegible]		297	21.6
175	[illegible]	12,668	-46.2		293	20.[illegible]
150	30	[illegible],691	-47.2		290	16.5
125	30	14,894	-48.2		284	15.3
100	[illegible]	16,362	-48.5		282	12.6
80	[illegible]	17,830	-48.3		280	9.1
70	[illegible]	18,709	-48.2		271	7.0
60	30	19,723	-48.2		262	6.0
50	[illegible]	20,925	-47.[illegible]		256	4.3
40	30	22,400	-47.2		[illegible]	2.7
30	30	24,308	-46.4		212	2.1
25	29	25,526	-45.8		139	2.1
20	26	27,022	-44.7		87	2.9
15	24	28,961	-42.5		67	4.7
10	15	31,725	-39.3			

SALEM, OREG.
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	12.0	86	311	1.4
1000	31	144	13.2	78	[illegible]	2.7
950	31	579	13.7	68	16	7.[illegible]
900	31	1,033	13.1	59	[illegible]	6.2
850	31	1,512	11.[illegible]	[illegible]	[illegible]	4.1
800	31	2,018	10.3	38	[illegible]	4.1
750	31	2,550	8.0	[illegible]	284	6.0
700	31	3,119	5.3	31	268	7.6
650	31	3,716	1.7	32	254	10.7
600	31	[illegible]	- 2.3	35	247	13.4
550	31	[illegible]	- 6.9	36	247	15.5
500	31	5,784	-12.0	36	249	17.7
450	31	6,575	-18.1	35	248	19.2
400	[illegible]	7,451	-24.4	[illegible]	252	20.[illegible]
350	31	8,410	-31.5	34	252	21.[illegible]
300	31	9,481	-39.9	31	[illegible]	[illegible]
250	31	10,702	-48.6		251	[illegible]
200	31	12,149	[illegible]		259	28.[illegible]
175	31	13,008	-54.1		259	30.1
150	31	[illegible]	-55.5		260	26.0
125	31	15,149	-57.7		259	20.0
100	31	16,554	-58.2		263	13.4
80	31	17,959	-57.4		267	6.6
70	31	18,803	-56.4		[illegible]	2.5
60	31	19,784	-55.1		1	.8
50	31	20,952	[illegible]		83	3.1
40	31	22,393	-51.6		84	4.5
30	[illegible]	24,265	-49.6		91	7.0
25	30	25,461	-48.1		85	7.6
20	28	26,936	-46.4		83	10.3
15	23	28,858	-44.2		87	9.7
10	15	31,573	-40.0		[illegible]	7.[illegible]

SALT LAKE CITY, UTAH
872 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	1,288	15.9	[illegible]	[illegible]	4.7
1000	31	99				
950	31	543				
900	[illegible]	1,015				
850	31	1,504	[illegible]	[illegible]	150	5.1
800	31	2,027	19.1	[illegible]	167	4.5
750	[illegible]	2,576	15.5	32	[illegible]	4.1
700	31	[illegible]	[illegible]	35	[illegible]	7.6
650	31	3,770	6.2	40	[illegible]	11.1
600	31	4,423	.9	46	[illegible]	15.5
550	31	5,112	- 4.6	[illegible]	263	18.1
500	31	5,860	- 9.9	45	[illegible]	20.2
450	31	6,663	-15.3	37	264	22.0
400	31	[illegible]	-21.6	39	[illegible]	23.3
350	31	8,515	-28.7	39	262	26.0
300	31	9,600	[illegible]	31	258	31.3
250	31	10,839	-45.4		[illegible]	42.2
200	31	12,301	-53.3		258	49.5
175	31	13,153	-57.4		261	48.4
150	31	14,118	-61.2		263	41.0
125	31	15,242	-63.4		265	27.0
100	31	16,609	-64.0		265	12.4
80	31	17,988	-59.9		276	[illegible]
70	31	18,825	-57.9		[illegible]	[illegible]
60	31	19,802	-56.2		98	4.3
50	31	20,964	-54.7		89	6.2
40	30	22,401	-52.6		81	9.9
30	30	24,270	-49.7		[illegible]	14.2
25	30	25,468	-48.1		[illegible]	15.2
20	[illegible]	26,939	-45.9		[illegible]	14.6
15	[illegible]	28,852	[illegible]		[illegible]	14.2
10						

VICTORIA TEXAS
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	33	24.5	89	111	1.4
1000	31	121	24.7	92	147	3.7
950	31	568	22.9	88	185	13.8
900	31	1,044	20.7	73	188	13.0
850	31	1,537	18.1	69	183	10.9
800	31	2,055	15.3	64	191	6.8
750	31	2,597	12.2	62	182	4.9
700	31	3,176	8.9	64	170	2.1
650	31	3,780	5.4	60	175	1.7
600	31	4,437	1.7	59	203	1.7
550	31	5,128	- 2.0	49	263	2.3
500	31	5,887	- 6.4	44	245	1.4
450	31	6,699	-11.3	36	300	2.5
400	31	7,599	-16.8	34	313	3.1
350	31	8,589	-23.6	31	321	4.3
300	31	9,696	-32.0	33	328	7.2
250	31	10,958	-41.8		340	10.1
200	31	12,431	-53.4		355	13.6
175	30	13,278	-59.8		356	13.8
150	30	14,227	-65.9		3	15.0
125	30	15,320	-70.3		19	12.4
100	30	16,643	-69.5		68	10.3
80	30	17,987	-65.1		82	17.1
70	30	18,804	-62.6		86	20.6
60	30	19,759	-60.2		86	24.7
50	30	20,902	-57.7		91	28.9
40	30	22,319	-55.0		93	33.4
30	29	24,169	-51.4		89	37.5
25	29	25,359	-49.0		90	39.2
20	28	26,832	-46.1		89	40.0
15	26	28,758	-43.2		89	42.3
10	9	31,538	-38.7			
7						
5						

SAN DIEGO, CALIF.
997 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	124	19.1	88	350	1.0
1000	31	102				
950	31	546	18.7	76	272	.4
900	31	1,012	23.7	35	313	3.3
850	31	1,511	22.7	33	302	5.8
800	31	2,036	20.0	36	281	5.1
750	31	2,587	16.3	37	237	3.7
700	31	3,172	12.0	40	206	4.7
650	31	3,784	7.5	42	184	4.9
600	31	4,442	2.8	41	193	4.5
550	31	5,131	- 1.6	36	219	4.3
500	31	5,894	- 5.9	30	246	5.4
450	31	6,706	-11.2	26	255	7.4
400	31	7,606	-17.4	25	245	11.1
350	31	8,592	-24.5	26	244	15.9
300	31	9,696	-32.7	27	244	19.2
250	31	10,957	-41.6	26	240	23.7
200	31	12,436	-52.2		235	28.7
175	31	13,289	-58.0		236	28.2
150	31	14,246	-64.0		235	24.1
125	31	15,348	-69.2		236	15.7
100	31	16,676	-69.6		284	5.1
80	30	18,021	-64.5		88	8.7
70	30	18,844	-61.3		98	11.8
60	28	19,805	-58.5		92	15.2
50	28	20,956	-56.6		91	20.0
40	28	22,380	-53.9		88	23.1
30	28	24,238	-51.1		89	29.1
25	27	25,427	-49.3		89	30.1
20	25	26,895	-46.9		88	31.1
15	24	28,814	-43.5		89	32.4
10	23	31,567	-39.3		89	36.5
7	22	34,036	-35.2		96	36.3
5	19	36,388	-32.6			

*** SAN JUAN, P. R.**
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	26.2	83	123	5.1
1000	31	143	25.5	82	109	10.9
950	31	589	22.5	82	93	13.8
900	31	1,064	19.7	78	93	14.6
850	31	1,555	17.2	69	94	15.7
800	31	2,071	14.9	56	97	14.6
750	31	2,605	12.2	44	98	13.2
700	31	3,191	9.0	42	99	12.0
650	31	3,791	5.3	39	97	11.7
600	31	4,450	1.5	37	98	11.3
550	31	5,135	- 2.5	32	102	8.9
500	31	5,897	- 6.9	28	101	6.2
450	31	6,704	-11.7	26	97	5.4
400	31	7,605	-17.7	27	85	4.[illegible]
350	31	8,590	-24.7	25	[illegible]	2.1
300	30	[illegible]	-33.3	26	198	3.3
250	30	10,947	-43.3		220	5.2
200	30	12,412	-54.8		227	4.1
175	30	13,254	-60.9		257	3.9
150	30	14,199	-65.9		237	3.7
125	30	15,274	-70.2		123	2.9
100	30	16,613	-71.5		88	11.7
80	[illegible]	17,946	-67.0		83	25.8
70	[illegible]	18,756	-64.3		85	32.1
60	30	19,705	-61.3		86	32.6
50	[illegible]	20,844	-58.2		88	32.2
40	29	22,257	-55.3		89	34.6
30	28	[illegible]	-51.3		91	33.4
25	28	25,299	-49.0		93	32.2
20	26	26,775	-46.5		89	33.0
15	20	28,705	-42.0		89	40.8
10	15	31,472	-37.6		90	50.1
7						
5						

SAN NICOLAS, CALIF.
992 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	174	14.9	90	299	4.1
1000	31	106				
950	31	545	20.1	44	306	6.0
900	31	1,016	24.1	25	307	6.6
850	31	1,514	22.1	26	289	5.6
800	31	2,037	19.0	28	266	5.1
750	31	2,586	15.3	29	244	5.6
700	31	3,167	11.4	26	239	5.1
650	31	3,780	7.0	25	238	4.1
600	31	4,433	2.6	29	230	3.3
550	31	5,130	- 2.0	27	263	3.7
500	31	5,881	- 7.1	26	263	4.5
450	31	6,693	-13.1	23	256	6.4
400	31	7,580	-18.6	20	246	9.7
350	31	8,564	-25.1	31	244	15.7
300	31	9,665	-33.5	28	244	21.0
250	31	10,920	-42.4	[illegible]	237	24.7
200	31	12,394	-52.8	19	[illegible]	30.1
175	30	13,242	-59.0	19	233	28.7
150	29	[illegible]	-65.0	20	234	24.[illegible]
125	29	15,295	-70.1		234	17.[illegible]
100	29	16,621	-69.8		291	3.[illegible]
80	[illegible]	17,966	-65.0		[illegible]	[illegible]
70	29	18,788	-61.3		92	12.8
60	29	19,751	-58.6		87	16.[illegible]
50	28	[illegible]	-56.5		91	19.4
40	26	22,325	-54.1		88	[illegible]
30	26	24,185	-50.4		87	[illegible]
25	26	25,379	-48.8		88	[illegible]
20	24	26,849	-46.0		89	30.5
15	24	28,773	-43.4		85	31.7
10	21	31,529	-38.4		91	33.[illegible]
7	15	33,983	-35.0		93	27.8
5	10	36,337	-32.8		98	30.5

*** SAULT STE. MARIE, MICH.**
988 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	221	13.9	92	17	1.6
1000	31	117				
950	31	548	14.3	81	291	5.4
900	31	1,008	12.4	75	287	8.9
850	31	1,486	10.0	74	288	10.7
800	31	1,988	7.3	73	280	13.2
750	31	2,515	5.1	64	282	16.7
700	31	3,079	[illegible]	54	285	19.6
650	31	3,671	- .5	52	283	21.6
600	31	4,311	- 4.0	49	281	23.1
550	31	4,985	- 8.1	45	280	26.2
500	31	5,727	-12.6	33	280	27.2
450	31	6,515	-18.1	34	279	28.4
400	31	7,393	-24.3	34	281	31.9
350	31	8,352	-31.4	29	281	34.8
300	31	9,425	-39.2	30	280	40.4
250	31	10,651	-47.5		283	46.0
200	31	12,106	-52.4		286	48.4
175	31	12,967	-53.2		[illegible]	41.8
150	31	13,957	-54.1		284	36.7
125	31	15,122	-55.4		281	28.0
100	31	16,542	-55.5		283	19.2
80	31	17,969	-54.1		289	10.3
70	[illegible]	[illegible]	-53.5		295	7.2
60	30	[illegible]	-52.8		[illegible]	5.4
50	[illegible]	20,999	-51.5		345	3.1
40	30	22,453	[illegible]		15	1.9
30	30	24,347	-47.2		[illegible]	5.2
25	30	25,558	-45.8		82	7.8
20	30	27,050	-43.9		82	8.7
15	29	29,000	-41.2		89	10.7
10	19	31,787	-36.7		86	12.8
7	5	34,290	-33.3			
5						

SHEMYA, ALASKA
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	38	8.1	96	268	3.9
1000	31	103			249	2.7
950	31	528	8.1	84	289	8.7
900	31	973	7.0	77	297	8.9
850	31	1,442	5.8	58	296	10.5
800	31	1,937	4.1	52	305	13.0
750	31	2,458	1.6	53	300	14.0
700	31	3,014	- .9	51	298	16.7
650	31	3,599	- 3.9	47	300	19.0
600	31	4,230	- 7.3	43	[illegible]	20.8
550	31	4,899	-11.1	44	294	22.7
500	31	5,630	-15.5	49	289	24.1
450	31	6,413	-20.4	47	292	26.0
400	31	7,280	-26.5	45	300	28.0
350	31	8,230	-33.6	45	300	30.1
300	31	9,293	-41.5	45	302	34.[illegible]
250	31	10,509	-48.9		306	36.7
200	31	11,965	-51.0		298	42.2
175	31	12,832	-51.7		297	40.[illegible]
150	31	13,830	-52.3		298	32.8
125	31	15,007	-53.0		300	25.6
100	31	16,444	-53.3		299	19.0
80	31	17,881	-53.0		302	11.5
70	31	18,742	-52.6		306	7.6
60	31	19,739	-51.9		301	4.5
50	31	20,922	-51.0		257	.[illegible]
40	31	22,378	-49.7		146	1.4
30	30	24,267	-47.9		116	1.9
25	29	25,475	-46.7		109	3.5
20	28	26,961	-45.2		94	3.5
15	27	28,894	-43.3		95	3.5
10	16	31,666	-39.6			

*** SHREVEPORT, LA.**
1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	22.3	90	136	2.1
1000	31	136	22.6	87	153	3.1
950	31	592	22.1	76	176	8.2
900	31	1,054	19.4	71	207	6.6
850	31	1,545	16.5	70	[illegible]	4.3
800	31	2,060	13.3	70	261	3.3
750	31	2,604	10.5	66	268	3.7
700	31	3,174	7.5	61	263	4.9
650	31	3,781	3.9	59	[illegible]	4.7
600	31	4,430	.6	53	272	6.4
550	31	5,125	- 3.3	54	261	8.2
500	31	5,873	- 7.6	47	257	8.7
450	31	6,686	-12.4	41	272	8.9
400	31	7,578	-18.2	37	277	10.5
350	31	8,561	-25.2	36	[illegible]	[illegible]
300	31	9,661	-33.4	34	[illegible]	[illegible]
250	31	10,915	-43.2		297	20.4
200	31	12,380	-54.3		304	21.0
175	31	13,223	-59.9		306	18.1
150	31	14,173	-64.9		306	14.2
125	31	15,273	-68.5		322	8.0
100	31	16,611	-67.2		28	3.3
80	30	17,967	-63.4		70	10.1
70	30	18,792	-61.0		79	14.2
60	[illegible]	19,755	-58.[illegible]		84	17.7
50	30	20,904	-56.7		89	22.3
40	30	22,325	-54.2		89	25.4
30	30	24,182	-50.9		90	29.7
25	30	25,373	-48.9		[illegible]	32.1
20	29	26,847	-46.4		87	35.4
15	24	28,773	-43.0		90	37.9
10	17	31,536	-39.2		83	40.2

SPOKANE, WASH.
932 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	717	14.1	50	128	2.1
1000	31	116				
950	31	553				
900	31	1,015	17.1	42	130	2.3
850	31	1,502	15.3	39	[illegible]	1.4
800	31	[illegible]	11.6	40	246	3.7
750	31	[illegible],542	7.8	42	[illegible]	6.8
700	31	3,114	3.9	45	[illegible]	10.9
650	31	3,707	.6	42	257	14.4
600	31	4,351	- 3.5	40	260	17.9
550	[illegible]	[illegible]	- 7.8	40	[illegible]	20.6
500	31	5,768	-12.8	39	262	[illegible]
450	31	6,555	-18.5	42	261	25.4
400	31	[illegible]	-24.7	40	261	25.4
350	31	8,391	-31.8	42	[illegible]	27.8
300	31	9,462	-39.9	[illegible]	260	33.2
250	31	10,683	-48.6		259	36.3
200	31	[illegible]	-53.2		[illegible]	36.5
175	31	12,991	-53.0		262	33.0
150	31	13,983	-54.0		262	27.6
125	31	15,148	-55.5		264	22.3
100	31	16,566	-56.2		263	[illegible]
80	31	17,984	-55.7		270	7.6
70	31	18,835	-55.0		276	4.5
60	[illegible]	19,822	-53.6		307	1.6
50	31	20,998	-52.0		61	2.5
40	31	22,448	-50.5		72	[illegible]
30	31	24,333	-48.2		[illegible]	5.4
25	31	25,537	-46.8		[illegible]	[illegible]
20	30	27,019	-45.0		90	[illegible]
15	22	28,978	-42.1		82	[illegible]
10	8	31,784	-37.2			

SWAN ISLAND, W. I.
1012 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	26.9	86	80	7.6
1000	31	116	26.2	86	82	9.7
950	31	571	23.1	88	[illegible]	[illegible]
900	31	1,039	20.3	78	103	[illegible]
850	31	1,533	17.6	72	101	19.[illegible]
800	31	2,049	14.9	64	102	[illegible]
750	31	2,590	12.1	55	103	18.1
700	31	3,170	9.2	48	[illegible]	16.9
650	31	3,777	5.7	44	103	15.[illegible]
600	31	4,432	2.0	42	109	14.0
550	31	5,120	- 2.1	[illegible]	114	11.3
500	31	5,881	- 6.6	33	118	10.1
450	31	[illegible]	-11.6	[illegible]	113	[illegible]
400	31	7,591	-17.6	34	101	7.4
350	31	8,577	-24.2	31	92	[illegible]
300	31	9,682	-32.6	32	69	4.5
250	31	10,939	-42.7		27	5.1
200	31	12,405	-54.9		10	2.1
175	30	13,245	-61.6		4	2.1
150	30	14,185	-67.9		[illegible]	[illegible]
125	30	15,269	-71.6		64	[illegible]
100	30	16,583	-72.4		80	[illegible]
80	30	17,904	-69.1		87	26.8
70	30	18,707	-66.0		84	30.[illegible]
60	29	19,650	-62.8		85	34.6
50	29	20,779	-60.1		98	37.7
40	29	22,183	-56.8		93	[illegible]
30	29	24,027	-51.9		96	36.3
25	28	25,215	-49.4		96	34.2
20	27	26,688	-46.8		93	35.[illegible]
15	21	[illegible]	-44.1		[illegible]	40.8
10	[illegible]	31,319	-41.5			

TAMPA, FLA.
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	23.9	94	108	3.7
1000	[illegible]	146	24.3	87	121	4.5
950	31	593	23.0	78	159	4.7
900	31	1,066	20.3	73	177	4.1
850	31	1,559	17.4	69	188	4.3
800	31	2,075	14.6	65	197	3.7
750	31	2,616	11.7	58	[illegible]	3.7
700	31	3,193	8.5	54		3.5
650	31	3,802	5.2	53	223	3.9
600	31	4,453	1.5	52	232	3.9
550	31	5,144	- 2.5	49	249	3.5
500	31	5,901	- 6.9	45	244	3.5
450	31	6,717	-11.7	40	199	3.3
400	31	7,610	-17.4	37	[illegible]	1.6
350	31	8,597	-24.3	33	238	[illegible]
300	31	9,702	-32.5	28	266	1.0
250	31	10,963	-42.5			2.3
200	31	12,429	-54.3		324	[illegible]
175	31	13,272	-60.3		20	[illegible]
150	31	14,221	-65.2		[illegible]	[illegible]
125	31	15,321	-68.6		62	7.2
100	31	16,654	-68.2		[illegible]	11.3
80	[illegible]	18,007	-64.6		79	18.1
70	30	18,825	-62.6		[illegible]	[illegible]
60	30	19,783	-59.9		[illegible]	[illegible]
50	30	20,929	-57.0		90	34.8
40	29	22,353	-54.1		[illegible]	[illegible]
30	[illegible]	24,214	-50.3		91	[illegible]
25	26	25,413	-47.7		99	38.1
20	20	26,894	-45.2		84	35.5
15	6	28,779	-43.6			
10						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

TOPEKA, KANS. 985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	269	18.1	84	1[illegible]6	2.9
1000	31	134				
950	31	579	20.4	73	186	5.6
900	31	1,043	18.6	68	225	7.4
850	31	1,532	15.8	68	258	6.8
800	31	2,045	13.0	62	281	8.2
750	31	2,584	10.5	57	289	9.5
700	31	3,159	7.4	55	298	9.9
650	31	3,761	4.1	48	274	10.5
600	31	4,414	.3	39	282	12.2
550	31	5,100	- 3.8	35	289	12.4
500	31	5,854	- 8.1	31	[illegible]	15.3
450	31	6,661	-13.3	32	287	17.1
400	31	7,554	-19.4	31	283	18.1
350	31	8,533	-26.5	33	285	20.0
300	31	9,628	-34.7	30	288	24.5
250	31	10,878	-44.1		287	26.8
200	31	12,341	-54.1		282	27.4
175	31	13,189	-58.3		[illegible]	28.9
150	31	14,152	-61.4		[illegible]	26.2
125	31	15,275	-63.9		294	20.0
100	31	16,642	-63.3		[illegible]	1[illegible].7
80	31	18,024	-60.1		313	3.3
70	31	18,862	-57.6		46	3.5
60	31	19,838	-55.9		80	5.4
50	31	21,003	-53.8		83	9.9
40	31	22,443	-51.8		87	11.1
30	31	24,319	-49.1		84	15.3
25	30	25,[illegible]	-47.1		87	16.7
20	28	27,008	-44.9		85	17.1
15	18	28,9[illegible]	-42.7		84	15.5
10	5	31,699	-39.3			
7						
5						

+ TRUK, CAROLINE IS. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	2	28.2	78	94	.4
1000	31	92	27.4	76	110	1.0
950	31	544	23.8	75	118	3.1
900	31	1,018	21.0	70	124	4.9
850	31	1,512	18.3	66	111	6.0
800	31	2,031	15.6	61	106	6.6
750	31	2,577	12.9	57	102	[illegible].9
700	31	3,154	9.9	55	97	1[illegible].7
650	31	3,768	6.4	52	100	12.0
600	31	4,420	2.7	50	98	14.8
550	30	5,112	- .9	43	97	16.1
500	30	5,876	- 5.0	37	99	15.2
450	30	6,698	- 9.6	33	94	13.8
400	30	7,601	-15.1	29	93	13.0
350	30	8,598	-21.8	28	90	13.4
300	30	9,714	-30.2	26	83	13.2
250	30	10,984	-40.6	25	78	14.0
200	30	12,465	-52.8		62	15.7
175	30	13,313	-59.8		59	17.9
150	30	14,259	-67.4		52	16.1
125	30	15,337	-74.4		48	14.0
100	30	16,622	-76.5		76	19.2
80	30	17,930	-69.6		88	23.7
70	30	18,734	-65.1		88	20.0
60	30	19,682	-61.8		92	19.0
50	30	20,819	-58.5		92	16.7
40	29	22,231	-55.4		89	13.8
30	26	24,083	-51.4		98	11.8
25	18	25,274	-49.0		108	7.2
20	15	26,756	-46.9			
15	5	28,677	-44.2			

* TUCSON, ARIZ. 923 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	789	23.4	75	158	5.4
1000	31	84				
950	31	534				
900	31	1,012	24.8	57	155	3.1
850	31	1,513	22.3	57	320	.6
800	31	2,038	18.9	59	346	3.5
750	31	2,585	15.3	62	6	4.5
700	31	3,172	11.5	57	47	3.3
650	31	3,782	6.9	61	98	5.4
600	31	4,441	2.0	62	106	6.2
550	31	5,125	- 2.6	56	91	4.7
500	31	5,888	- 6.8	49	35	3.5
450	31	6,698	-11.0	39	327	5.4
400	31	7,601	-16.9	36	303	6.4
350	31	8,589	-23.8	34	289	9.3
300	31	9,697	-31.9	34	267	12.4
250	31	10,959	-41.5	37	254	17.3
200	31	12,435	-52.8		256	21.0
175	31	13,285	-59.1		259	20.6
150	31	14,236	-65.5		**262**	**16.7**
125	31	15,329	-70.8		278	9.1
100	29	16,646	-70.7		332	1.9
80	29	17,987	-64.7		82	9.9
70	29	18,808	-61.6		92	13.6
60	29	19,768	-59.0		91	17.7
50	29	20,917	-56.8		91	22.7
40	29	22,336	-54.9		91	26.6
30	29	24,186	-51.7		89	30.5
25	28	25,374	-49.7		88	30.9
20	28	26,843	-46.9		89	32.8
15	27	28,766	-43.1		87	35.0
10	23	31,523	-39.1		88	38.3
7	10	33,991	-34.5			

* WAKE IS., PACIFIC AREA 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	28.1	82	93	6.2
1000	31	111	27.1	84	98	7.4
950	31	561	23.6	90	104	9.3
900	31	1,037	20.8	84	107	8.9
850	31	1,531	18.0	81	110	7.4
800	31	2,050	15.3	77	114	6.4
750	31	2,592	12.6	73	112	5.4
700	31	3,173	9.3	69	101	3.3
650	31	3,778	5.8	71	92	1.9
600	31	4,437	2.0	66	131	.6
550	31	5,128	- 1.9	62	98	.2
500	31	5,889	- 6.1	57	209	1.0
450	30	6,701	-10.9	47	224	1.7
400	30	7,603	-16.8	43	225	1.9
350	30	8,593	-23.7	41	234	3.3
300	30	9,701	-32.0	38	231	4.9
250	30	10,962	-42.2		230	6.2
200	30	12,431	-54.7		236	6.6
175	30	13,272	-61.7		252	5.2
150	30	14,210	-68.8		269	2.9
125	30	15,285	-73.7		13	.2
100	27	16,597	-71.0		72	13.4
80	27	17,927	-67.9		85	23.9
70	26	18,735	-65.3		88	29.5
60	26	19,678	-62.5		85	34.4
50	26	20,811	-59.3		88	36.5
40	26	22,217	-56.3		99	37.9
30	26	24,057	-52.7		87	40.4
25	25	25,243	-49.8		87	41.4
20	25	26,709	-47.6		87	42.7
15	23	28,630	-43.8		89	46.2
10	20	31,379	-40.2		90	54.6
7	14	33,823	-36.9		90	58.9
5	5	36,172	-35.2			

* WALLOPS IS. VA. NASA 1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	20.4	90	243	1.2
1000	31	150	21.7	80	281	3.5
950	31	594	20.5	67	300	5.8
900	31	1,062	17.8	65	288	5.1
850	31	1,549	14.8	70	264	6.2
800	31	2,061	11.9	65	255	9.5
750	31	2,600	9.4	58	255	13.2
700	31	3,171	6.6	55	258	14.8
650	31	3,775	3.5	52	258	17.9
600	31	4,423	.1	48	257	19.2
550	31	5,112	- 3.5	37	257	17.5
500	31	5,865	- 8.0	34	255	17.5
450	31	6,673	-13.3	34	253	20.0
400	31	7,563	-19.4	35	254	22.3
350	31	8,543	-26.4	34	251	25.4
300	31	9,639	-34.8	30	253	26.8
250	31	10,887	-44.6		256	29.1
200	31	12,346	-54.5		261	32.6
175	31	13,193	-58.9		262	30.7
150	31	14,153	-61.8		266	25.6
125	31	15,276	-63.4		261	19.4
100	31	16,646	-62.6		274	11.8
80	31	18,032	-59.5		284	3.5
70	31	18,870	-58.0		54	2.5
60	31	19,844	-56.2		74	7.4
50	31	21,008	-54.0		82	10.5
40	31	22,446	-51.8		87	14.4
30	30	24,326	-48.3		88	16.9
25	28	25,531	-46.5		87	19.0
20	28	27,018	-44.6		82	21.0
15	28	28,956	-41.8		85	24.5
10	21	31,725	-38.1		94	22.3

WASHINGTON, D. C. 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	84	18.1	92	234	.8
1000	31	145	19.4	86	251	1.6
950	31	592	20.0	69	305	4.7
900	31	1,053	17.1	66	310	4.7
850	31	1,539	14.1	68	288	6.6
800	31	2,049	11.4	61	272	8.5
750	31	2,587	8.8	51	265	11.1
700	31	3,155	6.2	48	266	14.2
650	31	3,761	3.0	46	266	15.9
600	31	4,405	- .1	40	266	17.9
550	31	5,091	- 4.0	39	261	17.3
500	31	5,843	- 8.4	34	264	18.8
450	31	6,650	-13.7	32	260	20.8
400	31	7,539	-19.7	33	262	22.9
350	31	8,517	-26.8	31	262	25.[illegible]
300	31	9,641	-35.1	28	265	28.4
250	31	10,856	-44.8		264	32.8
200	31	12,315	-54.3		271	34.4
175	31	13,163	-58.0		268	32.4
150	31	14,127	-61.2		271	28.7
125	31	15,255	-62.4		268	24.7
100	31	16,632	-61.7		273	16.7
80	31	18,02[illegible]	-59.[illegible]		284	4.5
70	31	18,862	-57.4		35	.6
60	31	19,842	-55.7		63	4.7
50	30	21,007	-53.6		82	9.9
40	29	22,449	-51.0		88	13.6
30	29	24,332	-48.2		85	15.3
25	29	25,538	-46.6		9[illegible]	16.9
20	22	27,022	-44.3		86	1[illegible].6
15	12	28,951	-41.9			
10						
7						
5						

WINNEMUCCA, NEV. 869 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,310	13.9	34	75	[illegible].0
1000	31	102				
950	31	545				
900	31	1,012				
850	31	1,500	20.1	30	42	2.9
800	31	2,021	18.3	30	65	1.9
750	31	2,567	14.7	30	253	2.5
700	31	3,150	10.3	33	241	7.6
650	31	3,758	5.4	38	241	13.2
600	31	4,410	.3	41	236	15.3
550	31	5,094	- 4.8	42	239	18.1
500	31	5,844	- 9.8	36	249	19.2
450	31	6,643	-15.7	35	251	19.8
400	31	7,527	-22.0	37	252	22.1
350	31	8,494	-29.2	34	249	26.6
300	31	9,577	-37.5	32	250	30.5
250	31	10,813	-45.7		250	39.4
200	31	12,274	-53.1		251	49.1
175	31	13,129	-56.2		254	45.1
150	31	14,100	-59.6		255	37.2
125	30	15,229	-62.3		258	27.8
100	30	16,607	-61.[illegible]		266	12.6
80	30	17,993	-59.2		241	3.1
70	30	18,832	-57.2		121	2.1
60	29	19,809	-55.6		89	4.1
50	29	20,975	-54.0		92	5.4
40	29	22,413	-52.2		81	9.5
30	29	24,288	-49.2		82	14.2
25	26	25,486	-47.4		85	15.3
20	24	26,962	-45.5		87	16.9
15	17	28,901	-42.5		86	13.2

WINSLOW, ARIZ. 852 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	1,492	18.7	68	211	1.9
1000	29	90				
950	29	539				
900	29	1,016				
850	29	1,513	19.0	65	208	2.7
800	29	2,036	20.0	48	260	9.5
750	29	2,588	16.8	48	295	7.8
700	29	3,174	12.6	48	315	4.7
650	29	3,786	7.7	55	299	2.3
600	29	4,446	2.4	62	219	2.7
550	29	5,133	- 3.0	63	197	4.9
500	29	5,892	- 8.1	54	234	6.0
450	29	6,698	-12.3	38	268	7.1
400	29	7,596	-18.2	35	270	11.7
350	29	8,580	-25.0	32	268	17.1
300	29	9,683	-32.9	33	261	20.8
250	29	10,942	-42.1	31	257	26.8
200	29	12,419	-52.5		263	30.5
175	29	13,271	-58.2		259	28.9
150	29	14,228	-64.1		261	25.1
125	29	15,331	-68.8		270	17.3
100	29	16,663	-68.5		284	5.1
80	29	18,013	-63.8		88	3.5
70	29	18,837	-60.7		92	8.4
60	29	19,801	-58.3		88	13.0
50	28	20,956	-56.1		87	16.1
40	27	22,382	-53.8		91	21.4
30	27	24,242	-50.8		88	23.9
25	26	25,434	-49.2		89	24.5
20	25	26,905	-46.6		86	27.4
15	22	28,821	-43.9		90	30.3
10	16	31,567	-39.4		84	31.3

YAKUTAT, ALASKA 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	8.0	98	104	4.5
1000	31	116	9.6	93	119	6.2
950	31	545	8.5	87	137	9.7
900	31	988	6.2	86	148	10.1
850	31	1,455	3.4	88	146	9.5
800	31	1,945	.5	89	155	8.4
750	31	2,461	- 2.3	83	168	7.8
700	31	3,007	- 4.9	74	176	8.0
650	31	3,584	- 8.1	70	191	8.7
600	31	4,205	-11.4	64	209	8.2
550	31	4,865	-15.5	58	212	7.8
500	31	5,581	-19.8	52	217	7.6
450	31	6,350	-25.1	52	223	8.9
400	31	7,200	-31.0	49	231	9.9
350	31	8,134	-37.9	45	234	9.9
300	31	9,180	-45.3		240	12.2
250	31	10,378	-51.3		268	16.7
200	31	11,825	-50.5		261	20.6
175	31	12,698	-49.1		256	19.4
150	31	13,709	-49.3		251	19.6
125	31	14,904	-49.5		249	17.1
100	30	16,364	-48.6		253	14.0
80	30	17,829	-48.8		245	11.7
70	30	18,706	-48.9		247	9.9
60	30	19,719	-48.8		251	7.6
50	30	20,917	-48.8		253	4.3
40	30	22,383	-48.6		272	2.1
30	28	24,280	-47.7		332	.8
25	25	25,479	-46.9		36	1.2
20	23	26,967	-45.4		51	3.9
15	20	28,913	-42.9		68	6.8
10	12	31,697	-39.0			

+ YAP, CAROLINE IS. 1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	17	28.3	81	222	2.1
1000	31	86	27.6	81	216	2.7
950	31	535	23.7	81	220	4.9
900	31	1,012	20.9	78	212	5.1
850	31	1,506	18.3	73	214	4.3
800	31	2,025	15.6	67	202	2.9
750	31	2,568	12.8	63	151	1.6
700	31	3,149	9.8	61	108	1.7
650	31	3,760	6.1	60	98	4.1
600	31	4,414	2.4	59	107	5.1
550	31	5,108	- 1.4	56	98	6.[illegible]
500	31	5,868	- 5.5	52	93	8.5
450	31	6,687	-10.1	45	97	9.3
400	31	7,589	-15.4	38	92	10.7
350	31	8,584	-22.1	33	91	13.6
300	31	9,700	-30.2	28	83	16.3
250	31	10,970	-40.4	23	76	22.9
200	30	12,452	-53.2		75	28.2
175	30	13,297	-60.5		70	29.9
150	30	14,239	-68.3		68	32.2
125	30	15,311	-76.2		68	29.5
100	30	16,585	-77.2		77	33.5
80	30	17,893	-69.5		87	31.5
70	30	18,696	-65.7		85	28.7
60	30	19,640	-62.2		87	26.6
50	30	20,774	-59.3		87	23.3
40	30	22,179	-56.7		90	20.2
30	30	24,022	-52.4		91	20.0
25	30	25,207	-50.1		93	21.4
20	29	26,672	-47.7		97	23.3
15	27	28,587	-44.6		103	27.2
10	26	31,320	-41.5		94	40.4
7	14	33,762	-38.5			
5	5	36,104	-34.3			

YUCCA FLAT, NEV. 880 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,196	18.3	42	243	1.0
1000	30	82				
950	30	527				
900	30	1,004				
850	30	1,5[illegible]	24.2	27	233	3.7
800	30	2,028	21.3	26	197	9.1
750	30	2,577	17.1	29	202	10.5
700	30	3,166	12.3	33	202	9.7
650	30	3,773	7.3	39	193	8.5
600	30	4,434	2.0	45	176	7.2
550	30	5,1[illegible]7	- 3.4	47	188	7.2
500	30	5,876	- 8.5	39	238	8.7
450	30	6,677	-13.7	R25	258	14.8
400	30	7,573	-19.9	R20	261	20.2
350	30	8,549	-26.9	R20	255	24.7
300	30	9,644	-34.5	R21	255	29.9
250	30	10,895	-43.2		259	38.7
200	30	12,366	-52.7		245	43.5
175	30	13,217	-58.0		247	41.0
150	30	14,176	-63.1		248	40.6
125	30	15,285	-66.9		252	30.9
100	30	16,630	-66.9		265	11.8
80	30	17,991	-62.6		229	1.0
70	30	18,821	-59.5		73	6.0
60	30	19,791	-56.7		86	11.7
50	30	20,951	-55.2		87	14.2
40	29	22,382	-53.4		80	18.3
30	29	24,247	-50.6		86	22.1
25	28	25,441	-48.7		87	22.3
20	27	26,908	-46.6		85	25.1
15	22	28,827	-44.6		89	26.2
10	15	31,567	-41.1			

YUMA, ARIZ. 994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	22	131	29.2	44	91	.6
1000	22	75				
950	22	530	29.7	41	204	5.6
900	22	1,014	27.5	38	214	8.5
850	22	1,518	24.3	36	219	8.7
800	22	2,045	20.5	39	204	6.2
750	22	2,592	16.2	45	178	6.2
700	22	3,181	11.7	49	168	6.2
650	22	3,789	7.2	49	173	5.6
600	22	4,449	2.9	49	174	5.1
550	21	5,138	- 1.8	47	178	3.7
500	21	5,901	- 6.2	37	242	3.3
450	21	6,710	-11.3	28	258	6.[illegible]
400	21	7,612	-16.9	25	253	9.3
350	21	8,598	-24.2	26	244	13.6
300	21	9,703	-32.6	29	241	19.4
250	21	10,960	-41.8		235	23.3
200	21	12,435	-52.9		229	25.8
175	20	13,286	-59.0		230	23.5
150	19	14,238	-65.4		225	22.5
125	14	15,327	-70.2		221	18.3
100	8	16,654	-68.5			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations Relative humidity averages are limited to those observations with temperatures warmer than -40°C Observations of wind speed and direction are sometimes lost due to limiting angles, i.e. elevation angles less than 6° above the horizon, or any obstruction above the horizon
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available
Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

R More than half of the observations are from statistical values. Equipped with lithium chloride hygristor.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
ALBUQUERQUE, N. MEX.									
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Aug.									
1	0.73	0.83	0.97	1.13	1.32	----	----	----	----
2	----	----	----	----	----	1.15	----	----	----
3	----	----	----	----	1.32	----	----	----	----
4	.72	.83	----	1.10	----	----	----	----	----
5	.83	.93	1.04	1.19	1.37	----	1.01	0.89	----
6	----	----	----	----	1.38	----	----	----	----
7	.79	.88	1.01	1.17	1.41	----	----	----	----
8	.68	.78	.94	----	----	----	----	----	----
10	----	----	----	----	1.33	----	----	----	----
11	.77	.86	.99	1.14	1.34	----	----	----	----
12	.72	.82	.96	1.11	1.37	----	----	----	----
13	.79	.90	1.02	1.18	1.38	----	----	----	----
14	.74	.86	----	----	1.36	1.21	----	.81	0.69
15	.79	.91	1.02	1.18	1.38	----	----	----	----
17	----	----	----	----	----	1.15	.97	----	----
18	.81	.92	1.04	1.19	1.34	1.29	----	----	----
19	.81	.91	1.03	1.18	1.35	1.20	1.07	----	.83
20	----	----	----	----	----	1.17	----	----	.74
21	.73	.83	----	1.15	1.38	----	1.01	.87	.75
22	----	----	1.06	1.21	1.39	----	----	----	----
23	----	----	----	----	----	----	.95	----	----
24	.79	.87	.98	1.16	1.39	----	----	----	----
25	.88	.95	----	1.20	1.43	----	----	----	.81
26	.82	.91	1.04	1.21	1.40	1.25	----	----	.79
27	.66	.76	.92	1.08	1.27	----	----	----	----
28	----	----	----	1.15	1.35	----	----	----	----
29	.82	.91	1.05	1.22	1.39	1.21	1.04	.92	.79
30	.60	.71	.84	1.01	1.28	----	----	----	----
Averages	0.76	0.86	0.99	1.16	1.36	1.20	1.01	0.87	0.77
BLUE HILL OBS., MASS.									
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Aug.									
1	0.77	0.87	1.01	1.16	1.33	1.04	0.87	0.72	0.60
3	----	----	----	1.24	1.41	1.18	1.01	.89	.77
4	.88	.98	1.10	1.23	1.37	1.06	.87	.71	.67
6	-----	-----	-----	.94	1.29	.91	.69	.57	.45
13	----	----	.94	1.16	1.35	1.15	1.00	.87	.79
14	.77	.87	.96	1.18	1.35	----	----	----	----
18	.72	.82	.93	1.11	----	----	----	----	----
19	.60	.72	.82	.91	----	----	----	----	----
20	.50	.67	.82	1.06	1.30	1.01	.82	.70	.58
26	.72	.79	.88	.96	1.36	.95	.79	.60	.48
27	.74	.82	.95	1.13	1.32	1.12	.96	.79	.67
28	.58	.65	.79	.99	1.35	1.01	.83	.76	.67
29	.77	.86	.96	1.13	----	----	----	----	----
Averages	0.71	0.81	0.92	1.09	1.34	1.10	0.87	0.73	0.63
GUAM, M. I.									
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
			No observations due to cloudiness						

Date	Sun's zenith distance								
	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
MADISON, WIS.									
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Aug.									
3	M 0.81	S 0.91	S 1.04	S 1.18	----	----	----	----	----
4	I .71	M .81	M .92	S 1.05	----	----	----	----	----
9	----	----	----	----	S 1.11	----	----	----	----
19	S .76	S .83	S .96	S 1.11	----	----	----	----	----
25	----	----	----	----	S 1.31	----	----	----	----
26	M .69	M .77	M .91	S 1.07	----	----	----	----	----
29	----	----	I .68	I .88	----	----	----	----	----
Averages	0.74	0.83	1.13	1.07	1.21	----	----	----	----
TUCSON, ARIZ.									
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Aug.									
1	0.11	0.16	0.24	----	----	----	----	----	----
2	.14	----	----	----	----	----	----	----	----
9	----	----	----	0.48	----	----	----	----	----
10	.09	.36	.53	----	----	----	----	----	----
11	.17	.45	----	----	----	----	0.87	----	----
12	.51	.59	----	----	----	----	----	----	----
13	.59	.69	.83	.99	----	----	----	----	----
14	.59	.70	----	----	----	----	----	----	----
16	.48	.58	----	----	----	----	.56	----	----
21	.73	.84	.95	1.11	----	----	----	0.78	0.65
22	.70	.80	----	----	----	----	----	----	----
24	.34	.43	----	----	----	----	----	----	----
25	.33	.43	----	----	----	----	----	----	----
27	.54	.66	.80	----	----	----	----	----	----
28	.59	.69	.82	----	----	----	----	----	----
29	.59	.69	----	----	----	----	----	----	----
Averages	0.43	0.58	0.79	0.86	----	----	0.71	0.78	0.63
OMAHA, NEBR.									
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Aug.									
2	----	----	----	HS1.15	----	----	----	----	----
3	HS0.77	HS0.89	HS0.99	HS1.12	----	----	----	----	----
6	----	----	----	HS .98	----	----	----	----	----
7	----	----	----	----	HS1.30	HS1.10	HS0.90	HS0.75	----
11	----	----	HS1.02	HS1.18	----	----	----	----	----
14	----	----	----	HS1.14	----	----	----	----	----
16	HS .74	HS .86	HS .97	----	HS1.31	HS1.14	HS .97	HS .86	HS0.75
19	----	----	----	HS1.07	HS1.27	HS1.02	HM .77	HM .65	HM .53
23	----	----	----	HS1.06	----	----	----	.87	----
25	HS .82	HS .91	HS1.00	HS1.18	HS1.29	HS1.04	HS .83	HS .72	HS .65
26	----	----	HS1.00	HS1.15	HS1.30	HS1.07	HS .93	HS .84	HS .73
27	HS .70	HS .82	HS .93	HS1.09	HS1.25	HS1.06	HS .90	HS .76	HS .41
28	----	----	----	HS1.10	----	----	----	----	----
29	----	----	----	HI .84	----	----	----	----	----
31	----	----	----	HI .78	----	----	----	----	----
Averages	0.76	0.87	0.98	1.06	1.29	1.07	0.88	0.78	0.61

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon

HS Slight haze
HM Moderate haze
HI Intense haze

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	713	530	---	---	---	---	630	547	342	584	642	534	---	633	616	535	---	---	---	---	---	---	---	638	707	702	669	672	707	566	475	---
ANNETTE ALASKA	289	260	551	633	636	---	89	152	168	555	197	137	105	103	80	153	397	574	554	102	550	555	536	265	283	213	121	407	196	220	59	304
APALACHICOLA FLORIDA	654	671	657	184	46	137	289	140	134	504	576	606	612	378	523	473	593	534	629	564	540	566	434	611	530	596	577	546	592	586	568	485
ARGONNE NAT. LAB.	414	501	547	608	524	526	350	542	566	81	535	474	265	268	420	527	508	372	551	470	285	472	460	447	511	519	517	378	461	469	451	452
ASTORIA OREGON	654	576	286	---	606	611	430	473	518	320	614	610	284	---	---	627	---	569	583	590	587	---	538	316	376	174	539	---	447	493	531	494
ATLANTA GEORGIA	181	246	198	274	468	270	467	---	503	272	463	368	575	538	580	424	537	613	491	609	586	344	648	510	333	544	599	434	500	512	484	452
BARROW ALASKA	312	562	505	308	482	616	511*	346*	383*	---	579	552	556	533	254	319	376	259	228	126	149	105	205	199	143	---	---	---	---	---	---	359*
BETHEL ALASKA	78	443	504	141	191	393	291	524	116	80	265	247	502	509	531	167	206	421	143	291	105	212	167	183	261	381	119	115	167	192	253	264
BISMARCK N.DAK.	573	638	616	452	391	345	347	477	421	564	553*	134	603	281	585	574	590	501	405	120	136	235	387	528	558	545	487	536	514	470	281	447*
BLUE HILL MASS.	684	385	686	666	405	629	564	345	485	348	378	462	639	593	117	170	492	580	572	622	533	74	87	561	522	546	595	593	543	488	450	478
BOISE IDAHO	680	641	567	619	658	656	641	516	644	642	538	654	506	627	614	590	461	515	605	624	619	587	464	580	470	329	558	569	226	426	577	561
BOSTON MASSACHUSETTS	625	340	671	651	404	613	562	324	568	335	389	415	629	575	108	183	528	542	529	603	482	---	- -	---	---	---	577	566	539	468	---	488
BROWNSVILLE TEXAS	733	644	608	718	639	692	531	495	537	625	728	660	703	672	705	724	707	667	404	610	694	681	599	457	500	586	631	545	693	708	675	631
CANTON ISLAND P.I.	597	542	542	598	595	586	525	616	622	633	611	620	637	620	628	622	623	548	643	619	613	646	639	608	632	546	636	669	615	630	664	611
CAPE HATTERAS N.C.	689	690	424	479	452	535	218	456	229	479	622	395	199	225	524	516	568	409	581	468	460	601	575	140	100	351	545	555	564	559	223	446
CARIBOU MAINE	480	218	283	292	679	624	172	546	308	178	244	240	403	576	572	60	102	590	516	616	389	529	90	285	362	257	219	527	565	359	576	383
CHARLESTON S.C.	731	---	482	220	395	448	309	474	341	603	456	485	639	432	508	603	652	556	633	634	635	468	611	223	104	289	665	594	566	568	656	499
CLEVELAND OHIO	432	167	626	629	608	500	435	393	447	256	139	505	419	104	421	463	---	605	414	583	307	374	- -	---	---	575	521	558	438	443	453	438
COLUMBIA MISSOURI	341	589	662	619	561	604	422	475	400	131	591	495	365	545	572	582	249	458	488	362	353	606	556	455	524	538	547	390	502	453	476	481
DAVIS CALIFORNIA	655	667	677	663	686	669	670	594	664	670	641	659	654	651	650	645	621	644	658	635	632	624	657	585	624	626	601	612	620	426	618	635
DODGE CITY KANSAS	631	630	617	174	397	588	274	563	417	296	349	590	608	631	611	602	550	304	564	522	470	470	313	467	611	606	609	358	434	576	381	491
E. LANSING MICHIGAN	324	467	703	679	574	635	574	552	532	138	323	598	644	151	502	382	616	536	676	58	198	218	35	39	267	565	517	519	514	501	491	436
EL CENTRO CALIF. NPF	506	504	491	543	397*	397*	397*	397*	474	543	526	529	509	497	523	499	435	444	471	538	543	525	506	489	453	496	502	504	511	432	528	487*
EL PASO TEXAS	730	600	349	672*	619	511	680	648	725	730	711	689	672	713	730	606	651	603	568	423	517	273	329	528	668	716	691	661	643	57[illegible]	591	607*
ELY NEVADA	496	433	475	592	550	697	666	678	654	674	526	639	642	594	570	333	553	340	402	432	430	462	514	516	623	635	630	539	552	545	356	540
EPPLEY NEWPORT R.I.	657	383	---	650	231	598	591	276	255	---	197	345	609	608	109	280	---	561	567	585	529	207	163	590	411	486	563	536	479	380	320	435
FAIRBANKS ALASKA	282	330	430	372	403	415	382	479	525	552	535	517	422	462	371	264	299	266	405	371	211	347	227	142	88	354	446	216	318	337	276	356
FORT WORTH TEXAS	677	263	610	568	455	637	546	592	634	653	462	397	117	319	522	681	658	663	621	340	647	629	495	76	623	499	396	443	259	362	599	498
FRESNO CALIFORNIA	604	589	640	661	663	676	667	661	645	658	637	630	620	620	627	614	609	610	627	628	624	616	611	583	599	621*	590	572	602	586	574	621*
GAINESVILLE FLORIDA	---	---	580	---	---	306	288	179	513	415	620	632	531	404	298	560	609	585	610	535	620	580	463	422	528	696	585	370	498	483	672	503
GLASGOW MONTANA	679	672	650	648	618	520	178	664	650	612	226	615	411	521	568	618	641	496	136	71	370	537	609	597	597	580	309	574	556	536	513	515
GRAND JUNCTION COLO.	487	684	694	687	680	600	707	729	664	727	720	592	698	541	702	598	677	---	417	561	702	609	652	665	676	604	655	662	589	247	285	617
GREAT FALLS MONTANA	581	564	451	460	418	429	472	455	513	455	424	469	230	549	543	533	551	440	140	78	548	538	541	528	499	317	306	440	453	484	513	449
GREENSBORO N.C.	662	472	279	96	623	447	423	450	346	457	443	369	242	469	495	474	494	435	496	447	494	529	537	507	438	134	555	550	436	391	503	442
INDIANAPOLIS INDIANA	598	410	652	675	612	621	601	584	---	---	---	518	75	384	356	542	634	630	---	---	---	---	621	479	555	637	490	433	463	494	526	525
ITHACA NEW YORK	550	72	545	508	568	538	535	510	435	428	239	346	298	494	284	274	484	513	401	250	342	671	378	264	284	473	378	377	147	630	434	408
LAKE CHARLES LA.	---	458	159	150	319	352	607	632	625	353	84	478	524	652	603	546	404	491	277	279	579	551	481	595	---	462	495	507	477	559	452	454
LAKELAND FLORIDA	303	639	591	518	351	326	388	309	645	494	635	537	619	540	368	627	691	618	635	679	470	297	510	336	612	625	505	635	591	613	622	527
LANDER WYOMING	425	511	303	625	511	688	681	643	397	687	698	345	649	669	658	629	596	335	296	348	634	648	633	632	627	529	619	615	560	589	285	550
LARAMIE WYOMING	435	462	360	358	575	523	549	579	278	599	543	278	643	585	644	555	573	447	348	402	638	592	564	629	617	602	604	615	583	417	524	520
LAS VEGAS NEVADA	593	376	675	711	703	664	699	710	718	702	705	696	698	707	689	591	628	474	656	684	677	652	666	658	653	686	668	607	660	602	650	653
LITTLE ROCK ARKANSAS	---	148	706	631	557	608	509	458	661	416	355	201	210	222	435	584	411	366	617	467	86	367	642	381	604	516	479	433	434	533	497	451
LOS ANGELES, CALIF.	658	423	666	660	645	531	660	625	626	615	627	654	649	645	644	637	606	587	597	480	566	572	587	584	589	595	584	558	578	584	496	598
MADISON WISCONSIN	187	682	683	662	519	609	384	366	671	312	460	636	457	443	369	509	602	571	517	506	104	295	371	398	571	595	579	551	552	331	517	484
MANHATTAN KANSAS	337	644	623	488	662	536	536	348	112	374	594	347	307	608	482	593	458	297	670	431	245	611	555	377	570	569	563	511	424	510	459	479
MATANUSKA ALASKA	350	---	150	287	202	380	311	66	306	106	108	297	548	528	458	339	331	73	146	147	64	122	89	268	398	480	443	119	245	148	286	260
MEDFORD OREGON	686	663	685	682	692	685	692	652	672	668	667	674	641	661	659	611	577	593	627	627	625	316	356	583	544	486	420	360	495	402	583	590
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MIDLAND TEXAS	656	---	644	703	469	581	640	631	---	607	652	635	475	609	509	674	653	471	648	646	499	354	250	186	400	306	601	487	360	469	405	525
NASHVILLE TENNESSEE	639	109	425	642	505	369	641	569	352	584	209	236	394	254	446	545	521	478	386	441	604	382	619	630	510	592	570	451	278	296	511	464
NEW YORK N.Y.U	655	277	707	550	487	562	523	492	102	366	347	521	657	503	163	157	637	599	538	489	511	301	209	570	423	565	584	483	270	384	401	453
NORTH OMAHA NEBRASKA	437	771	728	535	629	649	677	577	395	587	566	460	244	669	665	670	625	471	650	195	318	361	620	571	658	646	626	609	548	591	591	569
OAK RIDGE TENNESSEE	585	321	611	500	462	392	412	436	504	557	310	296	368	340	444	535	455	408	412	432	500	358	564	613	366	568	565	557	366	367	489	455
OKLAHOMA CITY OKLA.	519	453	505	569	338	562	559	415	534	385	449	366	195	437	561	508	530	438	444	509	207	205	110	324	541	514	326	299	352	356	373	416
PAGE ARIZONA	560	555	540	591	590	416	457	552	524	567	453	551	439	446	540	355	555	473	505	455	507	415	399	500	496	450	---	---	489	403	202	482

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

AUGUST 1966

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	572	566	422	535	536	552	579	551	551	563	568	552	565	543	550	550	543	503	464	538	565	559	558	536	513	528	529	536	412	490	494	533
PORTLAND MAINE	673	303	---	---	560	637	534	382	544	229	203	516	594	604	345	251	371	521	483	596	375	46	81	502	515	477	552	562	570	477	514	449
PROSSER WASHINGTON	732	715	692	614	683	673	659	639	677	650	683	659	570	622	650	635	614	---	616	616	336	452	458	526	318	296	429	480	432	584	574	576
RAPID CITY S.DAK.	589	468	535	389	491	493	287	312	94	457	448	162	566	444	549	525	551	436	103	151	404	534	430	527	531	518	459	501	---	---	---	427
RENO NEVADA	575	565	560	657	660	658	645	603	618	618	629	627	624	606	597	490	541	603	615	589	547	595	540	330	589	604	577	514	496	278	564	571
RICHLAND 25 NW WASH.	646	647	642	480	637	623	610	531	606	563	625	598	514	577	593	586	592	578	572	586	586	406	462	503	288	242	362	422	311	471	529	529
RIVERSIDE CALIFORNIA	638	580	631	635	616	578	634	627	624	608	592	620	640	630	600	612	535	587	593	580	547	559	582	569	565	600	588	555	515	620	584	595
RUSTON LOUISIANA	597	161	380	563	510	572	419	457	488	499	380	132	440	488	564	489	444	535	450	204	377	402	498	435	479	568	332	482	480	525	440	445
SAINT CLOUD MINN.	462	650	611	526	614	285	465	406	528	544	555	575	71	249	244	639	432	650	169	51	79	286	336	559	605	601	585	538	567	558	505	450
†SALT LAKE CITY ASR	684	525	466	746	621	737	740	741	738	664	613	765	729	721	700	658	673	410	485	---	---	419	677	661	665	522	666	647	601	511	185	620
SALT LAKE CITY	584*	584*	494	702	581	693	685	683	686	682	607	712	684	677	674	647	646	363	333	656	687	449	647	644	629	481	638	630	579	423	207	593*
SAN ANTONIO TEXAS	672	594	283	554	636	476	334	608	655	629	192	339	359	489	574	500	650	656	525	571	604	590	466	604	125	277	296	472	458	364	602	489
SANTA MARIA CALIF.	611	571	569	581	637	617	583	591	533	521	505	571	545	553	566	582	531	559	531	421	396	522	518	561	572	534	579	561	566	580	480	550
SAULT STE MARIE MICH	123	665	686	539	398	279	149	290	353	339	246	632	562	134	261	508	493	630	574	545	133	60	194	418	308	568	485	378	445	368	479	395
SEATTLE WASH. UNIV.	644	635	617	276	597	610	544	361	412	127	607	536	141	525	491	481	589	577	595	581	576	331	467	358	80	121	464	---	356	515	505	457
SEATTLE TACOMA WASH.	680	679	663	290	626	662	589	427	492	180	644	596	240	540	505	523	628	628	627	614	614	352	473	375	95	123	514	569	442	539	541	499
SPOKANE WASHINGTON	710	710	698	614	625	---	---	---	650	554	685	538	351	609	643	635	642	618	569	634	628	522	597	588	305	187	397	542	211	379	481	547
STATE COLLEGE PENN.	642	104	723	537	512	605	579	557	452	539	382	550	564	63	455	387	655	570	430	498	207	388	585	335	439	516	422	513	520	428	449	471
STERLING VIRGINA	614	301	646	450	---	618	427	566	325	429	385	511	413	156	341	471	580	598	518	454	435	420	322	614	390	500	533	538	344	349	420	456
SWAN ISLAND W.I.	564	585	531	707	747	680	608	616	663	298	597	624	522	628	499	633	592	440	633	569	128	603	654	554	539	128	665	664	676	637	637	568
TAMPA FLORIDA	402	634	721	701	412	475	451	466	714	706	632	568	601	548	526	618	688	677	571	670	577	222	612	554	621	636	492	646	686	704	816	592
TUCSON ARIZONA	631	563	487	531	572	538	604	585	628	499	617	505	643	635	642	594	537	556	406	532	637	611	601	566	511	626	597	577	408	420	542	561
WAKE ISLAND,PACIFIC	538	510	596	572	619	603	589	528	545	173	502	479	431	291	301	528	545	478	583	529	470	508	225*	514	491	537	545	507	381	186	270	470*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values in parentheses are interpolated.

† ASR Research Lab, formerly listed as Salt Lake City Utah.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

AUGUST 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	354	385	286	374	271	402	373	360	367	305	185	351	337	296	353	344	344	*	*	*	*	*	*	*	*	*	*	*	*	416	244	---

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

* recorder malfunction Aug. 18-29

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

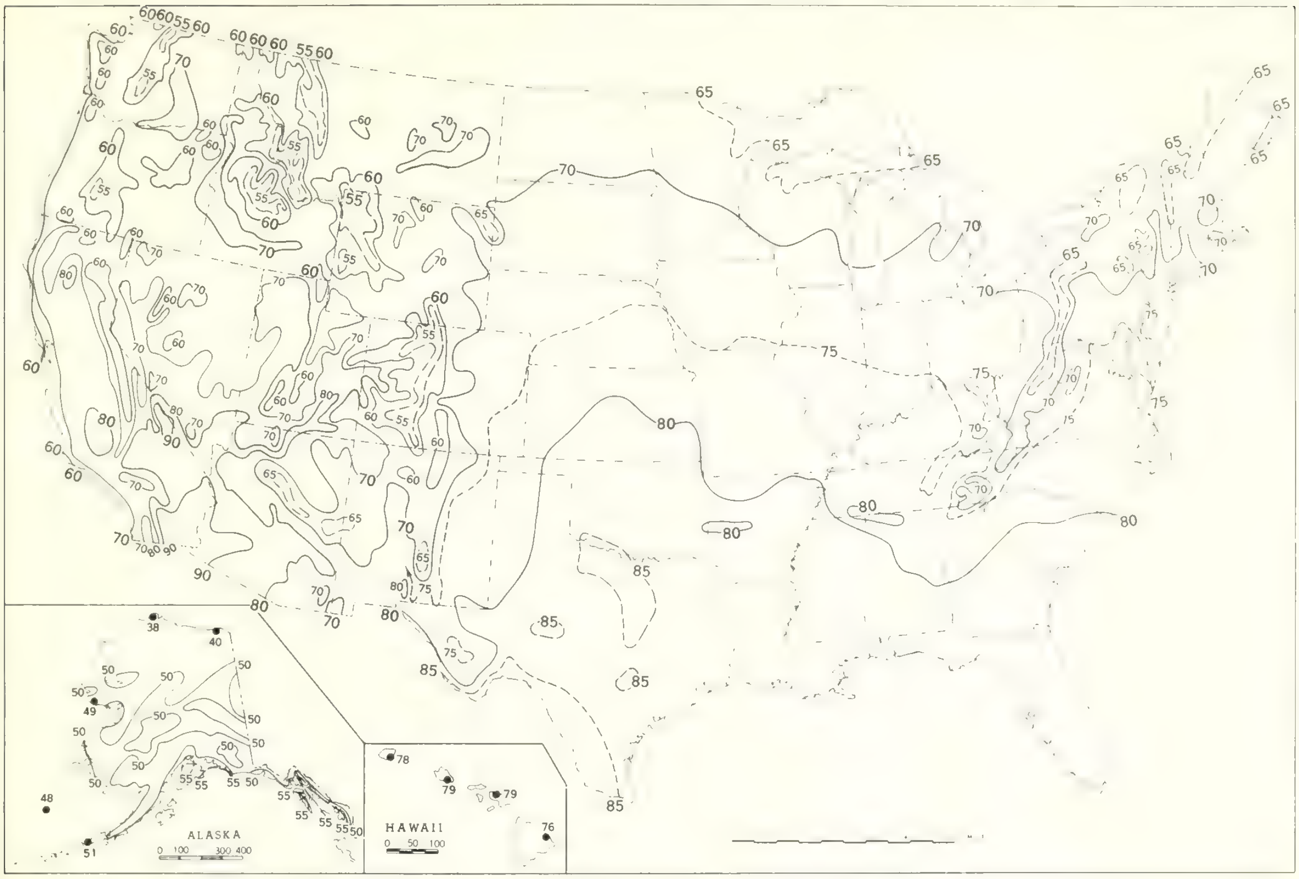
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λs Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

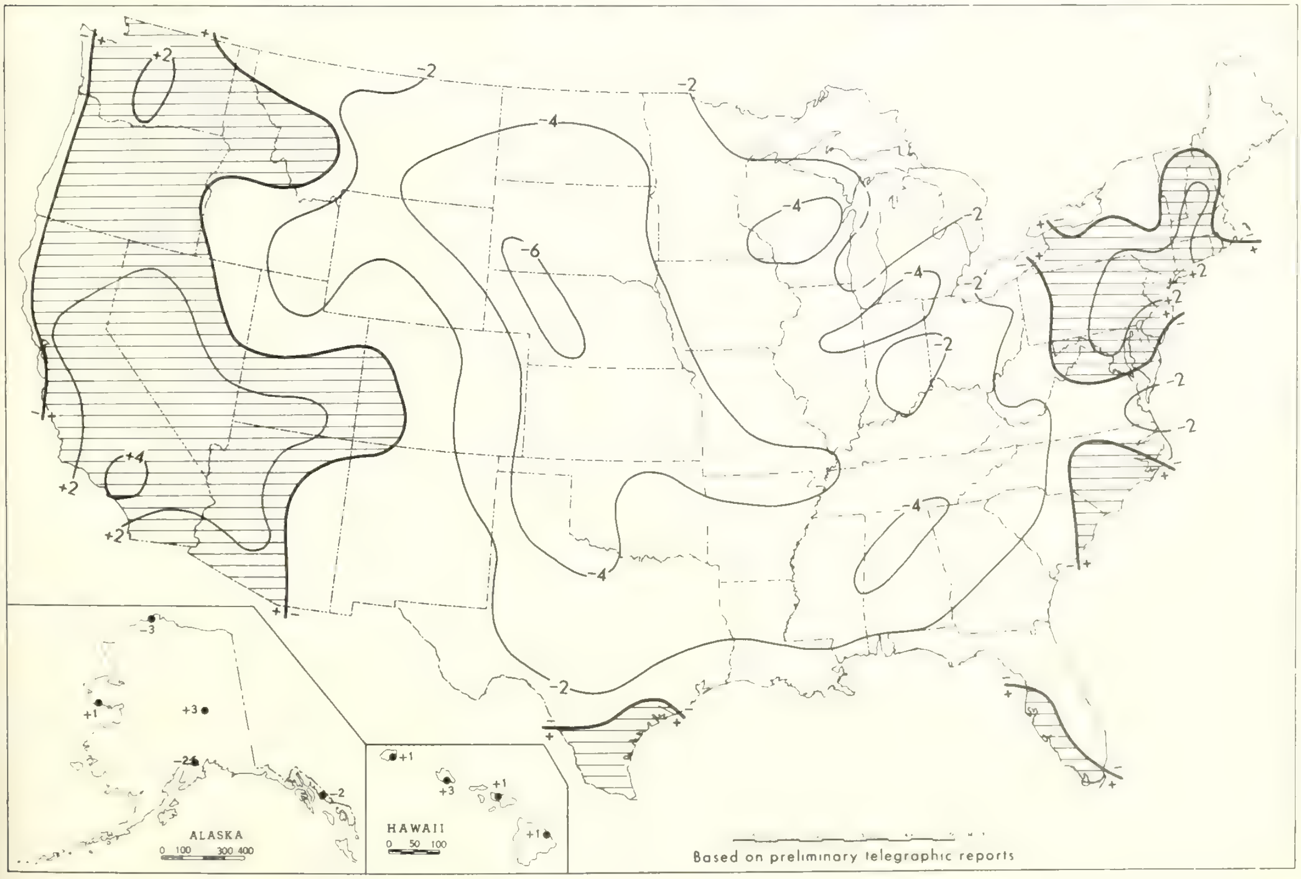
Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λs designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), August

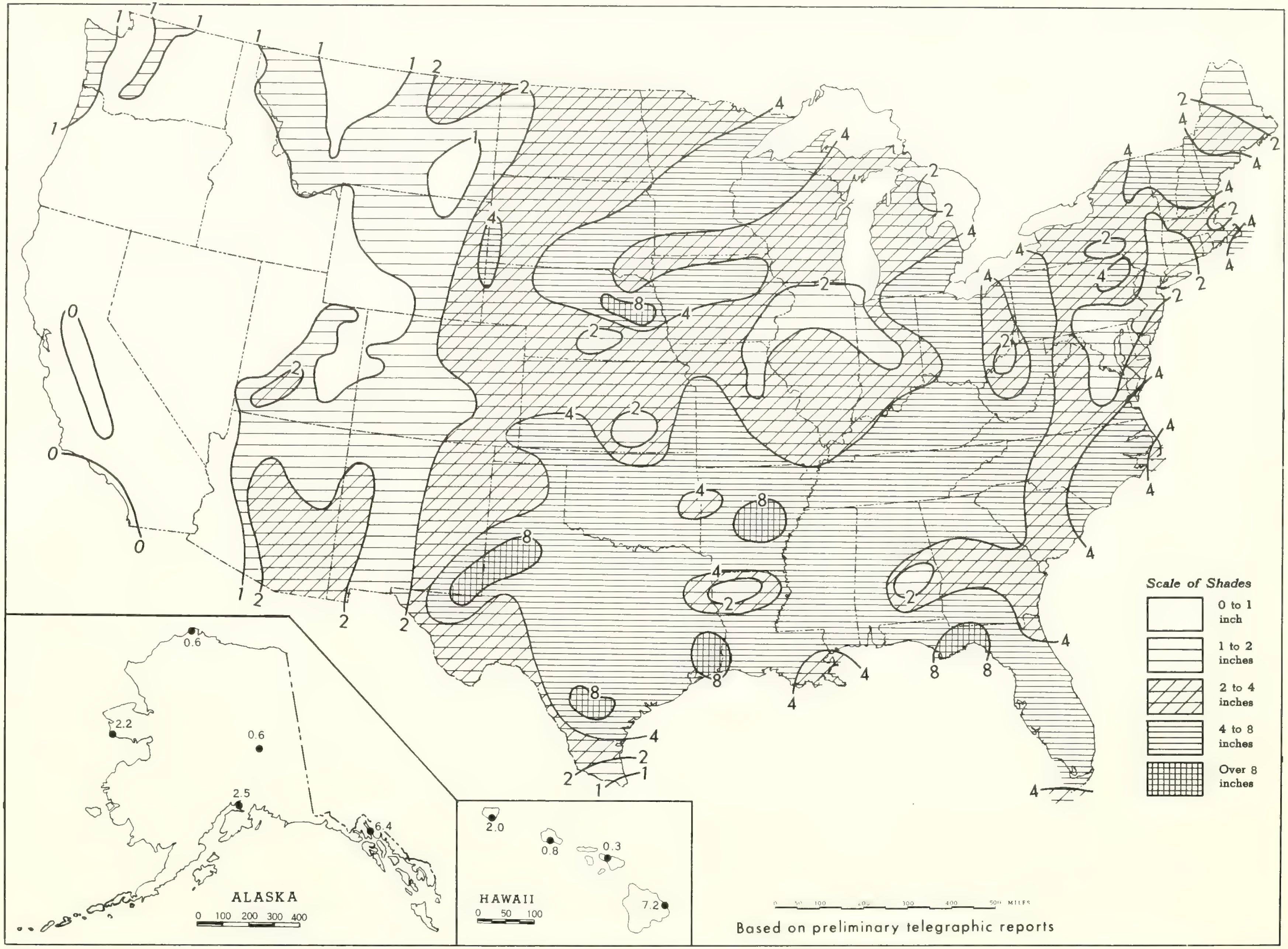


B. Temperature Departure from 30 - Year Mean (°F 1931-60), August 1966.



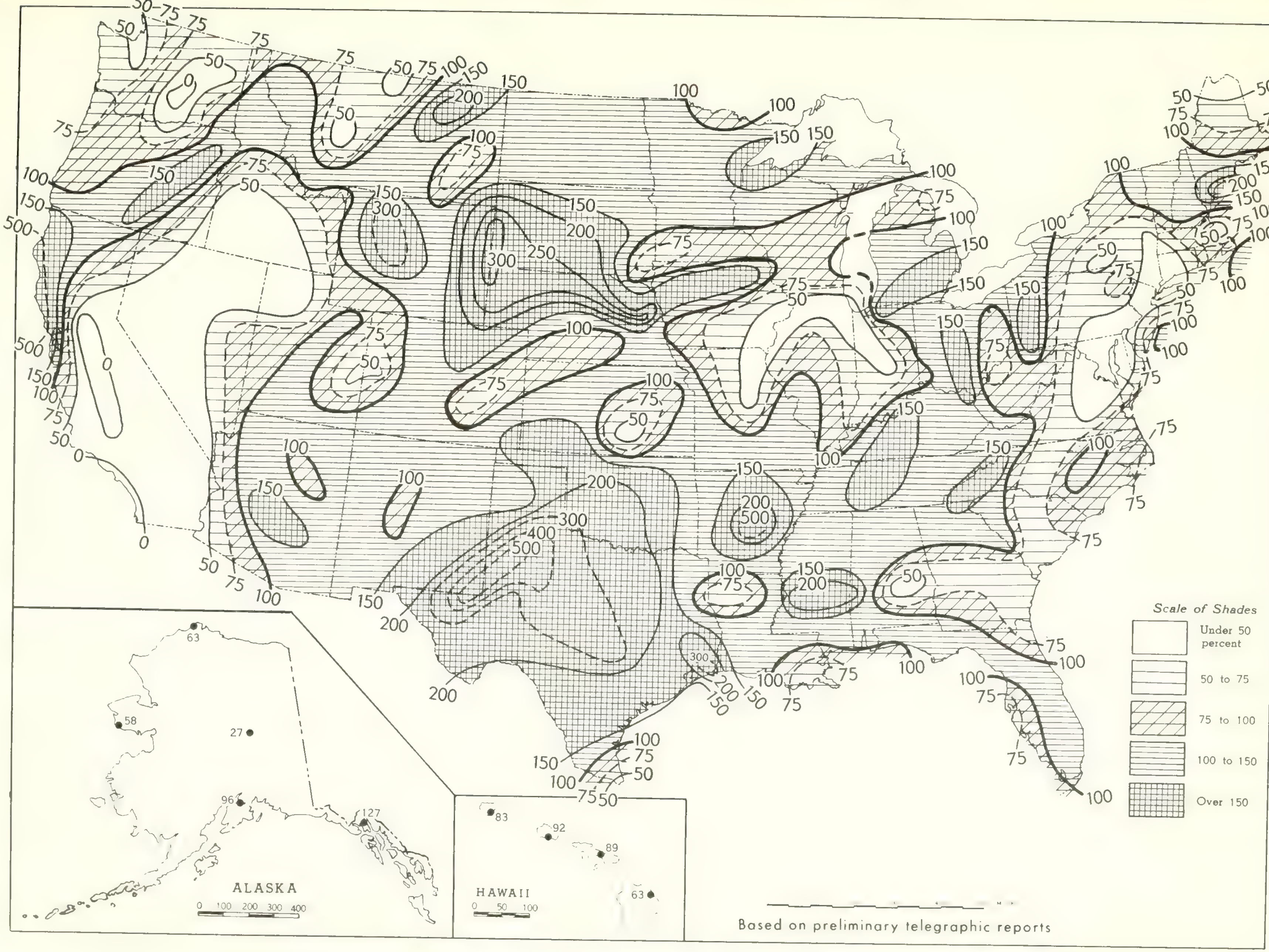
Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), August 1966.



Based on preliminary telegraphic reports

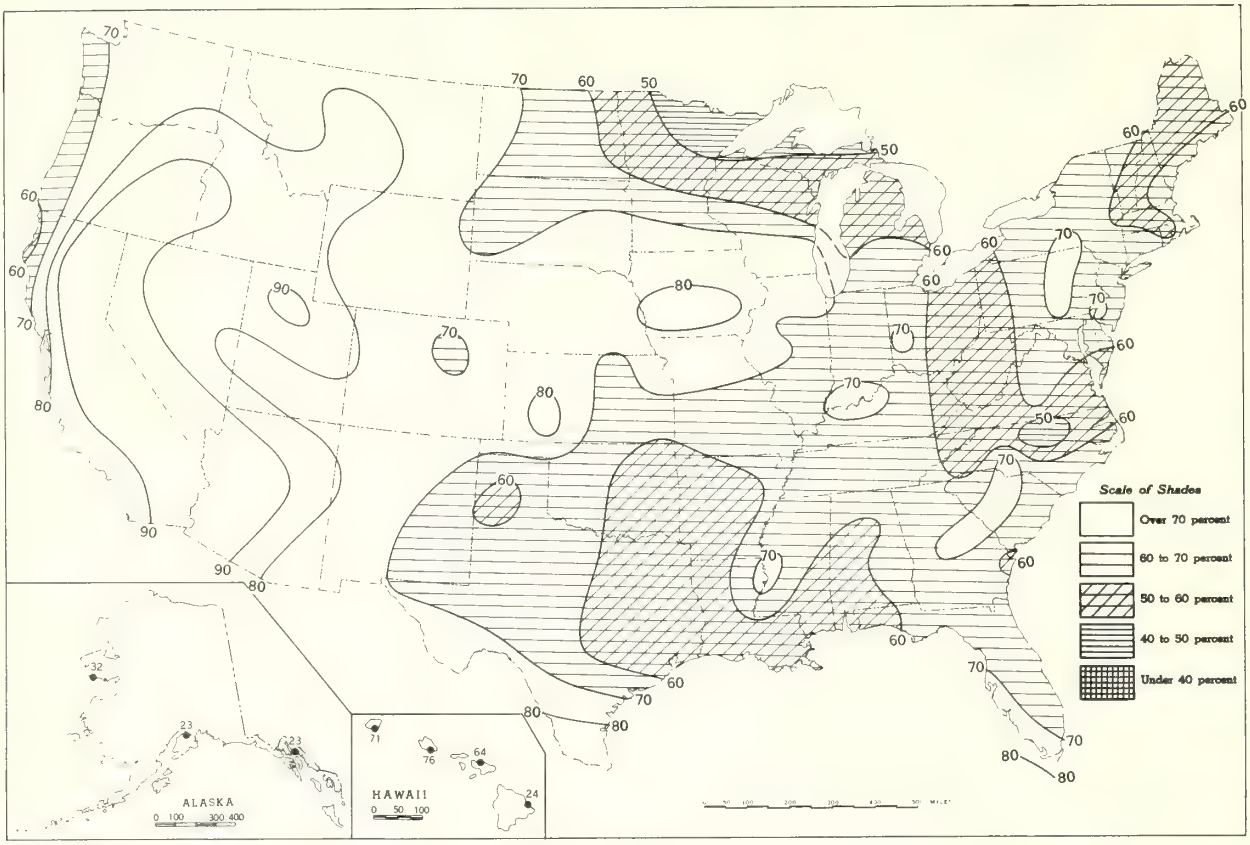
Chart III. Percentage of Normal Precipitation, August 1966.



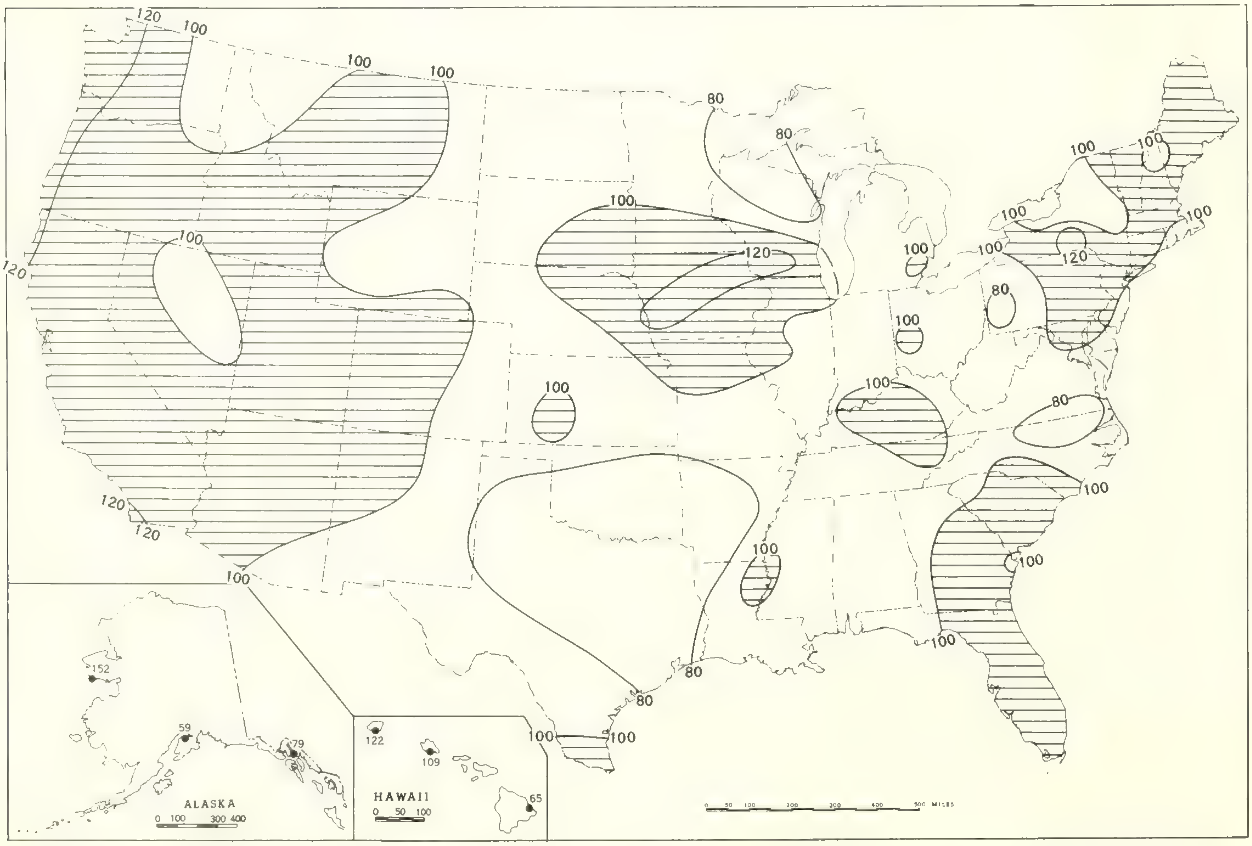
Based on preliminary telegraphic reports

Normal monthly precipitation amounts are computed from 30 yr. normals (1931-60) for first-order Weather Bureau stations.

Chart VI. A. Percentage of Possible Sunshine, August 1966.

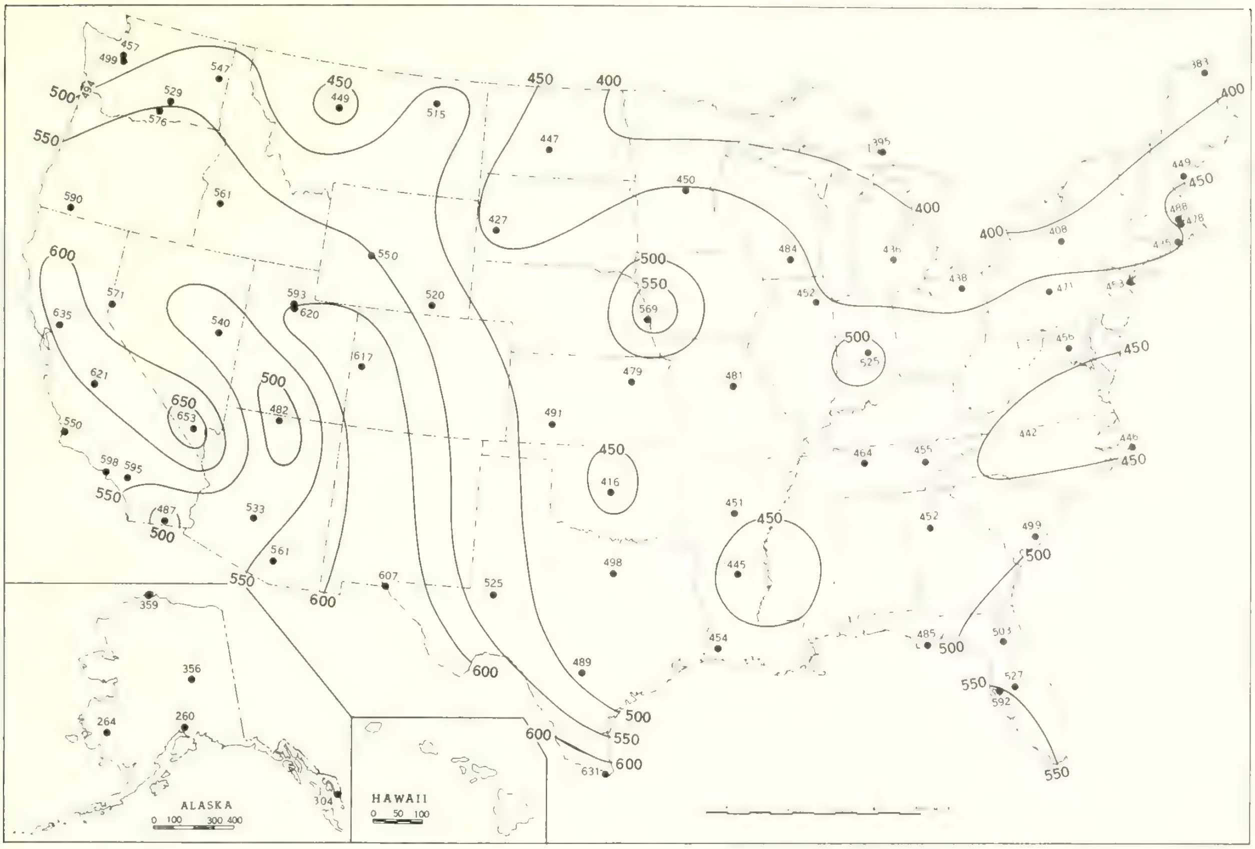


B. Percentage of Mean Monthly Sunshine, August 1966.

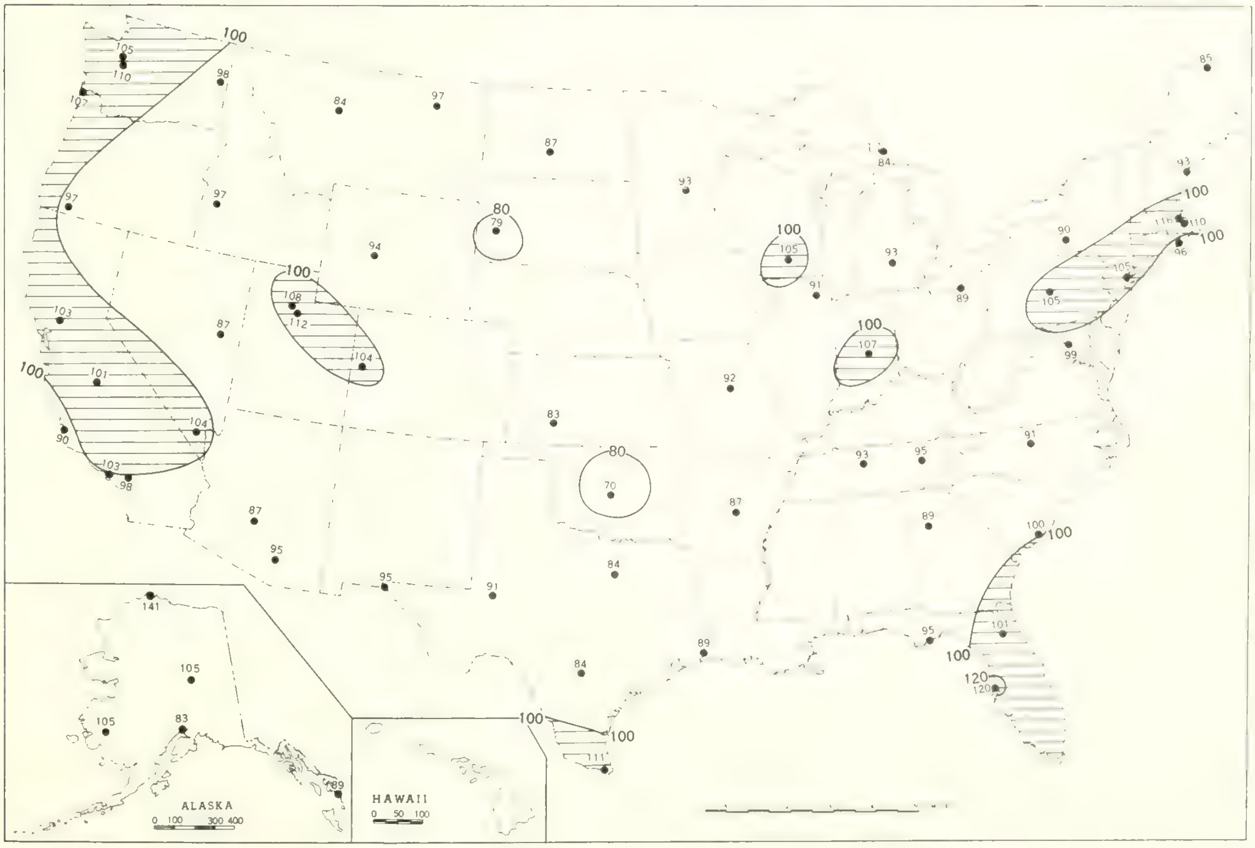


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, August 1966.

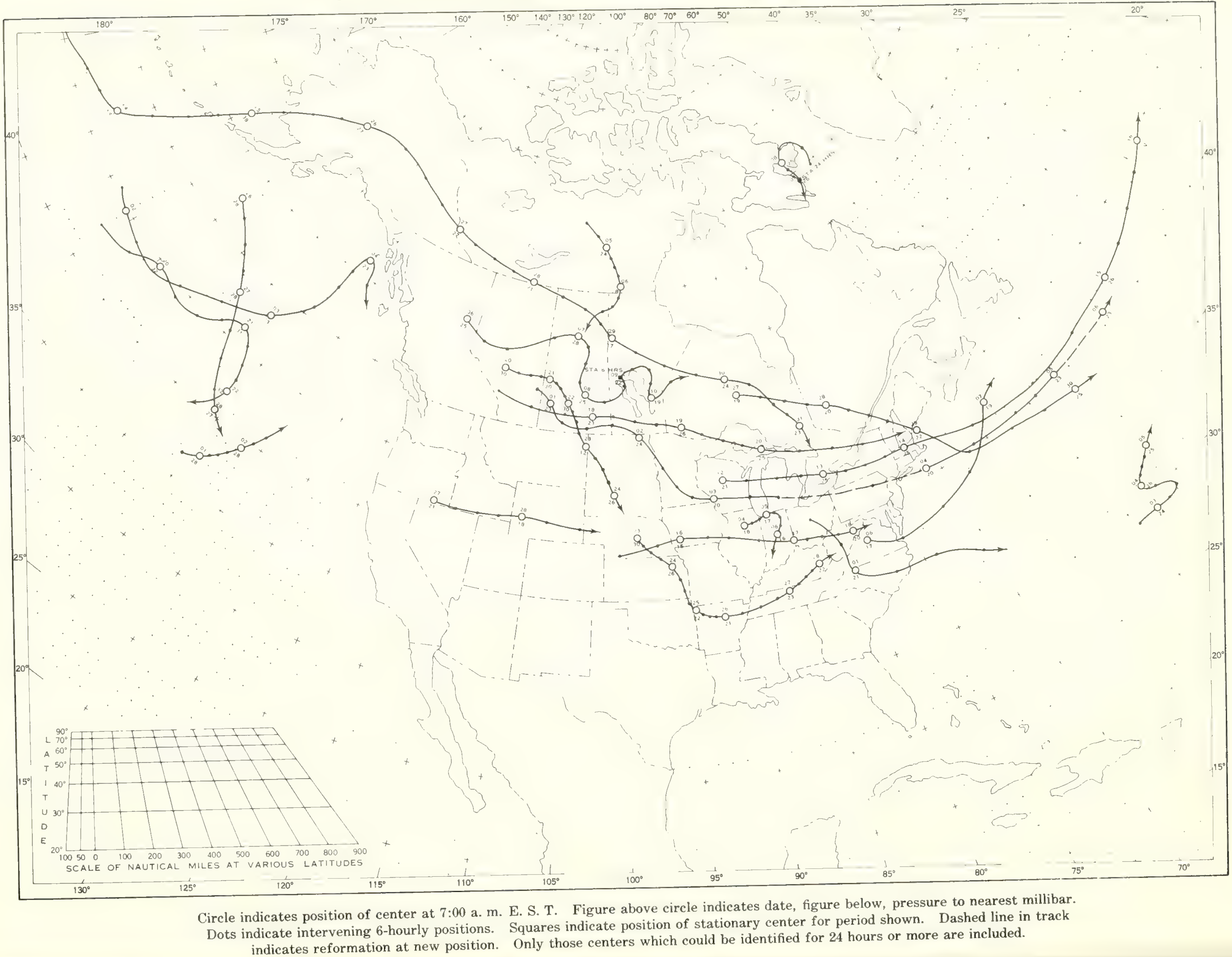


B. Percentage of Mean Daily Solar Radiation, August 1966.



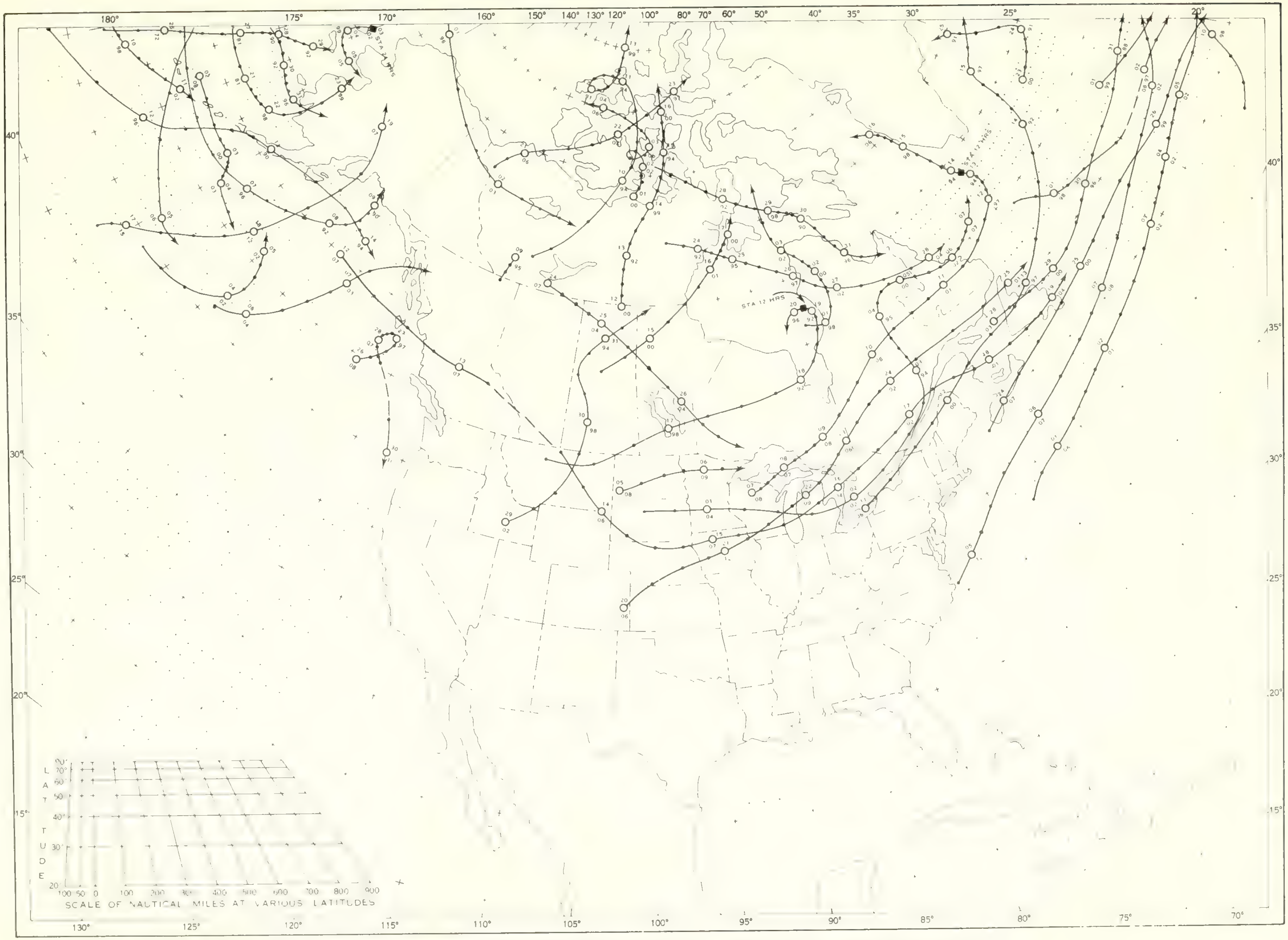
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, August 1966.



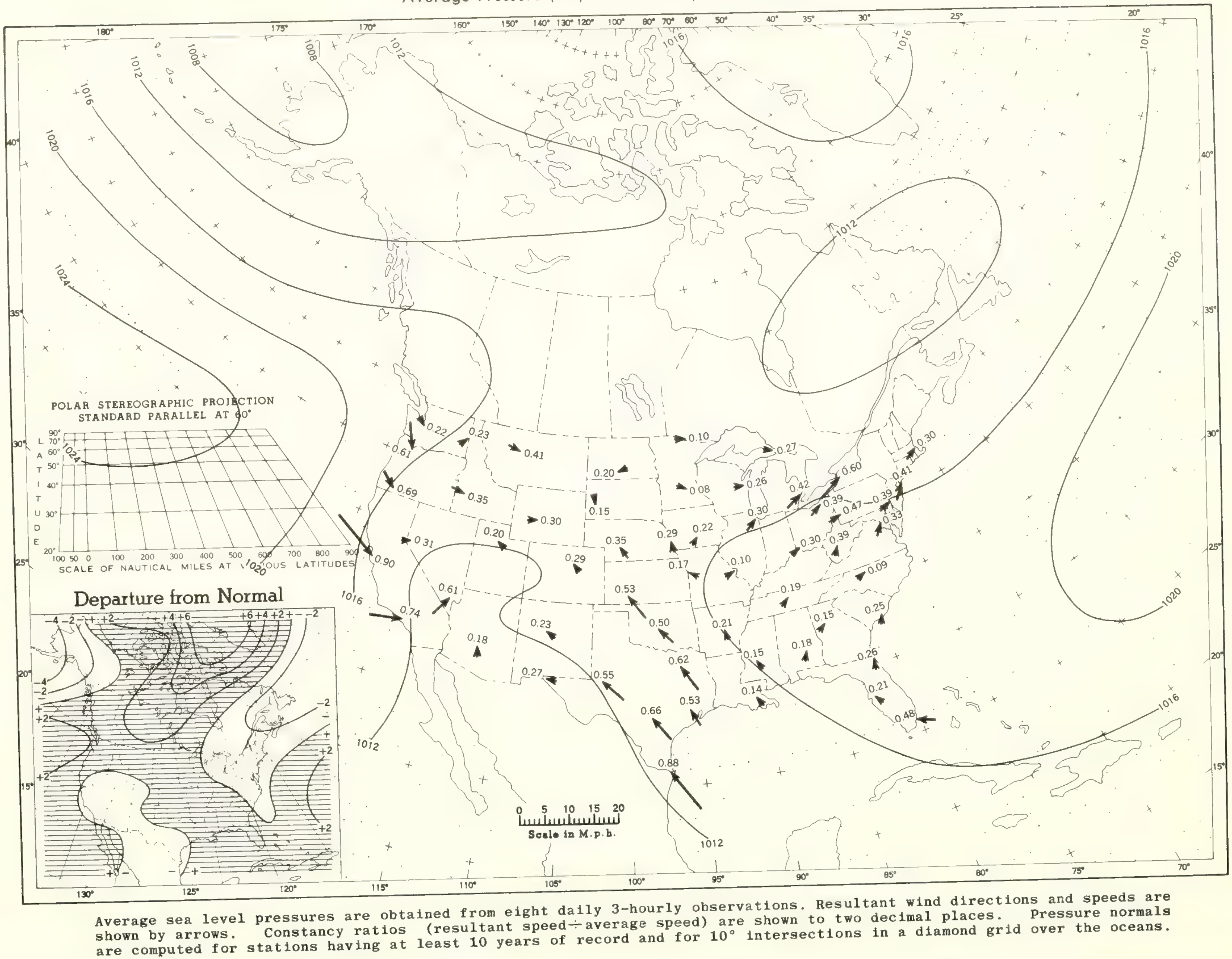
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, August 1966.



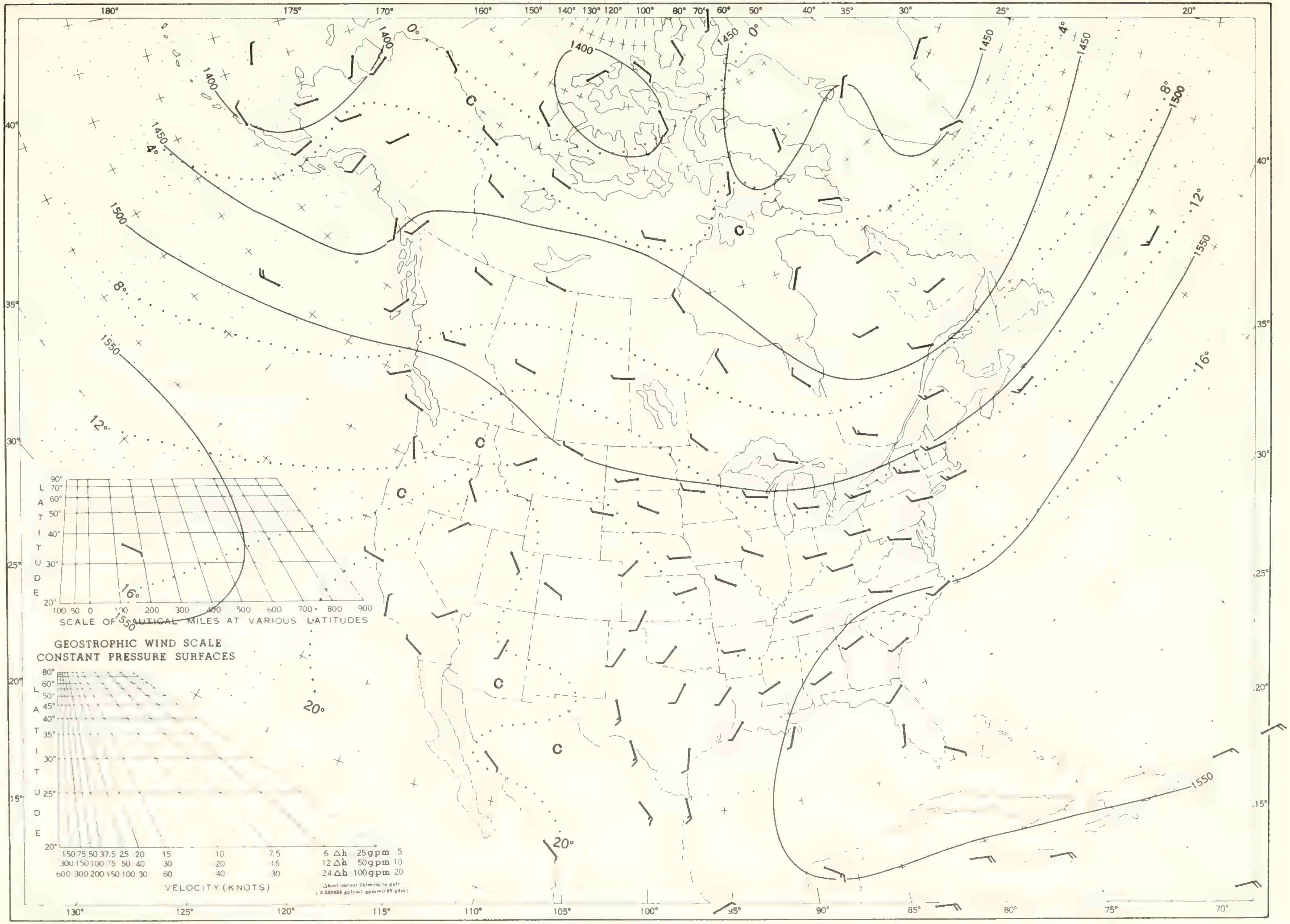
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, August 1966. Inset: Departure of Average Pressure (mb) from Normal, August 1966.



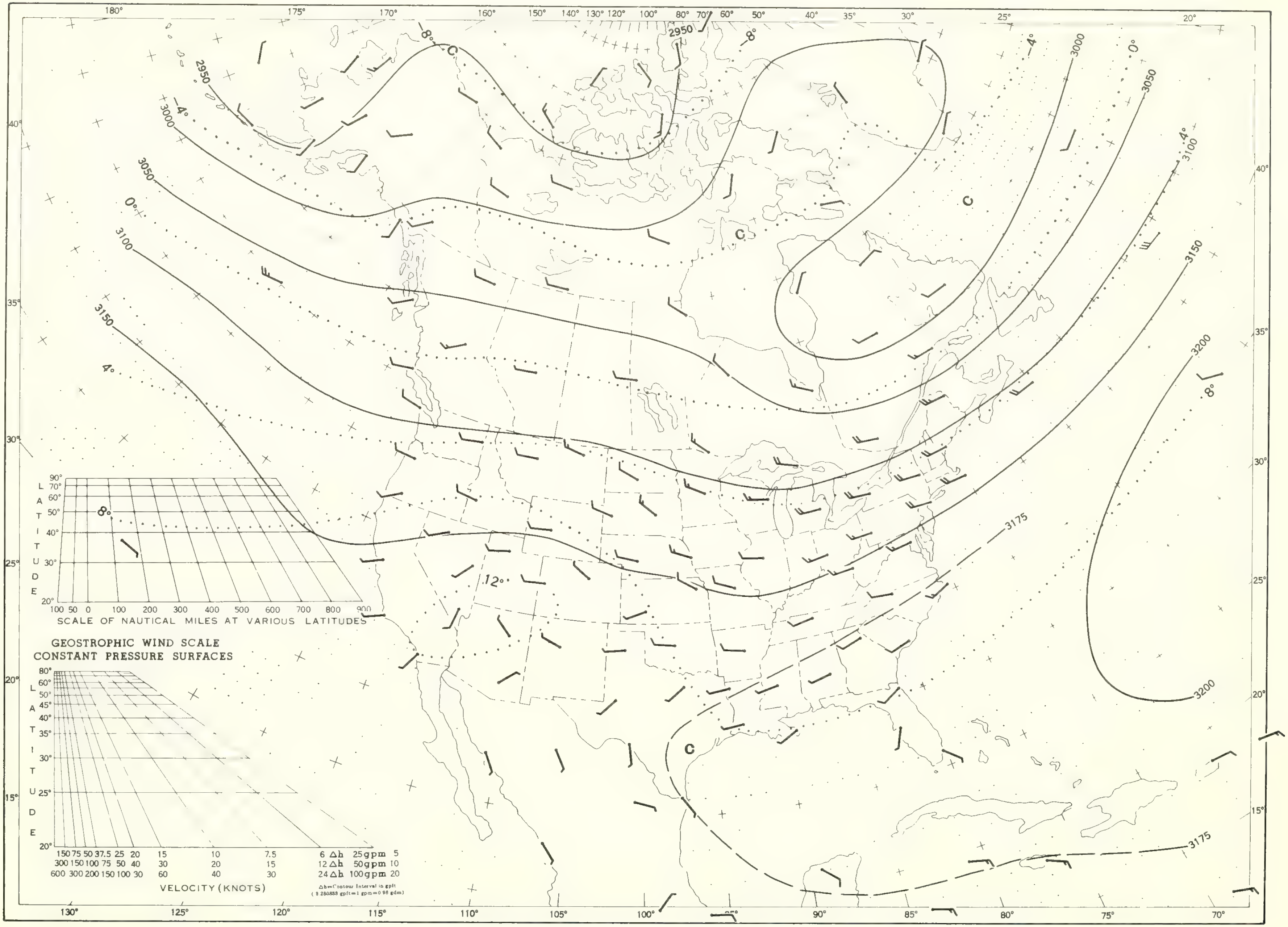
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, August 1966. Average Height and Temperature, and Resultant Winds.



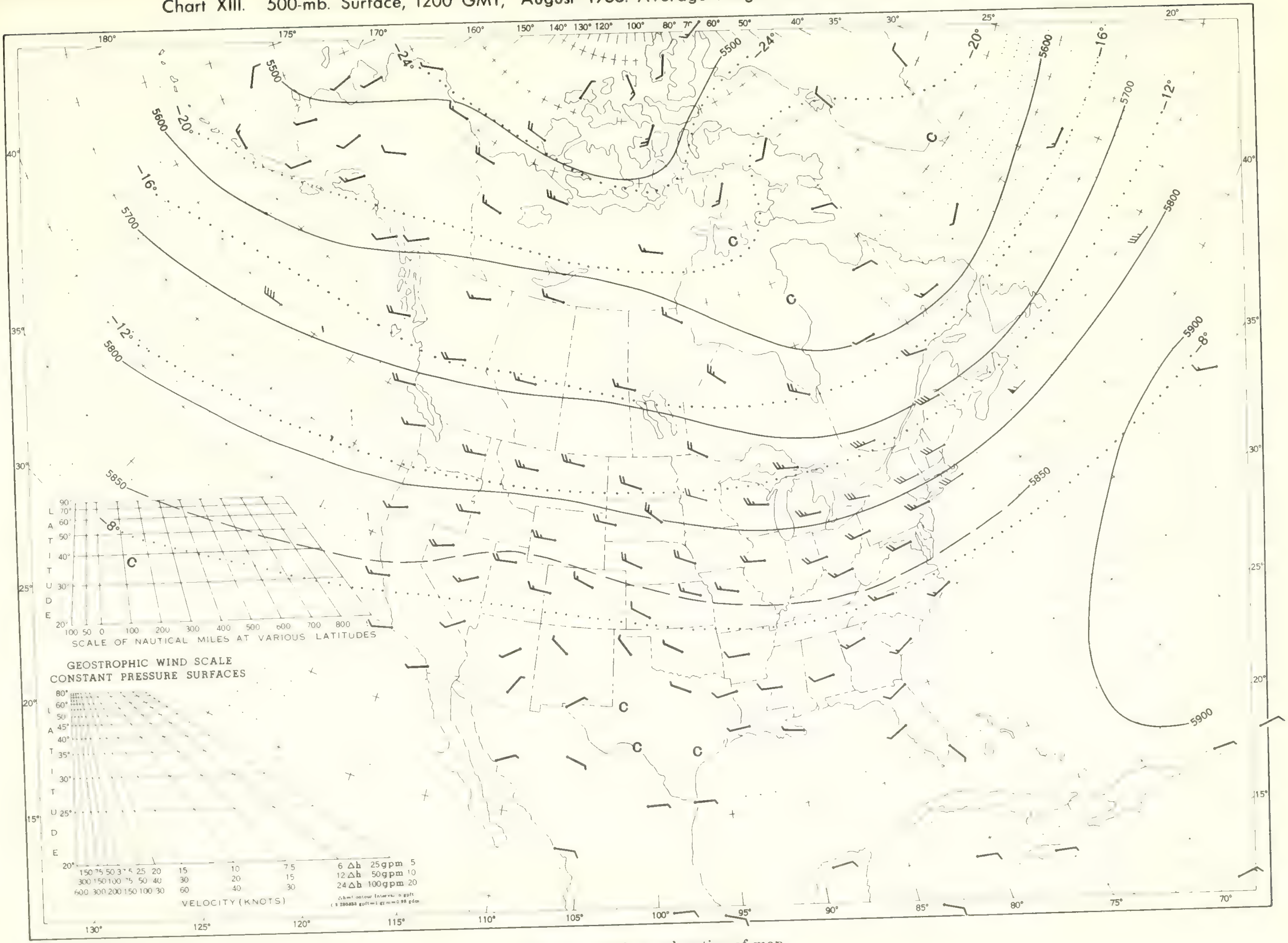
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, August 1966. Average Height and Temperature, and Resultant Winds.



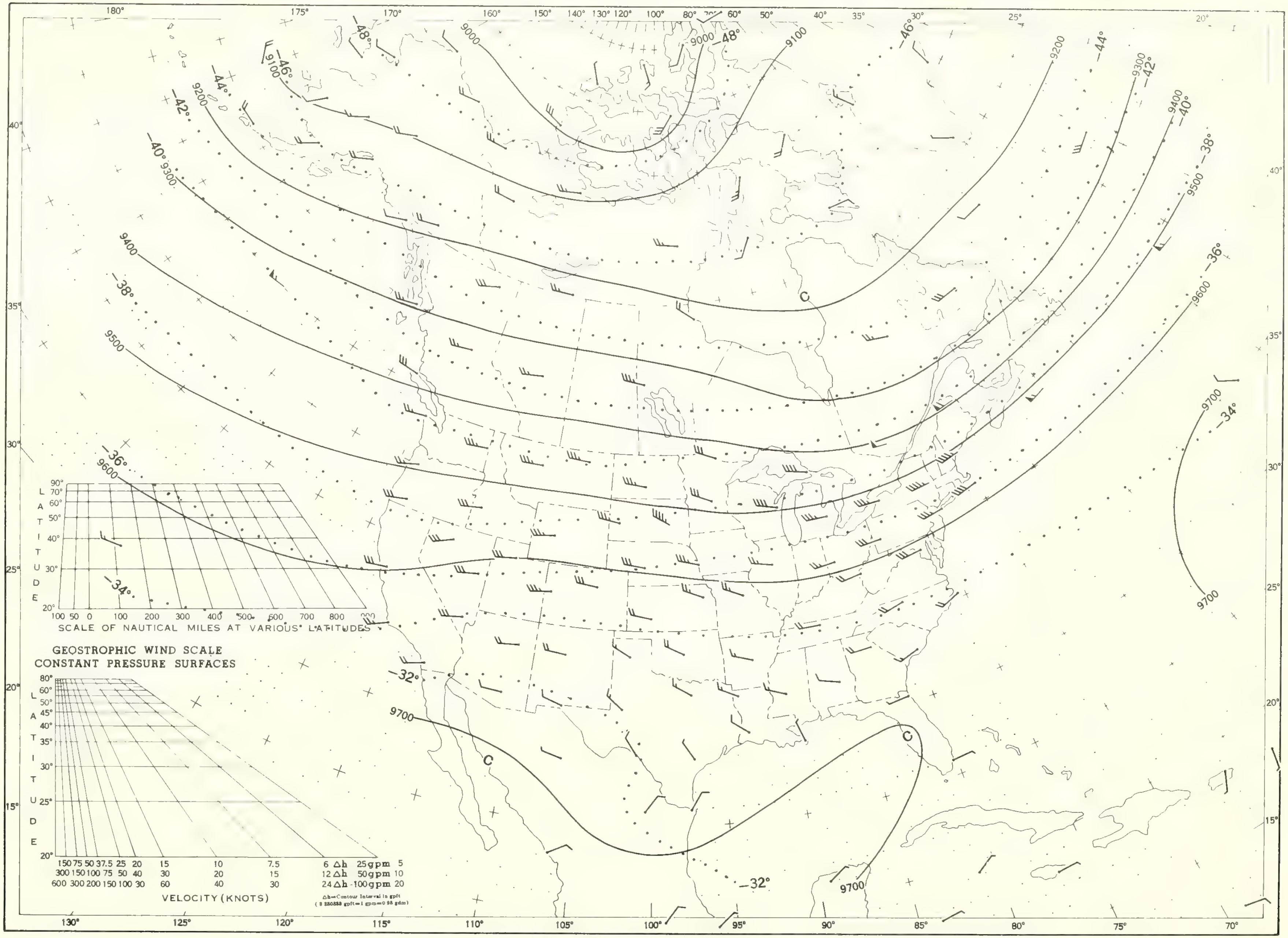
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, August 1966. Average Height and Temperature, and Resultant Winds.



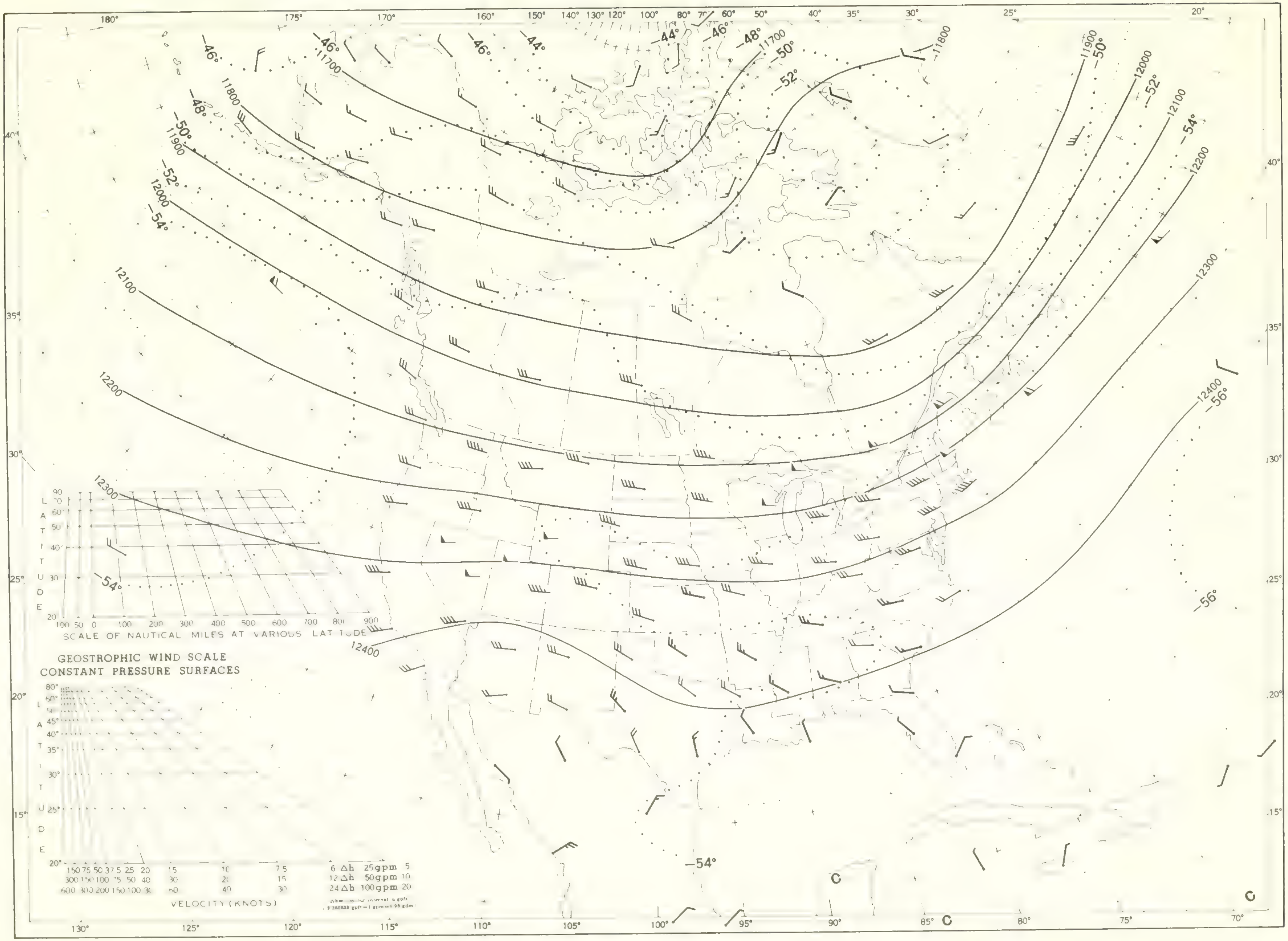
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, August 1966. Average Height and Temperature, and Resultant Winds.



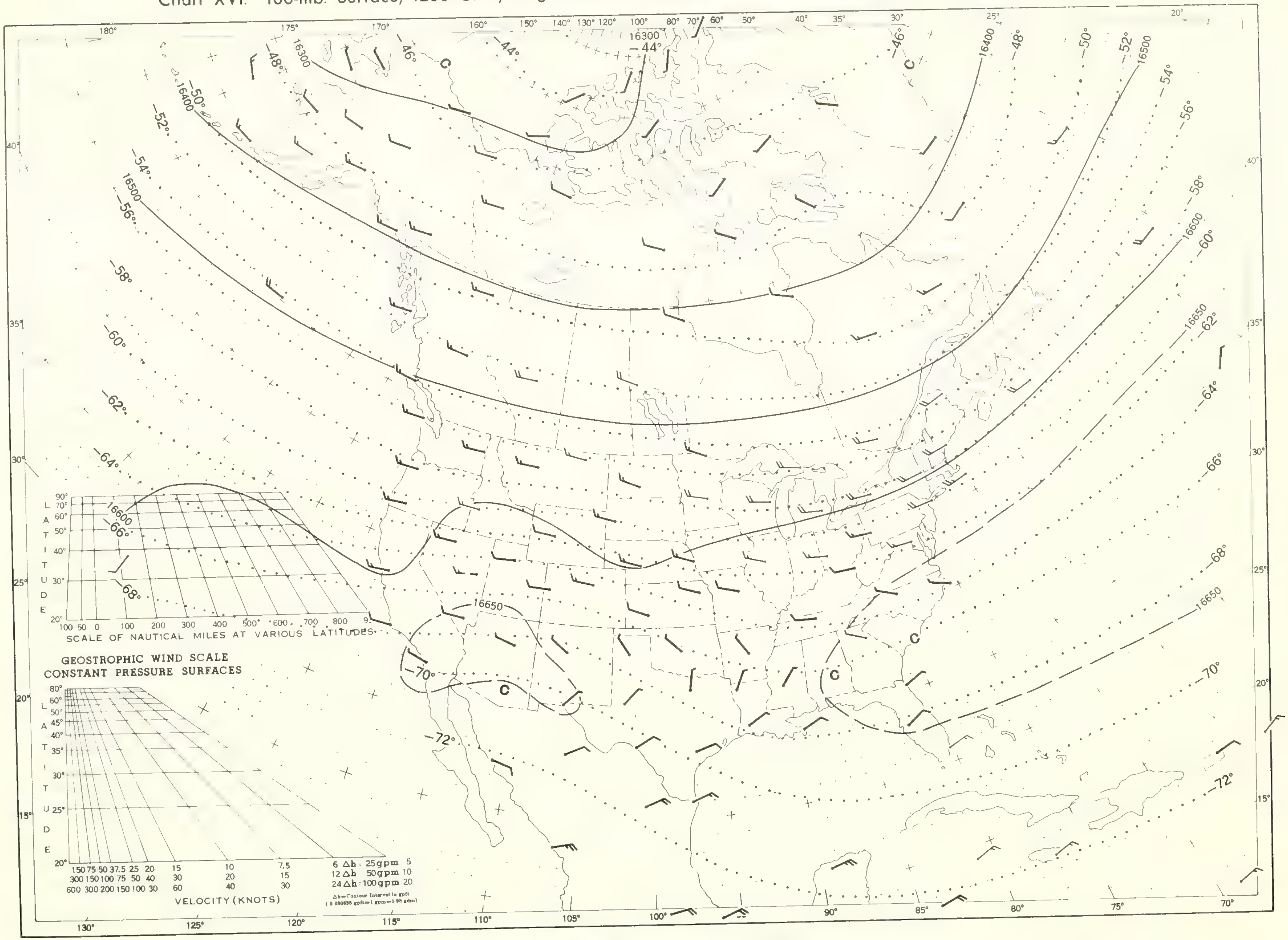
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, August 1966. Average Height and Temperature, and Resultant Winds.



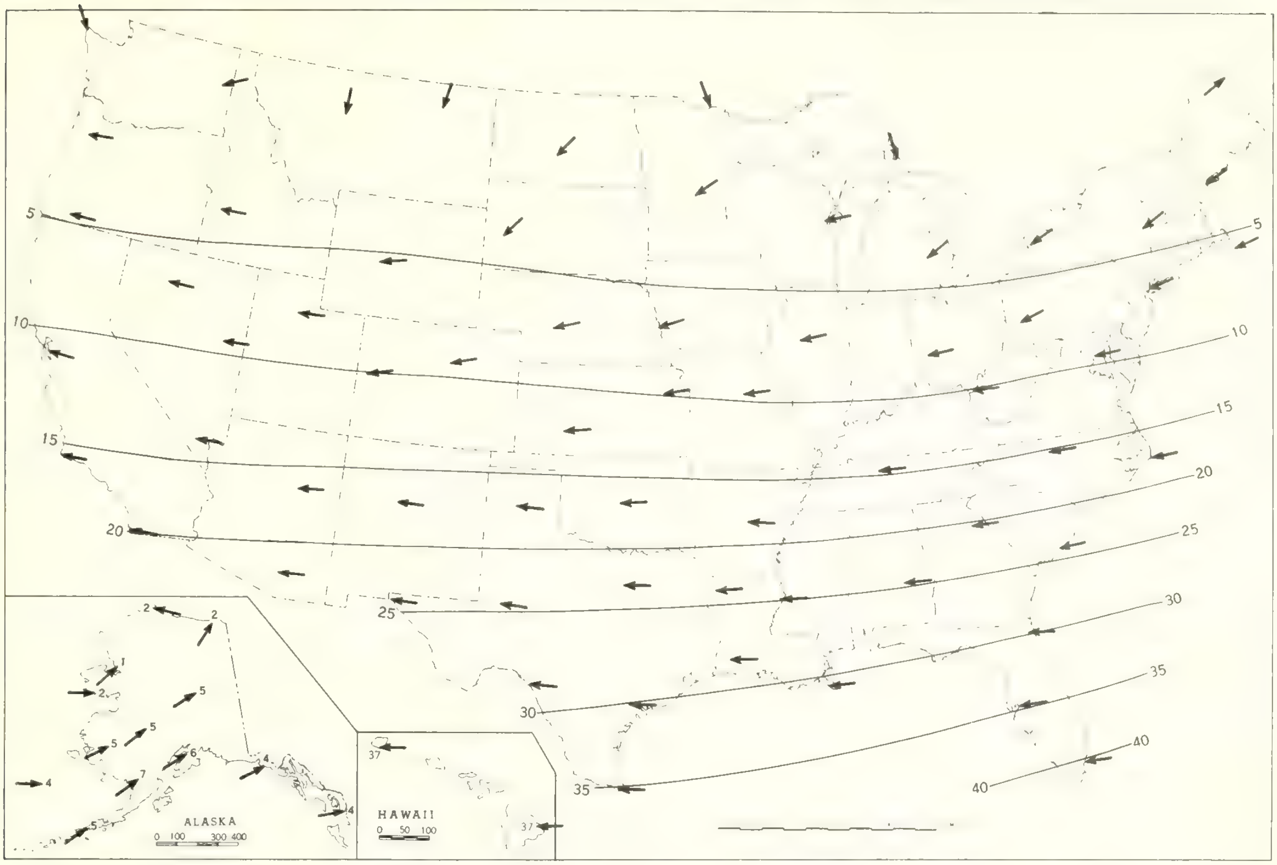
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, August 1966. Average Height and Temperature, and Resultant Winds.

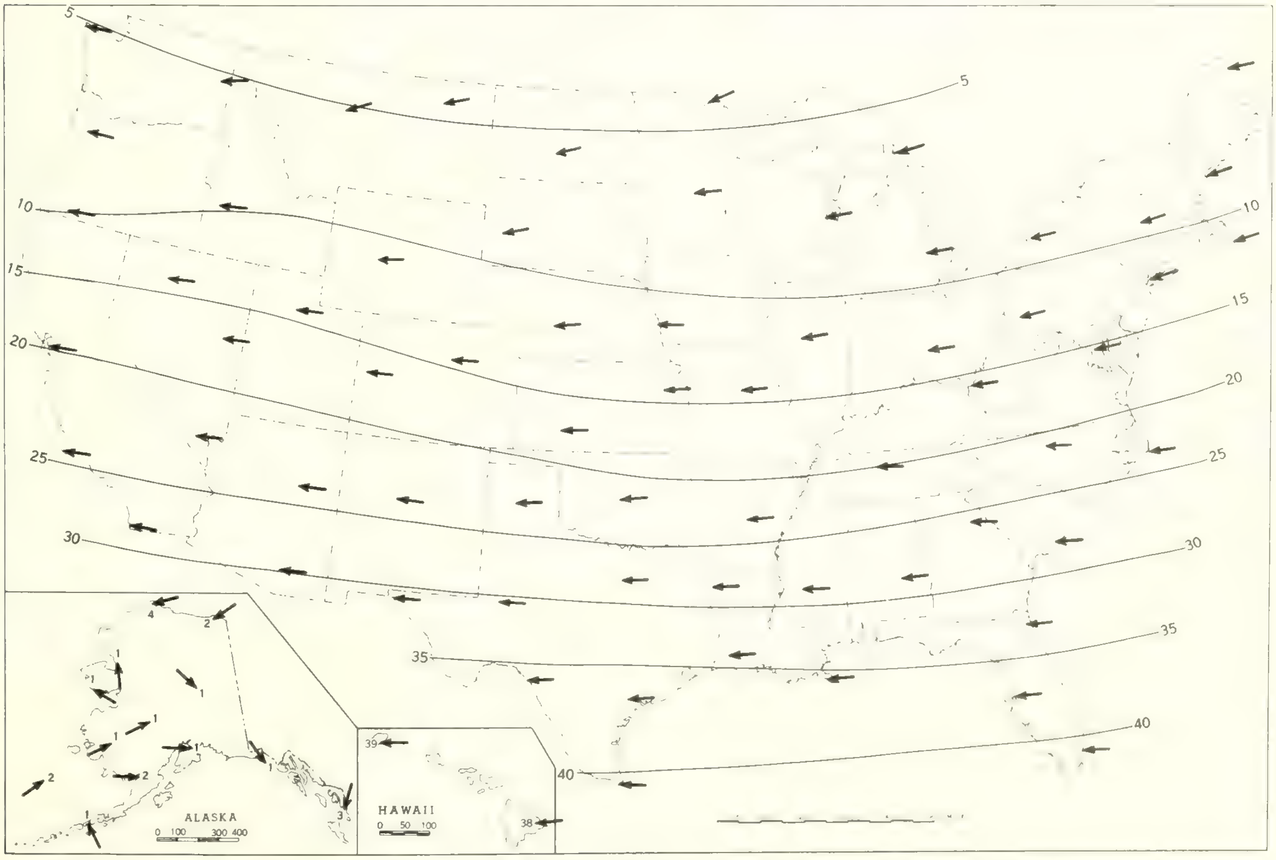


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, August 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, August 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. 11/15/66 1900

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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SEPTEMBER 1966
Volume 17 No. 9

ASHEVILLE: 1966

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 9 SEPTEMBER 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Unusually warm in Northern Rockies.
2. Heavy precipitation in Northeast Drought areas.
3. Tornado Southeast Cleveland, Ohio, 29th.

TEMPERATURE.--September temperatures averaged above normal along the Canadian Border west of the Great Lakes and in the Far West, and below normal in most other areas. This temperature pattern was just the reverse of that for September 1965 which was warm in the South and East and unusually cold in north-central and western areas. This was the coolest September since 1957 at Oklahoma City, Okla., and the warmest during a record dating back to 1896 at Kalispell, Mont. Extreme temperatures for the month ranged from 114° at Indio, Calif., to 13° at Sula, Mont., and two stations in California.

The warm weather in most of the Far West was continuous except for brief cool spells at the beginning of the month and again during the third week. In Montana and adjacent areas, the second week was 12° warmer than normal. Red Bluff, Calif., recorded a record high temperature for so late in the season of 109° on the 29th and Sacramento, Calif., one of 103° on the 30th. Highs in the 90's occurred on several days in the northwestern Great Plains.

Relatively warm weather persisted east of the Appalachians from Maryland and Delaware northeastward through New England the first 13 days of the month. Temperatures were well below normal during the remainder of the month in this region as well as in other areas east of the Rockies.

PRECIPITATION. -- The precipitation pattern for September, relative to normal, was extremely irregular with monthly totals ranging from none at all to more than twice normal. Some of the greatest monthly totals included 11.48 inches at Heflin, Ala., 12.67 inches at Emmitsburg, Md., 17.66 inches at Wewahitchka, Fla., and 13.77 inches at Red Bluff Crossing, Tex. Unofficial readings up to 17 inches or more were reported in Texas.

The largest and most important area of heavy rainfall extended from northern Georgia northeastward through Maryland, Delaware, New Jersey, eastern Pennsylvania, eastern New York, and southern New England. Nearly all this area received over 4 inches and numerous stations reported 6 to over 8 inches. Up to 5 years of drought had persisted from the Virginias northeastward to eastern New York and southern New England. These heavy rains helped replenish soil moisture, and eased water shortages in streams, lakes and reservoirs. Harrisburg, Pa., measured 6.12 inches for its largest monthly total since July 1961 and the most for September in the past 32 years. Most of this heavy rainfall occurred during a storm on the 13th to 15th when the Washington, D. C. Airport, measured 4.15 inches in 24 hours. Heavy rains over the Potomac River Basin ended the threat of a water shortage in the Nation's Capital. In north-central Maryland rainfall for this September was the heaviest since 1934.

Other areas with well above normal rainfall included parts of the Ohio Valley, the Great Plains, southern Rockies, Pacific Northwest, and Gulf Coastal areas. This was the third consecutive month of above-normal rainfall in the northern Great Plains. Wichita Falls, Tex., had 7.45 inches, the most for September since 1936 and Rapid City, S. Dak., measured 2.13 inches on the 13th for the greatest 24-hour amount there in September since 1923. In the Far West 1.88 inches at Medford, Oreg., was the greatest September total there since 1940, and 2.00 inches was the greatest September amount for Phoenix, Ariz., since 1958.

The area with most serious deficiencies extended from southern Idaho southwestward through California. Ranges were in poor condition throughout this area and in Nevada cattle and sheep were down from the high ranges a week to a month early due to lack of forage. In some areas grain seeding was delayed. At Eureka, Calif., rain on the 17th and 18th, the first substantial rain of the season, was helpful, but hot, dry weather the last 10 days of the month caused a very high fire hazzard in nearby forests by the end of the month. At Red Bluff, Calif., drought which began in March 1966 continued. San Diego, Calif., had only a trace for the period July through September. Boise, Idaho, reported its driest water year (October 1, 1965-September 30, 1966), 5.74 inches; the second driest was the 1923-24 year with 7.36 inches. Drought continued in western Nevada where Reno had only 0.10 inch of rain for the month, less than half normal, and only 0.73 inch since January 1, less than 15 percent of normal for the period.

SEVERE STORMS.--The usual severe local storms occurred during the passage of fronts and low pressure areas. A tornado injured more than a score of people and caused considerable damage in the southeastern suburbs of Cleveland, Ohio, on the 29th. Flashflooding caused damage in many areas. Flooding in the Metropolitan area of Washington, D. C., on the 14th was blamed for one death and damage estimated up to $2 million.

CONDENSED CLIMATOLOGICAL SUMMARY

SEPTEMBER 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	3 Stations	98	7	Valley Head	43	25+	Heflin	11.48	Livingston	0.71
Alaska	Data will be delayed									
Arizona	Yuma Citrus Station	112	12+	Fredonia	30	15	Palisade RS	7.36	Alamo No 1	.00
Arkansas	Booneville	97	25	3 Stations	38	30+	Augusta	6.56	Hector	.27
California	Indio US Date Garden	114	23	2 Stations	13	15+	Fort Dick	3.95	23 Stations	.00
Colorado	2 Stations	97	25+	Fraser	15	30	Byers	4.78	Meredith	.00
Connecticut	Hartford WBAP	95	2	West Thompson Dam	29	27	Waterbury Radio WBRY	8.71	Baltic	3.88
Delaware	Selbyville	95	5+	Georgetown 5SW	39	17	Wilmington New Castle WBAP	8.53	Bridgeville 1NW	3.98
Florida	Cross City 2WNW	99	8	3 Stations	52	23+	Wewahitchka	17.66	Milton Exp Station	2.19
Georgia	Camilla	100	4	Blairsville Exp Sta	38	25	Folkston 9SW	10.16	Fort Gaines	1.23
Hawaii	Data will be delayed									
Idaho	Riggins Ranger Station	104	22	Galena	15	26	Ashton 1S	2.42	Bliss	.05
Illinois	Effingham	96	3	2 Stations	33	26	Marshall 1E	10.43	Antioch	.38
Indiana	Shoals Hiway 50 Bridge	94	5	3 Stations	30	26+	Sullivan 1SSE	8.91	Mich City Philips AP	.58
Iowa	2 Stations	92	3+	Carroll 2SSW	27	16	Keosauqua	4.28	Boone	.15
Kansas	Elk City Dam	99	4+	Hill City FAA AP	35	30	Frankfort	5.72	Tuttle Creek Dam	.36
Kentucky	Lovelaceville	94	2	Falmouth 5WNW	33	16	Freeburn 2SW	8.03	Springfield	1.03
Louisiana	4 Stations	97	7+	2 Stations	47	22	Buras	14.74	Lake End	.50
Maine	Saco	89	2	Eustis 2	20	27	Bar Harbor	7.43	Houlton	1.75
Maryland	Vienna	98	4	2 Stations	30	17+	Emmitsburg 2SE	12.67	Salisbury FAA AP	4.01
Massachusetts	Fitchburg 2S	94	3	Birch Hill Dam	26	27	Beechwood	7.21	Nantucket WBAP	3.33
Michigan	2 Stations	92	2+	Lupton 1SW	23	25	Watersmeet	4.31	Eagle Harbor Coast GD	.59
Minnesota	Beardsley	91	9	Orr 13W	20	26	Pipestone	6.13	Gull Lake Dam	.21
Mississippi	Liberty 1W	98	8	Pontotoc	44	29	Louisville	8.31	Pleasant Hill	.71
Missouri	Malden	94	4	Louisiana Starks Nur	34	16	New Madrid Pwr Plant	8.60	Lucerne	.76
Montana	Mildred	100	8	Sula	13	30	Otter 9SSW	3.96	Conrad	.00
Nebraska	Merriman	98	9	Sidney FAA AP	27	30	Weeping Water	6.01	Grand Island WBAP	.43
Nevada	Sunrise Manor Las Vegas	107	7	Charleston	17	13	Pioche	2.87	Amargosa Ranch	.00
New Hampshire	Windham	92	2	Mount Washington	17	27	Epping	6.47	Berlin	2.06
New Jersey	2 Stations	96	1	Sussex 1SE	31	27+	New Brunswick Exp Sta	10.96	Newton	3.94
New Mexico	Tularosa	98	3	4 Stations	25	28+	McCauley Ranch	4.46	2 Stations	.00
New York	2 Stations	97	2+	Salisbury	25	27	New York Ave V Brooklyn	[illegible].29	Ellenburg Depot	1.66
North Carolina	5 Stations	96	4+	Banner Elk	33	25	Gillespie Gap	10.35	Rocky Mount Power Pl	1.31
North Dakota	2 Stations	99	9+	2 Stations	22	14	Oaks	2.41	Ambrose 3N	.00
Ohio	Toledo Blade	94	2	Jackson 2NW	29	16	Eaton	7.74	Canton Repository	.86
Oklahoma	Buffalo	99	2	Gage FAA AP	41	30	Hominy 4N	8.50	Checotah	.16
Oregon	Spray	103	5	Chemult	18	12	Brookings	4.22	Sheaville	.05
Pennsylvania	Harrisburg WBAP	97	3+	Clermont 4NW	24	16	South Mountain	10.57	Charleroi Lock 4	1.25
Puerto Rico	2 Stations	97	27+	2 Stations	59	13+	Guineo Reservoir	16.40	Potala	1.05
Rhode Island	Newport	90	2	Kingston	31	27	Greenville	6.10	Newport	4.52
South Carolina	2 Stations	98	4+	Walhalla	43	25	Greenville	10.57	Beaufort 7SW	1.32
South Dakota	Interior 3NE	102	11	Custer	23	27	Sioux Falls WBAP	6.34	Wetonka	.48
Tennessee	Waverly	96	2	Mountain City No 2	37	24	Unicoi 2ESE	7.86	Jackson Exp Sta	.77
Texas	Falcon Dam	106	16+	Mount Locke	40	30	Red Bluff Crossing	13.77	Milam 6ENE	T
Utah	Saint George	102	22+	4 Stations	22	15+	Garfield	2.76	Lakeside	.00
Vermont	Vernon	92	3	3 Stations	24	28+	Searsburg Station	6.66	Gilman	1.77
Virginia	3 Stations	97	1+	Monterey	30	16	Big Meadows	12.43	Emporia 1WNW	1.78
Washington	Pleasant View	104	6	2 Stations	29	30	Clearwater	4.50	Wilson Creek	.03
West Virginia	Harpers Ferry Nat Mon	96	2	Canaan Valley	23	16	Harpers Ferry Nat Mon	10.02	McMechen Dam 13	1.04
Wisconsin	La Crosse WBAP	93	1	Necedah 2NNW	19	26	Frederick	4.57	Coddington 1E	.41
Wyoming	Recluse 14NNW	97	8	Kendall	14	30	Carpenter 3E	4.10	Worland FAA AP	.19

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

SEPTEMBER 1966

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	992.6	1014.6	81	63	71.8	-4.5	89	4+	50	24	0	0	64	79	5.12	1.79	3.28	12	3	0.0	0	0.6	31	24	N	12	9	7	14	6.2	54
HUNTSVILLE	600	991.5	1014.4	82	62	72.2	-2.3	91	3+	52	24	3	0	63	76	4.53	1.44	1.27	8	3	0.0	0	0.5	18	21	29	30	8	7	15	6.0	
MOBILE	211	1006.4	1014.3	87	69	77.9	0.0	92	8+	59	22	9	0	67	74	4.32	-1.93	1.75	13	5	0.0	0	0.4	2	25	24	2	3	16	11	6.4	
MONTGOMERY	194	1007.1	1014.2	86	66	76.2	-0.9	95	4	57	25+	9	0	65	75	5.85	1.88	3.03	10	5	0.0	0	0.7	30	25	S	27+	6	10	14	6.4	58
ALASKA												B																				
ANCHORAGE PRK STRIP	85			57	41	48.7	0.9	64	4	31	23	0	2			2.03	-0.47	0.92	14		0.0	0										
ANCHORAGE	114	999.3	1004.2	54	39	46.3		63	4	29	23	0	2	40	80	2.45		1.04	12	0	0.0	0	1.2	16	21	15	28	4	6	20	7.7	45
ANNETTE	110	1009.5	1013.4	61	49	54.6	0.5	68	12	40	14	0	0	49	84	9.40	-0.48	3.11	19	0	0.0	0	6.7	16	36	16	3	3	4	23	8.5	
BARROW	22	1007.8	1008.5	33	29	31.0	0.5	42	29	24	2	0	30	30	97	0.48	-0.16	0.15	11	0	1.8	1	4.6	8	32	7	26	0	2	28	9.5	
BARTER ISLAND	39	1005.8	1007.7	38	30	33.8	1.7	54	14	21	11	0	27	31	90	1.50	0.56	0.41	13	0	4.0	2	2.1	11	45	26	10	0	2	28	9.5	
BETHEL	125	996.6	1002.2	54	38	45.8	1.2	63	10	29	24	0	2	41	85	0.54	-2.05	0.21	11	0	0.0	0	2.5	3	26	7	30+	2	3	25	8.3	
COLD BAY	96	997.6	1001.5	49	40	44.6	-2.9	57	10	32	17	0	1	41	88	4.28	-0.04	1.32	24	0	0.0	0	4.7	27	46	17	30+	0	1	29	9.4	
FAIRBANKS	436	987.8	1004.6	60	40	50.1	6.5	72	15	32	9	2	1	35	58	0.15	-0.95	0.12	3	0	0.0	0	2.0	2	20	28	9+	1	9	20	7.9	
JUNEAU	12	1010.2	1010.8	56	43	49.2	0.3	63	16+	32	8	0	1	47	94	8.20	1.53	1.75	24	0	0.0	0	8.2	10	37	12	4	0	1	29	9.7	8
KING SALMON	43	998.3	1000.5	53	41	47.0	-0.9	60	9	31	8	0	2	42	86	3.73	0.65	0.99	17	0	0.0	0	3.5	10	46	5	26	3	4	23	8.1	
KOTZEBUE	10	1004.1	1004.5	49	38	43.4	2.5	56	26	29	10	0	2	38	81	1.40	0.18	0.40	17	0	0.0	0	1.6	8	30	31	20	4	3	23	7.9	
MC GRATH	349	991.2	1003.8	55	36	45.6	1.7	67	27	30	24+	0	8	36	74	0.48	-2.13	0.17	8	0	0.0	0	0.6	34	23	17	20+	2	6	22	8.1	
NOME	13	1002.0	1002.9	49	36	42.5	0.6	58	26	27	20	0	5	37	81	2.04	-0.63	0.62	14	0	0.0	0	0.9	2	31	2	15	3	9	18	7.7	25
ST. PAUL ISLAND	22	1001.4	1002.2	48	40	44.1	-0.5	51	11+	33	17	0	0	40	86	2.49	-0.58	0.73	17	0	0.0	0	2.3	36	35	6	30	0	4	26	9.3	
SHEMYA	122	1001.7	1005.3	52	43	47.7	-0.6	55	19	38	15	0	0	45	90	1.95	-0.30	0.34	22	0	0.0	0	6.8	24	43	19	5	1	7	22	8.5	
YAKUTAT	28	1006.4	1007.6	53	41	46.9	-2.3	68	14	30	23	0	4	44	92	18.79	2.24	2.70	24	2	0.0	0	5.5	11	33	13	26	2	2	26	9.0	
ARIZONA																																
FLAGSTAFF	6993	790.7	1016.4	74	44	58.6	0.1	82	9	38	3+	0	0	44	65	2.03	0.45	0.98	11	13	0.0	0	1.7	21	17	22	13+	7	18	5	5.1	
PHOENIX	1117	971.9	1009.8	95	71	82.9	0.1	103	22+	65	3+	24	0	61	53	2.00	1.27	1.84	6	6	0.0	0	3.7	12	33Y	S	1	20	5	5	3.0	79
TUCSON	2584	924.8	1010.9	90	67	78.3	-2.1	99	7	63	30+	18	0	57	55	3.53	2.53	1.80	9	7	0.0	0	4.8	15	35	SE	28	20	2	8	3.6	79
WINSLOW	4895	853.0	1014.2	85	55	69.8	-0.9	91	23+	49	3	4	0	48	53	0.98	0.07	0.35	6	9	0.0	0	3.1	19	29	16	12	13	14	3	4.1	
YUMA	194	1001.7	1008.7	100	73	86.6	0.3	110	23+	66	30+	29	0	58	44	0.04	-0.34	0.02	2	2	0.0	0	2.2	18	25	N	27	22	5	3	2.5	89
ARKANSAS																																
FORT SMITH	447	998.3	1014.8	84	59	71.3	-3.6	94	25	45	23	4	0	59	69	1.26	-2.38	0.73	7	4	0.0	0	1.9	3	28	N	4	9	8	13	6.0	56
LITTLE ROCK	257	1005.4	1014.9	82	62	72.0	-2.3	93	6	50	17	5	0	62	74	1.42	-1.81	0.80	7	3	0.0	0	1.5	36	24	W	3	11	8	11	5.2	60
TEXARKANA	372	1001.7	1014.6	83	64	73.4	-3.1	91	3	55	22+	5	0	66	80	2.74	0.01	1.40	9	4	0.0	0	0.8	6				9	12	9	5.3	
CALIFORNIA																																
BAKERSFIELD	494	994.9	1012.4	87	62	74.8	-1.7	101	4	51	14	8	0	50	45	0.03	-0.05	0.03	1	0	0.0	0	2.7	33	26	18	19	23	3	4	2.0	
BISHOP	4108			88	46	67.1	-1.1	96	23+	36	14+	16	0			0.18	-0.01	0.18	2		0.0	0						24	2	4	1.9	
BLUE CANYON	5280			72	53	62.6	-0.3	87	29	36	13	0	0			0.05	-0.58	0.04	3		0.0	0			31	2	28	24	5	1	1.8	
EUREKA U	43			64	52	58.0	1.6	77	29	47	13	0	0			1.33	0.69	1.32	3		0.0	0			24	SW	17	11	8	11	5.3	68
FRESNO	328	1000.3	1012.0	89	56	72.8	-1.4	101	4	48	15	15	0	51	51	0.03	-0.07	0.03	2	2	0.0	0	3.6	30	22	NW	18	24	3	3	1.6	92
LONG BEACH	34	1011.5	1012.8	83	62	72.4	1.1	99	16	53	14	7	0	58	66	0.01	-0.05	0.01	1	0	0.0	0	2.6	26	18	28	23	13	14	3	3.6	
LOS ANGELES	97	1008.8	1012.4	76	63	69.6	1.1	83	16	55	14	0	0	57	69	0.19	0.02	0.14	3	0	0.0	0	4.9	25	25Y	SE	19	12	11	7	4.3	
LOS ANGELES U	270			82	64	73.4	1.5	96	16	57	14	6	0			0.30	0.07	0.23	3		0.0	0			16	SE	19	13	14	3	3.7	65
MT SHASTA R	3544			78	45	61.5	0.0	95	5+	32	12	3	1			0.56	-0.31	0.31	2		0.0	0										
OAKLAND	6	1013.9	1014.1	73	59	66.0	0.9	92	27	53	14	1	0	55	72	0.09	-0.11	0.09	1	0	0.0	0	5.9	28	29	28	18	18	10	2	2.9	
RED BLUFF	341	999.7	1012.1	92	62	76.7	0.7	109	29	50	14	20	0	46	38	0.10	-0.27	0.06	2	2	0.0	0	0.4	23	29	NW	18	23	7	0	1.9	94
SACRAMENTO	17	1011.5	1012.3	88	56	72.0	0.4	102	29	48	15+	10	0	51	56	0.07	-0.12	0.07	2	0	0.0	0	4.4	21	23	SW	29+	25	4	1	1.6	97
SANDBERG R	4517			78	58	67.8	-1.5	90	22	40	14	1	0			0.03	-0.18	0.03	1		0.0	0			35	7	28	20	6	4	2.6	
SAN DIEGO	13	1011.5	1012.4	76	64	69.9	0.0	84	17	56	14	0	0	60	73	T	-0.15	T	0	0	0.0	0	4.2	30	22	NW	22	15	12	3	3.7	74
SAN FRANCISCO	8	1013.5	1014.2	74	54	64.0	0.1	93	29+	50	15	2	0	52	73	0.08	-0.11	0.08	1	0	0.0	0	8.6	29	40	WNW	11	20	8	2	2.9	
SAN FRANCISCO U	52			70	57	63.6	1.6	95	28	53	9+	2	0			0.10	-0.12	0.10	1		0.0	0			26	W	18+					79
SANTA CATALINA	1568			76	61	68.0	-2.2	90	23	55	20+	1	0			T	-0.20	T	0	0	0.0	0						16	7	7	3.5	
SANTA MARIA	236			75	52	63.4	0.6	98	28	43	14	2	0			0.16	0.00	0.16	2		0.0	0						20	4	6	3.7	
STOCKTON	22	1012.2	1013.1	87	57	71.9	-0.8	100	29	48	13	11	0	49	49	0.02	-0.17	0.02	1	0	0.0	0	6.2	30	24	29	18	23	6	1	1.5	
COLORADO																																
ALAMOSA	7536			75	35	55.2	-0.5	81	21	25	16	0	6			0.03	-0.74	0.01	3		0.0	0						18	10	2	3.1	
COLORADO SPRINGS	6145	814.8	1016.1	75	49	62.1	0.5	87	24	37	30	0	0	42	55	2.12	1.05	1.20	6	9	0.0	0	2.0	6	32	35	29	14	10	6	4.5	
DENVER	5283	838.8	1014.5	79	51	65.0	2.0	91	9	37	30	1	0	44	53	1.15	0.02	0.42	11	6	T	0	0.2	10	37	NE	29	11	12	7	4.7	69

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
GRAND JUNCTION	4855	853.7	1013.6	84	54	69.1	1.3	90	23+	43	15	3	0	40	39	0.26	-0.65	0.13	7	4	0.0	0	2.6	12	30	W	14+	19	8	3	2.9	84
PUEBLO	4684	857.8	1014.6	82	52	67.0	0.4	94	24	45	18	5	0	46	53	1.05	0.21	0.70	7	4	0.0	0	3.3	9	51	N	29	15	10	5	4.0	77
CONNECTICUT																																
BRIDGEPORT	7	1013.5	1014.0	74	59	66.3	0.8	93	2	46	26+	1	0	55	68	6.01	2.06	3.00	9	1	0.0	0	2.2	33	38	35	15	5	11	14	6.5	
HARTFORD	169	1007.5	1013.8	75	52	63.4	0.1	95	2	37	27	1	0	52	70	6.05	2.40	2.67	9	1	0.0	0	2.7	33	28	SW	30	7	9	14	6.5	62
NEW HAVEN	6			72	54	62.9	-1.0	91	2	40	26	1	0			5.21	1.28	2.14	9		0.0	0			26	W	23	7	10	13	6.4	60
DELAWARE																																
WILMINGTON	78	1011.2	1014.2	75	56	65.3	-2.3	91	3	43	27+	2	0	54	70	8.53	4.58	3.72	11	2	0.0	0	2.7	33	25	6	21	5	9	16	7.2	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1011.9	1014.1	77	60	68.6	-1.1	94	3+	49	17+	4	0	55	66	6.87	3.04	4.15	12	1	0.0	0	2.3	34	29	NE	21	5	7	18	7.3	45
FLORIDA																																
APALACHICOLA U	13			85	72	78.5	-0.4	92	5	63	22	1	0			11.57	3.04	7.53	11	8	0.0	0			28	E	9	9	9	12	5.5	54
DAYTONA BEACH	31	1013.9	1015.1	88	71	79.1	-0.1	92	5	62	24	7	0	69	78	4.49	-2.51	1.51	15	12	0.0	0	2.0	18	23	16	20	5	7	18	7.0	
FORT MYERS	15	1014.6	1014.8	89	74	81.8	0.5	93	4	72	26+	19	0	73	79	4.18	-4.32	1.17	19	14	0.0	0	2.0	15	29	34	6	5	10	15	6.9	
JACKSONVILLE	20	1013.5	1014.6	86	70	78.2	-1.2	95	5+	62	23	9	0	69	78	5.94	-1.62	1.19	13	7	0.0	0	1.6	24	33	NW	19	7	9	14	6.3	58
KEY WEST	4	1013.9	1014.4	88	79	83.3	1.0	90	1	71	26	1	0	74	74	8.34	1.61	3.32	18	10	0.0	0	5.0	14	33	SW	24	3	14	13	6.9	74
LAKELAND U	214			88	72	80.0	-0.2	94	4	67	24	10	0			6.49	-0.06	2.62	17		0.0	0						5	11	14	6.6	59
MIAMI	7	1014.2	1014.5	88	75	81.2	-0.1	93	1	70	25	7	0	74	83	8.00	-1.47	2.83	18	18	0.0	0	2.2	14	23	17	25	1	12	17	7.6	
ORLANDO	108	1010.8	1014.9	88	72	80.1	0.1	93	4	66	24	12	0			6.25	-0.98	1.99	16	15	0.0	0	2.1	20	30	21	28	4	10	16	7.1	
PENSACOLA	112	1010.5	1014.4	85	69	77.4	-0.8	92	4	58	22	7	0	69	77	3.59	-4.10	1.60	9		0.0	0	0.7	25	27	E	28+					44
TALLAHASSEE	55	1012.2	1014.4	89	68	78.3	0.2	98	3	56	23	11	0	69	78	10.67	5.16	5.49	11	7	0.0	0	0.1	25	23	22	15	8	10	12	6.0	
TAMPA	19	1014.2	1014.6	88	73	80.6	0.1	95	1	65	24	11	0	71	77	4.12	-2.77	1.68	10	8	0.0	0	1.0	22	20	27	29+	5	7	18	7.1	57
WEST PALM BEACH	15	1014.2	1014.9	88	74	81.3	-0.8	92	2	72	30+	7	0	73	81	10.00	0.34	2.40	17	16	0.0	0	1.4	16	29	24	20	2	8	20	8.0	
GEORGIA																																
ATHENS	802	985.8	1014.1	82	61	71.7	-1.8	93	3	51	25	6	0	61	75	2.80	-0.22	1.61	8	1	0.0	0	1.2	31	16	19	30+	11	9	10	5.4	
ATLANTA	1010	978.3	1014.6	80	62	70.6	-2.5	90	2	53	25	1	0	60	75	2.15	-1.11	0.61	9	1	0.0	0	0.9	31	19	NE	12	12	8	10	5.4	61
AUGUSTA	145	1008.8	1013.9	85	60	72.6	-2.7	94	4+	50	25	6	0	63	78	2.10	-0.90	0.83	10	2	0.0	0	1.2	21	23	29	4	10	10	10	5.4	
COLUMBUS	385			86	65	75.5	-0.5	96	3	56	25	8	0	66	78	3.46	0.69	1.21	9		0.0	0	0.2	5	23	31	4	8	10	12	5.9	
MACON	354	1001.7	1014.7	86	62	74.1	-2.3	96	3+	52	10	7	0	63	75	2.67	-0.10	1.03	9	3	0.0	0	0.6	33	25	W	4	6	13	11	6.3	61
ROME	637			82	59	70.3	-2.1	92	2	46	25	3	0			6.21	2.91	2.03	9		0.0	0										
SAVANNAH	46	1012.5	1014.4	87	66	76.4	-0.3	94	4+	54	10	7	0	67	79	1.78	-3.47	0.88	9	7	0.0	0	1.1	20	27	SW	5	12	8	10	5.7	57
HAWAII																																
HILO	27	1013.9	1015.2	85	70	77.4	1.9	88	28	67	22	0	0	70	81	8.37	-0.13	2.53	24	0	0.0	0	0.7	17	19	SE	28	2	13	15	7.2	28
HONOLULU	7	1014.2	1014.6	90	75	82.4	3.2	93	25+	71	2	23	0	67	63	0.16	-0.83	0.06	6	0	0.0	0	9.3	7	29	N	18	7	16	7	5.3	73
KAHULUI	48	1012.2		88	71	79.2	0.8	92	24+	66	22+	6	0	66	65	0.62	0.37	0.46	4	0	0.0	0	9.3	6	30	NE	6	12	14	4	4.6	72
LIHUE	103	1010.5	1015.7	85	73	78.6	0.5	86	24+	67	30+	0	0	71	80	1.51	-0.57	0.30	15	0	0.0	0	8.5	6	22	E	19	3	21	6	6.0	63
IDAHO																																
BOISE	2838	915.0	1013.5	81	51	66.2	3.5	99	22	40	27	5	0	42	46	0.19	-0.20	0.17	3	2	0.0	0	1.5	29	32	SW	18	16	8	6	3.8	90
IDAHO FALLS 42NW R	4790			79	41	60.0	3.9	90	23+	30	28	4	2			0.73	0.10	0.40	4													
IDAHO FALLS 46W R	4932			77	41	59.1	2.6	88	23+	29	27	0	1			0.47	0.12	0.22	5		0.0	0										
LEWISTON	1413			83	55	68.6	5.1	99	22	44	30	6	0			0.22	-0.68	0.13	5		0.0	0						13	8	9	4.5	
POCATELLO	4454	863.9	1014.7	79	45	61.7	1.4	92	22	34	13	3	0	38	48	0.82	0.21	0.39	5	3	0.0	0	3.0	20	38	S	11	11	12	7	4.9	69
ILLINOIS																																
CAIRO U	314			78	60	68.9	-3.6	91	3	47	30	2	0			4.90	1.89	1.51	10		0.0	0			25	SW	3	9	7	14	6.3	47
CHICAGO O HARE	658	991.5	1015.7	76	49	62.5	-1.1	90	2+	36	26	2	0	49	66	0.55	-2.19	0.27	6	0	0.0	0	1.6	33	35	28	29	9	7	14	6.0	
CHICAGO MIDWAY	607	992.9		75	55	65.0	-1.1	91	1	43	30+	1	0	51	63	0.92	-1.81	0.52	6	0	0.0	0	1.4	34	30	W	29	10	8	12	5.7	64
MOLINE	582	994.2	1015.8	75	51	62.9	-2.4	93	2	38	26	2	0	52	73	2.80	-0.45	1.46	8	2	0.0	0	1.2	33	28	NW	29	12	4	14	5.6	66
PEORIA	652	991.9	1015.9	75	53	63.8	-2.6	90	2	41	28	1	0	51	67	3.06	0.01	1.99	5	3	0.0	0	2.4	36	30	W	29+	10	7	13	5.8	64
ROCKFORD	724	988.8	1015.6	75	51	62.5	-1.3	90	2+	38	26	2	0	50	68	1.18	-2.33	0.68	5	1	0.0	0	1.9	33	24	29	29	10	9	11	5.3	
SPRINGFIELD	588	993.2	1015.1	74	54	64.0	-3.6	92	2	42	28+	3	0	53	70	4.72	1.79	1.43	11	3	0.0	0	2.5	36	26	W	3	11	6	13	5.6	71

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CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1001.0	1014.9	76	55	65.5	- 4.6	91	2	42	16	2	0	58	79	3.33	0.46	1.23	10	5	0.0	0	0.9	3	20	N	15	12	4	14	5.7	54
FORT WAYNE	791	985.4	1015.4	71	49	60.0	- 4.8	86	3+	35	26	0	0	49	70	2.82	0.15	1.13	10	1	0.0	0	1.1	34	34	W	29	9	12	9	5.5	68
INDIANAPOLIS	792	986.1	1015.1	76	55	65.2	- 1.3	92	3	41	30	3	0	52	65	5.73	2.49	2.57	10	2	0.0	0	1.1	2	28	SW	29	9	9	12	5.9	60
SOUTH BEND	773	987.5	1015.3	72	52	62.3	- 1.5	85	2	38	26	0	0	51	68	1.10	- 1.97	0.48	7	1	T	T	1.9	33	28	30	29	9	10	11	5.7	
IOWA																																
BURLINGTON	692			73	53	63.1	- 2.9	90	2	42	26+	1	0	52	70	3.62	0.43		5	2	0.0		3.2	35	24	30	29	10	12	8	5.4	
DES MOINES	938	982.1	1016.7	74	51	62.4	- 3.0	87	1	39	16	0	0	51	69	0.75	- 2.13	0.37	8	0	0.0	0	0.7	2	24	N	14	11	6	13	5.5	69
DUBUQUE	1056			72	49	60.7	- 1.0	86	1	36	30	0	0			1.65	- 2.09	0.88	5		0.0	0						11	4	15	6.0	
SIOUX CITY	1095	977.0	1016.7	73	52	62.3	- 3.2	83	21+	38	30	0	0	54	78	1.29	- 1.45	0.53	12	6	0.0	0	1.0	12	28	SE	24	11	7	12	5.5	65
WATERLOO	868	984.8	1016.3	74	49	61.5	- 1.4	90	1	35	30	1	0	49	68	0.55	- 3.25	0.22	4	0	0.0	0	1.0	31	25	32	29+	13	6	11	5.2	
KANSAS																																
CONCORDIA	1470	963.4	1015.8	77	54	65.5	- 4.1	91	24	41	15	1	0	54	71	2.36	- 0.37	1.13	8	6	0.0	0	2.1	12	30	N	25	15	4	11	4.7	66
DODGE CITY	2582	925.8	1015.5	79	55	67.0	- 3.3	92	24	41	30	2	0	54	69	1.89	0.36	0.94	7	4	0.0	0	1.9	13	38	NE	29	12	9	9	4.5	79
GOODLAND	3650	890.6	1015.7	80	52	66.0	0.5	96	24	36	30	5	0	49	62	1.00	- 0.24	0.72	6	6	T	T	2.0	16	30	2	29	16	7	7	3.8	
TOPEKA	876	984.4	1015.9	77	55	65.8	- 3.6	91	5	44	30+	1	0	56	75	1.46	- 1.52	0.53	8	6	0.0	0	1.6	6	26	S	1	11	6	13	5.8	63
WICHITA	1321	968.2	1015.5	80	57	68.6	- 2.7	92	5	42	30	3	0	55	67	0.72	- 2.50	0.37	7	6	0.0	0	1.6	11	37	NE	30	11	8	11	5.2	63
KENTUCKY																																
COVINGTON	869	983.7	1015.1	76	57	66.5	- 0.7	92	3+	41	24	3	0	55	72	3.13	0.30	1.35	8	1	0.0	0	0.9	6	29	26	29	6	11	13	6.6	
LEXINGTON	966	980.0	1015.1	75	56	65.3	- 4.0	88	3	43	16	0	0	55	73	4.03	1.23	2.22	12	2	0.0	0	0.8	14	21	22	29	8	5	17	6.5	
LOUISVILLE	477	997.0	1014.5	76	59	67.4	- 2.1	89	2	45	16	0	0	57	71	2.59	- 0.04	0.72	10	2	0.0	0	0.5	2	25	W	29	7	7	16	6.5	56
LOUISIANA																																
ALEXANDRIA	92	1009.8	1014.1	85	65	74.9	- 2.1	92	7+	53	22	5	0	67	82	5.55	2.42	1.48	10	7	0.0	0	0.7	1	29	32	30+	6	15	9	5.9	
BATON ROUGE	64	1011.5	1014.3	86	67	76.9	- 1.0	93	8	57	22	9	0	67	76	2.62	- 0.90	1.31	10	5	0.0	0	0.4	36	25	1	6	6	12	12	6.4	
LAKE CHARLES	9	1013.2	1014.2	88	70	79.0	0.3	93	7+	60	22	12	0	70	79	3.54	- 0.48	0.88	12	11	0.0	0	1.2	5	23	12	8	10	12	8	5.2	
NEW ORLEANS	3	1012.9	1013.9	86	68	77.0	- 1.3	91	8+	57	23	7	0	69	80	5.55	0.52	1.86	12	7	0.0	0	1.0	2	20	9	10+	10	7	13	5.7	
SHREVEPORT	252	1005.1	1014.1	84	66	75.3	- 3.5	93	6	56	22	8	0	66	77	3.27	0.99	1.90	7	2	0.0	0	1.2	35	23	21	30	9	9	12	5.7	69
MAINE																																
CARIBOU	624			63	40	51.7	- 2.1	80	10	30	27+	0	4			3.19	- 0.34	1.33	10		0.0	0						7	11	12	6.0	
PORTLAND	47	1011.2	1013.6	68	45	56.2	- 2.5	87	2	30	27	0	1	49	77	3.84	0.32	1.84	7	1	0.0	0	2.2	26	31	W	23	11	9	10	5.3	69
MARYLAND																																
BALTIMORE	148	1008.8	1014.3	76	57	66.7	- 1.4	95	3+	46	24+	4	0	55	71	8.50	5.17	3.84	11	1	0.0	0	2.3	32	26	W	24	7	7	16	7.0	45
MASSACHUSETTS																																
BLUE HILL OBS R	629			69	52	60.5	- 1.9	90	2	40	26	1	0			3.84	- 0.11	1.55	7		0.0	0			39	SE	4					64
BOSTON	15	1012.9	1013.9	71	56	63.5	- 1.8	92	2	46	27	1	0	51	67	3.42	- 0.04	1.22	8	0	0.0	0	1.6	26	30	W	30	12	7	11	5.4	64
NANTUCKET	43	1013.2	1013.7	68	51	59.2	- 3.7	83	2	38	27	0	0	54	82	3.33	- 0.18	1.11	12	2	0.0	0	0.4	35	30	SW	23	8	6	16	6.6	56
PITTSFIELD	1170			67	45	56.1	- 2.0	86	2	31	27	0	1			5.62	1.12	2.55	10		0.0	0										
WORCESTER	986	977.7	1014.4	67	49	58.2	- 2.6	88	2	37	27	0	0	47	72	5.59	1.67	2.25	7	0	0.0	0	4.0	30	33	29	23	11	9	10	5.6	
MICHIGAN																																
ALPENA	689	989.2	1014.5	68	43	55.8	- 0.2	90	1	29	26	1	3	45	71	2.15	- 1.46	0.94	12	2	0.0	0	1.9	28	27	NW	29	7	11	12	6.0	55
DETROIT	623	991.9	1014.6	73	54	63.4	- 1.7	90	2+	40	26	2	0	50	65					1	0.0		3.1	30	29	29	29					
DETROIT M WAYNE CO	633	990.9	1014.7	73	51	62.2	- 2.1	89	1	38	16	0	0	52	73	1.51	- 0.81	0.50	6	2	0.0	0	2.5	29	29	NW	23	11	9	10	5.5	61
DETROIT WILLOW RUN	711	987.1	1015.3	71	49	59.9	- 4.9	87	2	35	26	0	0	48	68	1.86	- 0.43	0.99	6	2	0.0	0	3.2	29	35	32	3	10	10	10	5.6	
FLINT	770	987.1	1015.0	69	46	57.5	- 3.2	84	2	31	26	0	1	49	75	1.62	- 1.32	0.76	10	4	0.0	0	2.6	27	31	22	2	8	12	10	5.9	
GRAND RAPIDS	784	986.1	1015.2	74	49	61.4	- 0.8	87	2+	34	26	0	0	50	73	1.92	- 1.06	0.75	9	1	0.0	0	2.5	29	40	NW	29	9	10	11	5.8	62
HOUGHTON LAKE	1149	973.6	1015.5	68	44	55.8		84	2+	28	26+	0	3	48	77	2.25		1.09	10	3	0.0	0	2.6	30	23	27	29	8	12	10	5.8	
LANSING	841	983.1	1014.8	73	47	59.7	- 2.3	89	2	27	26	0	2	49	71	1.22	- 1.38	0.41	9	2	0.0	0	2.9	29	41	W	29	7	11	12	6.4	62
MARQUETTE U	677			66	51	58.5	0.8	90	1	39	30	1	0			3.10	- 0.18	1.20	13		0.0	0			27	NE	29	9	11	10	5.3	65
MUSKEGON	627	992.6	1015.4	72	50	60.9	- 2.1	85	2	33	26	0	0	50	70	1.36	- 1.70	0.61	9	1	0.0	0	2.3	31	23	30	29+	11	8	11	5.3	
SAULT STE MARIE	721	987.8	1014.2	65	46	55.4	- 0.4	86	1	31	24	0	1	47	77	2.64	- 1.17	1.18	14	5	T	0	3.1	31	32	W	24	8	9	13	6.5	57
MINNESOTA																																
DULUTH	1428	965.1	1016.7	66	44	54.8	0.6	80	9	31	26	0	2	46	75	1.52	- 1.34	1.26	5	1	T	T	3.2	28	34	W	4	9	9	12	5.7	66

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	973.2	1016.4	66	42	54.0	1.1	82	9	26	26	0	5	46	79	1.22	- 1.68	0.47	9	2	0.0	0	2.6	27	25	29	4	12	8	10	4.9	
MINNEAPOLIS	834	986.5	1016.7	71	49	60.3	- 0.1	87	1	33	30+	0	0	49	70	1.69	- 0.74	1.14	8	4	0.0	0	1.6	31	31	NW	29	9	12	9	5.4	70
ROCHESTER	1297	969.2	1016.9	71	47	59.0	- 1.7	85	1	34	26	0	0	47	69	1.36	- 1.74	0.69	6	0	0.0	0	2.5	27	24	31	29	11	8	11	5.2	
ST CLOUD	1034	978.7	1016.4	71	46	58.4	- 0.4	84	10	30	26	0	1		72	0.95	- 1.46	0.75	4		0.0	0						11	7	12	5.4	
MISSISSIPPI																																
JACKSON	310	1002.4	1014.3	85	64	74.4	- 2.1	91	7+	54	24	7	0	65	80	4.87	2.34	1.33	9	6	0.0	0	0.8	36	24	SW	9	7	13	10	5.9	56
MERIDIAN	290	1003.4	1014.5	85	63	74.0	- 1.9	92	4+	53	23	6	0	64	77	3.32	- 0.01	1.20	8	6	0.0	0	0.7	29	21	30	4	4	15	11	6.4	
VICKSBURG U	234			82	67	74.5	- 2.1	90	7+	55	30	3	0			6.90	4.40	2.79	13		0.0	0			22	SW	18	10	7	13	6.1	46
MISSOURI																																
COLUMBIA	778	987.1	1015.3	76	56	65.8	- 3.5	90	2+	44	24	2	0	53	67	3.32	- 0.56	1.85	9	3	0.0	0	1.7	2	30	NW	3	9	10	11	5.6	69
KANSAS CITY	742	989.2	1015.7	78	59	68.8	- 2.5	90	5	50	30	1	0	57	69	2.67	- 0.58	1.12	8	5	0.0	0	1.3	5	22	N	14	11	6	13	5.6	62
SAINT JOSEPH	811			79	51	65.2	- 3.4	88	5	41	24	0	0	54	76	2.64	- 0.80	1.43	7	5	0.0	0	1.0	2	21	29	3	12	7	11	5.2	
ST LOUIS	535	995.3	1015.4	76	56	65.6	- 3.9	91	2	44	30+	2	0	56	75	2.15	- 0.61	0.41	11	2	0.0	0	2.5	32	26	N	14+	9	6	15	6.3	56
SPRINGFIELD	1268	970.9	1015.7	76	54	65.0	- 5.4	87	4	41	30	0	0	56	75	3.35	- 0.50	1.22	10	10	0.0	0	0.7	5	24	N	20	8	8	14	6.0	56
MONTANA																																
BILLINGS	3567	892.0	1014.5	79	52	65.5	5.1	92	10+	39	30	6	0	44	51	2.46	1.27	2.19	7	4	0.0	0	1.6	27	31	NW	28	14	7	9	4.7	79
GLASGOW	2284			76	48	62.1	5.4	91	7	35	30	3	0			0.41	- 0.55	0.40	3		0.0	0						11	6	13	5.5	
GREAT FALLS	3662	889.3	1014.6	78	50	64.2	6.8	93	23	32	30	6	1	39	45	0.21	- 0.99	0.09	6	2	0.0	0	3.0	25	43	SW	7	10	9	11	5.6	78
HAVRE	2582			77	46	61.4	5.8	92	18+	31	30	4	1			0.17	- 0.84	0.16	2		0.0	0			32	NW	29	10	11	9	4.9	78
HELENA	3828	882.2	1015.8	79	47	62.7	6.7	91	18+	29	30	6	1	39	46	0.34	- 0.61	0.13	6	2	0.0	0	3.7	29	34	W	11	11	6	13	5.5	70
KALISPELL	2965	912.0	1016.0	76	43	59.3	4.6	88	6	27	30	0	1	45	64	0.29	- 0.75	0.15	3	4	0.0	0	1.0	5	29	1	29	9	11	10	5.5	
MILES CITY	2629	922.8	1014.5	79	52	65.6	4.6	98	8	36	30	7	0	43	50	0.52	- 0.44		4	2	0.0		1.2	9								
MISSOULA	3190	905.5	1016.4	79	47	62.9	7.5	93	6	39	30	2	0	44	58	0.96	- 0.06	0.59	5	7	0.0	0	1.0	34	35	SE	11	11	9	10	5.2	69
NEBRASKA																																
GRAND ISLAND	1841	950.9	1016.5	78	50	63.9	- 1.3	92	24	35	15	1	0	51	70	0.43	- 1.72	0.21	8	4	0.0	0	0.7	18	23	34	30+	12	8	10	4.8	
LINCOLN U	1150			74	54	63.9	- 4.3	86	10	41	15	0	0			2.11	- 0.76	1.25	9		0.0	0			30	S	12	13	4	13	5.2	59
NORFOLK	1544			72	51	61.7	- 3.3	85	10+	38	15	0	0			2.08	- 0.17	0.71	11		0.0	0						12	8	10	5.0	
NORTH PLATTE	2775	919.1	1016.0	77	47	62.1	- 1.6	91	9	33	30	2	0	48	67	2.09	0.42	0.84	8	6	0.0	0	1.1	12	33	SE	26	12	9	9	4.8	72
OMAHA	977	981.4	1016.6	75	52	63.7	- 3.2	87	10	40	30	0	0	54	73	2.16	- 0.47	0.90	9	3	0.0	0	0.5	11	33	NW	3	11	6	13	5.5	67
SCOTTSBLUFF	3957	881.1	1015.5	78	48	63.0	0.7	92	24+	31	30	4	1	48	66	1.59	0.38	0.71	9	6	0.0	0	2.2	6	32	34	29	14	11	5	4.2	
VALENTINE	2587			73	49	60.9	- 0.9	93	9	33	30	3	0			2.62	1.37	1.10	7		0.0	0			29	SW	7	14	5	11	4.8	63
NEVADA																																
ELKO	5050	845.6	1014.5	82	41	61.3	3.4	92	22	33	16	6	0	34	42	0.44	0.10	0.18	4	1	0.0	0	0.3	17	35	23	13+	18	6	6	3.5	
ELY	6253	810.7	1013.9	77	42	59.1	1.6	86	17	24	14	0	2	34	46	1.34	0.78	1.21	4	4	0.0	0	6.1	20	38	SW	11	18	6	6	3.4	84
LAS VEGAS	2162	935.7	1010.5	94	66	80.1	0.1	103	8+	50	15	24	0	39	28	0.35	0.01	0.21	2	2	0.0	0	3.3	22	47	NW	27	20	6	4	2.8	87
RENO	4404	866.2	1014.7	81	37	58.7	- 0.1	90	23+	29	14	2	6	37	51	0.10	- 0.13	0.10	2	1	0.0	0	1.2	24	34	NW	18+	21	6	3	2.4	91
WINNEMUCCA	4299	867.9	1014.2	82	41	61.6	3.0	94	22	31	2	8	1	29	34	0.34	0.00	0.21	2	3	0.0	0	1.1	29	28	SW	18	19	7	4	3.3	79
NEW HAMPSHIRE																																
CONCORD	342	1001.7	1014.2	70	44	57.0	- 2.3	88	2	30	26	0	2	51	82	5.40	1.65	2.25	5	1	0.0	0	1.6	30	30	W	23	8	12	10	5.7	60
MT WASHINGTON OBS	6262			42	31	36.8	- 4.2	59	1	17	27	0	15			5.57	- 1.43	1.75	16	1	3.9	3						3	7	20	7.9	32
NEW JERSEY																																
ATLANTIC CITY	64	1011.9	1014.3	74	56	65.2	- 2.0	90	5	44	27+	1	0	57	77	6.27	2.96	3.10	11	3	0.0	0	0.9	32	25	9	21	5	9	16	7.1	50
ATLANTIC CITY U	11			73	61	67.1	- 1.3	89	2	51	16	0	0			4.35	0.95	1.15	12						39	ENE	20					
NEWARK	7	1013.2	1014.2	74	59	66.6	- 1.7	91	2	46	16	1	0	55	68	7.86	4.10	4.71	10	1	0.0	0	2.1	29	25	28	24	5	11	14	7.0	
TRENTON U	56			73	58	65.5	- 1.6	92	2	46	16	1	0			8.41	4.91	3.43	12		0.0	0			25	NW	24	5	9	16	7.1	49
NEW MEXICO																																
ALBUQUERQUE	5311	840.5	1014.5	82	55	68.4	- 1.6	91	21	47	28	2	0	45	50	1.04	0.09	0.52	7	6	0.0	0	1.0	10	34	E	30	20	6	4	3.1	78
CLAYTON	4969			77	52	64.5	- 1.5	89	24	44	30	0	0			2.76	1.11	1.08	7		0.0	0						18	5	7	3.9	
RATON	6379			78	46	61.7	- 0.2	84	29+	39	30	0	0			0.57	- 1.11	0.48	4		0.0	0						14	10	6	4.3	
ROSWELL	3617			85	57	70.9	1.2	94	25	50	29	9	0			0.97	- 0.85	0.54	4	6	0.0	0			33	NW	3	11	12	7	5.1	65
SILVER CITY	5373			81	55	67.8	- 2.2	88	21	49	30	0	0			1.08	- 0.38	0.50	8		0.0	0						14	10	6	4.2	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1003.7	1014.5	70	46	58.0	- 3.6	86	2	31	27	0	2	51	80	5.61	2.03	2.56	10	2	0.0	0	2.3	28	34	W	30	5	11	14	6.5	60
BINGHAMTON	1590	956.0	1014.6	65	48	56.8	- 2.7	86	2	36	26	0	0	49	76	3.26	0.31	1.30	9	0	0.0	0	3.0	26	32	W	30	2	10	18	7.6	49
BUFFALO	705	988.8	1014.4	67	50	58.7	- 2.7	80	2	39	26	0	0	51	77	2.65	- 0.48	0.81	13	5	0.0	0	3.4	26	30	W	30	5	7	18	7.1	57
NEW YORK U	132	1010.5	1013.6	74	59	66.5	- 2.0	91	2	46	26	1	0	54	67	8.82	4.95	5.54	9	1	0.0	0	1.9	34	34	NE	21	7	12	11	6.0	53
J.F. KENNEDY	13	1013.2	1014.0	74	59	66.2	- 1.6	91	2	47	16	1	0	55	70	7.47	3.31	4.49	9	1	0.0	0	1.3	32	26	29	23+	5	11	14	6.7	
NEW YORK LA GUARDIA	11	1012.2	1014.1	74	63	68.3	- 0.5	91	2	51	27	1	0	53	62	5.07	1.15	3.02	7	2	0.0	0	2.0	34	40	NE	21	6	10	14	6.7	
ROCHESTER	547	994.9	1015.1	69	49	59.2	- 3.2	88	2	36	26	0	0	49	74	2.47	- 0.06	1.33	10	2	0.0	0	3.4	26	34	SW	30	6	8	16	6.7	55
SYRACUSE	410	999.0	1013.8	69	50	59.5	- 2.9	89	2	34	27	0	0	51	75	4.75	1.91	2.09	11	2	0.0	0	2.7	27	29	W	30	8	9	13	6.1	53
NORTH CAROLINA																																
ASHEVILLE	2140	940.1	1015.3	74	52	62.9	- 3.0	83	3+	40	25	0	0	57	88	4.55	0.93	2.65	10	1	0.0	0	2.4	35	23	36	4	7	8	15	6.5	50
CAPE HATTERAS R	7	1013.5	1013.8	82	66	73.7	- 0.4	88	2	52	25	0	0	65	74	6.41	0.52	2.61	10	4	0.0	0	2.4	24	30	S	20	11	5	14	5.7	75
CHARLOTTE	736	986.8	1013.9	81	60	70.7	- 2.2	94	4	52	25+	4	0	59	72	5.42	1.93	2.79	12	3	0.0	0	0.9	1	29	NW	21	10	11	9	5.2	67
GREENSBORO	897	983.4	1014.5	81	59	69.8	- 0.3	93	3	45	17	3	0	59	73	3.59	- 0.07	1.88	11	4	0.0	0	1.2	32	18	W	22	12	6	12	5.4	50
RALEIGH	434	998.3	1014.0	82	60	71.0	- 0.2	92	3+	43	17	5	0	60	73	3.58	- 0.27	1.83	6	3	0.0	0	0.5	21	23	32	29	12	9	9	5.4	60
WILMINGTON	28	1012.9	1014.3	85	66	75.8	0.6	95	3	54	17	6	0	65	74	6.09	- 0.20	2.62	11	4	0.0	0	1.2	25	33	NW	4	14	8	8	5.0	69
NORTH DAKOTA																																
BISMARCK	1647	957.0	1016.6	74	43	58.7	0.0	94	12	29	14	3	3	44	62	0.86	- 0.33	0.59	6	3	0.0	0	1.7	13	42	NW	28	10	7	13	5.8	69
FARGO	896	984.1	1016.7	72	44	58.2	- 0.6	89	12	29	26+	0	3	45	64	0.54	- 0.94	0.24	6	2	0.0	0	0.8	29	35	N	22	11	9	10	5.0	75
WILLISTON	1899			75	45	60.1	2.9	97	7	28	14	3	2			0.40	- 0.72	0.23	4		T	T			42	N	28	10	7	13	5.3	72
OHIO																																
AKRON	1208	970.9	1015.2	72	51	61.5	- 2.4	88	3	36	26	0	0	51	73	2.01	- 0.61	0.77	10	2	0.0	0	1.2	29	23	22	29	6	10	14	6.4	
CINCINNATI OBS	761			75	56	65.5	- 3.5	91	2+	42	16	3	0			4.66	1.95	1.47	11		0.0	0			17	SW	29					48
CLEVELAND	777	986.1	1015.1	71	51	60.9	- 2.5	88	3	39	26+	0	0	50	69	1.66	- 1.24	0.73	9	4	0.0	0	1.8	26	38	SW	29	7	11	12	6.3	75
COLUMBUS	812	985.8	1015.4	73	53	63.2	- 2.7	91	3	41	24+	1	0	54	74	3.56	0.91	1.14	12	1	0.0	0	1.7	36	29	W	29	6	11	13	6.5	60
DAYTON	1002	979.3	1015.3	74	55	64.3	- 2.5	90	3	43	16	1	0	54	73	3.63	1.04	1.16	11	2	0.0	0	0.8	1	31	SW	29	7	12	11	6.3	58
MANSFIELD	1295			70	50	59.7	- 3.6	84	3	37	26+	0	0			1.95	- 1.03	1.05	8	2	0.0	0						8	11	11	6.0	
TOLEDO	676	990.5	1015.5	74	50	61.7	- 1.7	89	2+	34	26	0	0	50	70	1.17	- 0.96	0.79	8	1	0.0	0	1.9	28	30	W	29	9	13	8	5.6	62
YOUNGSTOWN	1178	972.9	1015.3	70	48	59.1	- 3.4	87	3	35	26	0	0	50	76	1.59	- 1.30	0.75	11	4	0.0	0	0.9	27	22	3	15	5	12	13	6.6	
OKLAHOMA																																
OKLAHOMA CITY	1280	969.2	1015.0	80	61	70.5	- 3.3	91	25+	48	30	2	0	60	74	2.82	- 0.20	1.06	6	5	0.0	0	0.8	11	36	NW	3	13	5	12	5.2	59
TULSA	650	991.2	1015.1	82	59	70.3	- 3.5	91	26+	45	30	6	0	59	73	2.68	- 1.33	1.96	7	5	0.0	0	0.9	3	30	N	30	9	8	13	5.5	45
OREGON																																
ASTORIA	8	1016.3	1017.0	69	50	59.2	1.2	83	21	41	13	0	0	52	81	2.18	- 0.95	0.56	12	1	0.0	0	1.5	26	20	31	4+	9	7	14	6.0	
BURNS U	4151	874.0	1015.7	76	44	60.4	1.6	91	5	29	12	2	1	39	51	0.80	0.30	0.66	3		0.0	0	3.1	31				16	7	7	4.0	
EUGENE	359	1002.7	1016.3	77	52	64.6	3.1	94	4	44	1	2	0	52	71	1.44	0.17	0.56	9	1	0.0	0	1.5	30	23	23	17	9	7	14	5.6	
MEACHAM	4050	878.1	1015.8	68	47	57.5	1.8	88	22+	39	12	0	0	41	61	0.93	- 0.53	0.62	5		0.0	0	1.5	29				14	8	8	4.8	
MEDFORD	1298	968.5	1015.7	82	49	65.2	1.0	100	4	40	12	5	0	48	61	1.88	1.28	1.46	5	1	0.0	0	2.3	29	24	29	22	16	5	9	4.0	
PENDLETON	1482	962.4	1015.6	80	53	66.6	2.4	97	5	43	13	4	0	44	49	0.43	- 0.20	0.33	3	2	0.0	0	1.8	24	30	25	22	18	5	7	4.1	
PORTLAND	21	1014.9	1016.3	75	53	64.4	2.2	91	4	46	13	1	0	55	76	1.70	0.07	0.52	9	2	0.0	0	1.9	31	34	S	22	7	9	14	5.9	54
SALEM	196	1008.8	1016.3	78	49	63.2	0.7	92	4	42	13	1	0	54	77	1.66	0.28	0.76	10	1	0.0	0	1.4	30	20	35	30	10	8	12	5.5	
SEXTON SUMMIT R	3836	884.9	1015.0	71	49	59.9	0.2	89	4	37	12+	0	0			1.82	0.57	1.62	7		0.0	0						16	5	9	3.9	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	83.6	0.0	91	28	76	27+	2	0			0.36	- 0.88	0.17	6		0.0	0						13	12	5	4.4	
ENIWETOK	13	1008.8	1009.6	89	78	83.7	0.4	94	21	74	13+	13	0	76	79	9.39	3.15	1.76	19		0.0	0	2.8	10								
TAGUAC GUAM R	361			85	73	78.9	- 0.4	87	28+	69	28	0	0			22.28	8.92	5.85	24		0.0	0			25	SE	16					39
JOHNSTON	7	1012.2	1012.9	86	79	82.0	0.4	87	24+	76	18+	0	0	73	75	0.49	- 1.86	0.12	8	1	0.0	0	12.8	9	27	SE	11+	5	10	15	7.1	70
KOROR R	94	1006.4	1010.0	88	77	82.6	1.6	90	30+	73	5+	5	0	76	81	7.20	- 7.13	2.26	14	1	0.0	0	4.2	21	26	NW	5+	0	0	30	10.0	62
KWAJALEIN	8	1009.5	1010.1	88	78	83.1	1.2	92	4	74	9	4	0	76	79	12.55	2.36	3.65	24	1	0.0	0	1.6	11	25	18	18+	0	7	23	8.5	
MAJURO	10	1009.8	1010.3	86	77	81.8	1.4	89	14+	74	5+	0	0	75	80	13.95	1.89	2.88	22	3	0.0	0	1.2	8	20	N	4+	2	5	23	8.5	59
MARCUS ISLAND	20	1009.1	1011.0	89	78	83.0	- 0.1	91	1	74	2	6	0	76	80	6.15	2.28	1.26	20	1	0.0	0	5.6	12	27	S	14	4	10	16	7.0	69
PAGO PAGO	12	1012.9	1012.9	85	74	79.5		88	30+	67	21	0	0	73	82	8.46		3.62	14	0	0.0	0	11.0	12	32	E	14	4	16	10	6.3	57
PONAPE R	123	1004.4	1009.9	89	72	80.5	1.0	92	21+	69	8	13	0	74	85	10.65	- 5.16	3.02	18	2	0.0	0	2.5	18	19	NE	13	3	7	20	7.9	83
TRUK MOEN ISLAND	5	1009.5	1009.9	87	75	81.2	0.8	91	27	73	6+	4	0	75	84	12.49	- 0.09	2.97	21	0	0.0	0	2.7	28	35	NE	14	0	12	18	8.3	81
WAKE	11	1011.5	1011.7	87	78	82.5	0.0	89	14+	74	8	0	0	74	76	5.15	- 0.09	1.24	17	2	0.0	0	7.8	8	35	13	10	6	7	17	7.4	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1007.5	1009.4	88	75	81.5	0.1	91	14	71	17	10	0	76	84	9.59	- 4.42	1.85	21	3	0.0	0	4.4	22	20	S	3+	0	0	30	10.0	56
PENNSYLVANIA																																
ALLENTOWN	387	1000.7	1014.6	71	53	62.4	- 2.3	93	2	40	16	1	0	54	77	6.23	2.48	2.00	12	1	0.0	0	2.0	30	25	26	24+	5	12	13	6.6	
ERIE	731	988.2	1014.9	69	53	61.1	- 2.2	83	2	39	16	0	0	52	75	3.24	- 0.32	0.78	11	4	0.0	0	2.9	26	26	29	22	6	11	13	6.3	
HARRISBURG	338	1001.7	1014.5	76	58	66.7	- 0.2	97	3+	45	26	3	0	54	67	6.12	3.30	4.23	13	1	0.0	0	2.4	31	26	E	21+	5	9	16	6.9	51
PHILADELPHIA	5	1013.2	1014.2	75	56	65.2	- 1.5	91	3+	41	27	2	0	55	74	8.70	5.24	4.69	11	2	0.0	0	2.5	34	29	NE	21+	3	10	17	7.3	55
PITTSBURGH	1137	971.6	1015.2	71	51	61.3	- 2.9	87	3+	38	16	0	0	53	77	1.92	- 0.62	0.73	11	4	0.0	0	2.0	30	25	32	22	5	9	16	6.9	53
READING U	266			73	57	65.0	- 2.5	93	2	45	26+	2	0			5.35	2.03	2.82	14		0.0	0			55	E	21	7	11	12	6.4	49
SCRANTON	930	981.0	1015.2	69	52	60.2	- 2.3	90	2	39	26	1	0	53	80	2.70	- 0.27	0.77	13	1	0.0	0	1.1	22	30	NE	21	1	13	16	7.6	48
WILLIAMSPORT	524	995.9	1015.0	69	49	59.4	- 4.7	91	2	38	16	1	0	53	85	5.22	1.95	1.35	11	6	0.0	0	2.7	27	20	24	23+	5	7	18	7.3	
RHODE ISLAND																																
BLOCK ISLAND	110			68	57	62.4	- 1.6	83	2	48	16	0	0			4.74	1.54	2.12	11		0.0	0						11	6	13	5.8	
PROVIDENCE	51	1011.5	1013.9	71	52	61.3	- 1.9	87	2	37	27	0	0	50	70	5.23	1.71	2.00	9	2	0.0	0	1.9	29	29	25	23	11	4	15	6.1	59
SOUTH CAROLINA																																
CHARLESTON	40	1012.5	1014.0	85	67	75.8	0.2	93	4	54	10	5	0	66	76	2.20	- 3.63	1.35	9	4	0.0	0	1.5	22	39Y	SW	4	12	7	11	5.3	67
CHARLESTON U	9			84	71	77.2	0.1	93	4	63	23	4	0			2.02	- 4.30	0.82	6		0.0	0			33	E	12					
COLUMBIA	217	1005.8	1013.9	86	62	73.8	- 1.5	98	4	52	10	7	0	62	72	2.02	- 2.29	0.85	7	1	0.0	0	0.9	24	25	26	4	11	9	10	5.2	68
GNVLE-SPARTANBURG	957	980.7	1014.7	79	61	69.9	- 2.8	89	4	49	25	0	0	60	76	7.98	4.10	4.22	9	3	0.0	0	1.2	36	28	NW	4	12	8	10	5.0	65
SOUTH DAKOTA																																
ABERDEEN	1296	969.9	1016.5	73	45	59.0	- 1.6	87	12+	31	15	0	2	46	65	1.25	- 0.15	0.60	7	3	0.0	0	1.3	10	35	36	28	11	8	11	5.1	
HURON	1282	969.9	1016.3	71	47	58.9	- 3.0	85	9	35	15	0	0	50	77	2.69	1.16	1.23	7	3	0.0	0	2.5	13	31	S	7	14	4	12	5.1	74
RAPID CITY	3162	905.5	1015.6	75	48	61.3	- 0.3	92	11+	31	30	4	1	45	62	2.84	1.89	2.13	8	2	T	T	0.7	36	37	NE	29	13	9	8	4.4	70
SIOUX FALLS	1418	965.5	1016.8	71	49	59.9	- 1.9	85	9	35	30	0	0	50	73	6.34	3.73	4.02	10	5	0.0	0	0.7	10	25	7	24+	11	4	15	5.5	
TENNESSEE																																
BRISTOL	1507	961.7	1015.2	76	57	66.4	- 2.7	86	3	45	25	0	0	59	82	4.73	2.11	1.35	13	4	0.0	0	0.4	28	20	27	20	6	9	15	6.7	
CHATTANOOGA	665	990.2	1014.5	79	60	69.5	- 4.3	90	2	49	25+	1	0	62	82	6.40	3.30	2.80	11	2	0.0	0	0.5	35	18	W	30	8	10	12	5.9	54
KNOXVILLE	980	979.7	1014.4	78	60	68.9	- 3.3	88	3+	50	25	0	0	61	82	4.41	1.87	1.40	10	3	0.0	0	0.9	31	18	SW	30+	7	10	13	6.2	57
MEMPHIS	258	1004.7	1014.7	81	61	70.8	- 3.1	91	3	51	30+	2	0	62	76	3.23	0.41	1.42	10	3	0.0	0	1.2	34	31	NW	30	8	11	11	5.9	61
NASHVILLE	590	992.6	1014.1	79	60	69.5	- 3.3	90	2	48	24	1	0	61	78	3.87	1.00	1.15	10	4	0.0	0	1.9	8	32	NW	30	10	4	16	6.2	54
OAK RIDGE	905			78	59	68.5	- 2.5	89	4+	47	24	0	0			4.20	0.90	1.78	12		0.0	0			29Y		15	8	8	14	6.4	
TEXAS																																
ABILENE	1762	953.9	1014.2	84	66	75.2	- 0.7	94	14	54	30	9	0	63	70	4.08	2.01	1.73	9	6	0.0	0	1.8	14	41	NW	17	8	9	13	6.0	55
AMARILLO	3604	892.7	1013.8	80	57	68.5	- 3.3	90	24	47	30	1	0	56	70	2.40	0.51	1.70	3	4	0.0	0	4.9	16	42	NE	30	15	8	7	4.3	67
AUSTIN	597	992.2	1013.8	88	68	78.2	- 0.9	95	6+	60	22	16	0	66	70	3.22	- 0.22	1.41	10	7	0.0	0	1.1	8	36	NE	27	11	11	8	4.9	61
BROWNSVILLE	16	1012.2	1012.7	91	72	81.2	0.0	96	5	63	24+	18	0	71	74	0.52	- 4.47	0.28	7	3	0.0	0	5.3	12	26	E	17	17	10	3	3.8	86
CORPUS CHRISTI	41	1011.9	1013.3	90	72	80.7	- 0.1	96	5	63	23+	16	0	71	77	2.84	- 1.56	0.98	10	4	0.0	0	4.0	12	32	N	30	12	11	7	4.6	74
DALLAS	481	997.0	1014.1	84	66	75.3	- 2.6	93	2	57	24	8	0	65	75	2.71	- 0.11	0.91	7	3	0.0	0	2.0	8	28	N	30	12	7	11	5.2	57
DEL RIO	1026	977.3	1012.9	91	69	79.7	- 0.2	98	30	60	18	17	0	66	68	1.45	- 1.16	0.62	7	5	0.0	0	5.0	12	24	32	30	12	8	10	4.9	
EL PASO	3918	882.8	1012.5	85	61	73.4	- 1.1	91	25+	52	30	6	0	56	57	1.79	0.65	1.19	8	7	0.0	0	0.7	7	30	W	29	15	8	7	3.9	79
FORT WORTH	537	993.9	1014.2	85	66	75.8	- 2.6	94	4+	55	24	10	0	65	74	4.23	1.69	1.10	9	4	0.0	0	1.8	4	29	36	30	11	9	10	5.1	
GALVESTON U	7			84	74	79.2	- 0.9	88	7	69	30+	0	0			7.99	2.90	5.88	8		0.0	0			25	N	30+					67
HOUSTON U	41			89	71	79.7	- 0.1	94	15+	63	30	16	0			1.96	- 1.85	1.07	5		0.0	0										
HOUSTON	50	1011.5	1013.8	89	70	79.6	0.4	94	4	61	22	16	0	68	72	4.01	- 0.25	2.34	5	10	0.0	0	1.1	2	29	15	7	13	8	9	4.9	72
LUBBOCK	3254	904.5	1014.1	82	61	71.6	0.2	93	29	51	28	5	0	59	69	2.18	- 0.18	1.27	6	5	0.0	0	2.1	13	35	4	2	8	12	10	5.8	
MIDLAND	2851	916.4	1013.1	83	62	72.8	- 2.6	92	25+	47	30	7	0	62	74	3.29	1.50	1.31	6	6	0.0	0	3.4	10	37	1	1	10	10	10	5.3	
PORT ARTHUR	16	1013.2	1013.9	89	69	78.9	0.7	93	30+	59	22	12	0	70	80	3.17	- 1.71	1.03	10	5	0.0	0	0.9	1	31	NE	7	11	12	7	5.0	63
SAN ANGELO	1903	947.9	1013.5	84	65	74.1	- 4.2	93	14+	54	24	5	0	66	81	2.41	- 0.25	0.94	11	7	0.0	0	1.6	13	30	26	3	8	12	10	5.6	
SAN ANTONIO	788	986.5	1013.9	88	67	77.5	- 1.1	93	4	55	21	12	0	68	76	2.13	- 1.36	0.94	11	11	0.0	0	1.5	10	30	NE	27	10	11	9	5.1	69
VICTORIA	104	1009.8	1013.8	89	71	80.0	0.9	93	27+	61	22	17	0	70	76	2.39	- 1.84	0.93	9	9	0.0	0	2.0	8	46Y	NNE	27	12	8	10	5.0	
WACO	501	996.6	1014.2	88	69	78.4	- 0.6	98	5	58	24	11	0	63	63	4.73	1.96	1.67	6	4	0.0	0	0.7	5	29	30	27	13	7	10	4.9	
WICHITA FALLS	994	978.7	1014.7	83	62	72.8	- 4.6	95	2	50	30	9	0	63	77	7.45	5.12	2.08	10	6	0.0	0	2.1	10	36	36	30	10	8	12	5.7	
UTAH																																
MILFORD	5028			84	45	64.1	1.0	93	22	32	15	5	1			0.25	- 0.18	0.15	3		0.0	0						17	7	6	3.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	F.	°F.	°F.	°F.		°F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	872.3	1014.2	82	53	67.5	3.1	93	9+	43	30	6	0	42	46	0.83	0.30	0.69	6	4	0.0	0	4.1	14	40	S	10	13	9	8	4.5	83
WENDOVER	4237			81	56	68.5	1.8	91	8+	43	15	3	0			0.37	0.05	0.16	4		0.0	0										
VERMONT																																
BURLINGTON	332	1001.0	1013.5	66	45	55.7	- 2.7	81	2	33	27+	0	0	49	78	3.33	0.02	1.29	10	0	0.0	0	2.0	21	24	NW	24	7	8	15	6.5	60
VIRGINIA																																
LYNCHBURG	916			77	56	66.8	- 1.9	92	3	42	17	2	0			6.22	2.86	2.94	9	2	0.0	0			20	E	19+	10	8	12	5.7	59
NORFOLK	22	1012.9	1013.9	78	62	69.9	- 2.7	92	4	49	17	1	0	62	77	3.39	- 0.83	1.23	10	2	0.0	0	0.8	36	29	E	14	7	10	13	6.2	60
RICHMOND	162	1008.5	1014.3	78	56	67.2	- 3.0	92	3	40	17	2	0	57	77	5.06	1.41	1.90	11	1	0.0	0	1.3	36	20	N	15	7	10	13	6.3	55
ROANOKE	1149	973.2	1014.7	76	56	66.1	- 3.0	88	3+	43	17	0	0	54	69	7.25	3.99	2.69	11	1	0.0	0	2.6	31	20	27	22+	9	9	12	6.1	
WASHINGTON																																
OLYMPIA	195	1010.2	1017.3	72	47	59.4	0.9	86	4	37	12	0	0	50	75	1.95	- 0.14	0.77	9	2	0.0	0	0.5	23	24	25	22	7	8	15	6.5	
QUILLAYUTE	179	1009.5	1017.1	67	49	57.8	0.6	84	21	41	7	0	0	52	85	3.50	- 1.18	1.99	13	1	0.0	0	0.8	18	20	S	8	7	6	17	6.9	43
SEATTLE TACOMA	400	1001.0	1017.2	69	54	61.5	1.6	82	4	46	12	0	0	53	78	1.77	- 0.28	0.93	9	1	0.0	0	0.9	33	28	25	22	8	9	13	6.4	50
SPOKANE	2356	931.9	1014.7	78	51	64.6	3.7	93	22+	40	30	2	0	42	49	0.51	- 0.24	0.50	2	2	0.0	0	1.9	20	27	SW	5	11	9	10	5.0	73
STAMPEDE PASS R	3958			63	46	54.4	2.5	81	4	38	19+	0	0			1.39	- 3.00	0.36	10		0.0	0						7	7	16	6.7	
WALLA WALLA U	949			80	58	68.8	2.8	97	5	47	30	3	0			0.15	- 0.63	0.14	3		0.0	0			17	SE	14	13	5	12	4.9	76
YAKIMA	1052	977.0	1014.9	82	51	66.5	5.2	95	5	44	19	3	0	48	55	0.87	0.52	0.32	8	5	0.0	0	3.3	27	21	26	22	12	9	9	4.6	
WEST INDIES																																
SAN JUAN P.R.	13	1013.2	1015.7	87	76	81.1	0.6	89	30+	72	11	0	0	74	82	7.20	0.44	1.96	20	9	0.0	0	6.2	9	34	E	28	5	20	5	5.9	74
SWAN ISLAND	28			87	78	82.3	- 0.7	90	9	74	22+	1	0			3.25	- 1.94	0.89	17		0.0	0						3	15	12	6.6	
WEST VIRGINIA																																
BECKLEY	2504	927.9	1015.2	68	51	59.7		81	3	37	16	0	0	53	81	8.08		2.86	13	2	0.0	0	2.1	20	25	27	22	7	4	19	7.1	
CHARLESTON	939	980.7	1014.6	77	56	66.5	- 1.7	91	3	42	17	3	0	56	74	3.74	0.82	1.08	13	0	0.0	0	0.9	23	21	22	29	4	7	19	7.4	
ELKINS	1970	945.1	1016.2	69	48	58.4	- 4.2	83	3+	35	17	0	0	52	85	5.14	2.07	1.65	13	1	0.0	0	1.7	29	25	29	22	2	9	19	7.9	
HUNTINGTON	827	985.1	1014.9	74	56	65.1	- 3.1	87	3+	42	16	0	0	57	80	5.64	3.10	1.37	13	3	0.0	0	0.7	23	17	26	23	5	10	15	6.9	
PARKERSBURG U	615			74	54	64.1	- 4.0	89	3	39	16	0	0			2.88	0.17	0.81	9		0.0	0			20	SW	29					47
WISCONSIN																																
GREEN BAY	682	990.2	1015.7	70	44	56.9	- 3.6	87	1	28	26	0	2	45	67	1.21	- 1.71	0.71	4	0	0.0	0	4.0	29	31	NW	29	11	8	11	5.0	60
LA CROSSE	651	991.5	1016.1	74	49	61.4	- 0.8	93	1	33	26	1	0	51	74	0.96	- 2.52	0.37	6	1	0.0	0	0.6	30	28	30	29	12	8	10	5.2	
MADISON	858	985.1	1016.3	71	43	57.1	- 3.9	84	1	27	26	0	2	48	75	0.51	- 2.81	0.23	5	1	0.0	0	2.7	32	27	NW	29	12	8	10	4.8	73
MILWAUKEE	672	991.5	1016.8	69	49	59.1	- 1.2	85	2+	35	30	0	0	49	71	0.48	- 2.24	0.22	6	0	0.0	0	2.5	33	30	W	29	12	8	10	4.9	69
WYOMING																																
CASPER	5338	839.8	1015.1	78	46	62.2	2.5	88	8	33	30	0	0	37	46	0.39	- 0.51	0.17	6	3	T	0	4.2	26	32	34	24	15	6	9	4.6	
CHEYENNE	6126	815.8	1016.4	73	47	59.9	1.3	85	20+	33	30	0	0	40	55	2.12	1.02	1.18	8	9	T	0	4.7	31	45	NE	29	11	12	7	5.0	67
LANDER	5563	831.4	1015.2	75	48	61.4	2.4	87	8	35	16	0	0	39	49	0.71	- 0.32	0.31	6	5	T	0	2.3	25	56	W	24	11	10	9	5.2	64
SHERIDAN	3964	879.8	1015.3	77	46	61.6	2.8	93	8	30	30	1	1	40	49	0.98	- 0.19	0.41	9	6	0.0	0	2.2	30	35	NW	29	12	8	10	5.1	75

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	992.6	1014.6	27.2	17.2	22.1	-2.5	31.7	4+	10.0	24	0	0	17.8	79	130	45	83	12	3	0	0	0.3	31	10.7	N	12	9	7	14	6.2	54
HUNTSVILLE	183	991.5	1014.4	27.8	16.7	22.3	-1.3	32.8	3+	11.1	24	3	0	17.2	76	115	37	32	8	3	0	0	0.2	18	9.4	29	30	8	7	15	6.0	
MOBILE	64	1006.4	1014.3	30.6	20.6	25.5	0.0	33.3	8+	15.0	22	9	0	19.4	74	110	-49	44	13	5	0	0	0.2	2	11.2	24	2	3	16	11	6.4	
MONTGOMERY	59	1007.1	1014.2	30.0	18.9	24.6	-0.5	35.0	4	13.9	25+	9	0	18.3	75	149	48	77	10	5	0	0	0.3	30	11.2	S	27+	6	10	14	6.4	58
ALASKA												B																				
ANCHORAGE PRK STRIP	26			13.9	5.0	9.3	0.5	17.8	4	-0.6	23	0	2			52	-12	23	14		0	0										
ANCHORAGE	35	999.3	1004.2	12.2	3.9	7.9		17.2	4	-1.7	23	0	2	4.4	80	62		26	12	0	0	0	0.5	16	9.4	15	28	4	6	20	7.7	45
ANNETTE	34	1009.5	1013.4	16.1	9.4	12.6	0.3	20.0	12	4.4	14	0	0	9.4	84	239	-12	79	19	0	0	0	3.0	16	16.1	16	3	3	4	23	8.5	
BARROW	7	1007.8	1008.5	0.6	-1.7	-0.6	0.3	5.6	29	-4.4	2	0	30	-1.1	97	12	-4	4	11	0	46	25	2.1	8	14.3	7	26	0	2	28	9.5	
BARTER ISLAND	12	1005.8	1007.7	3.3	-1.1	1.0	0.9	12.2	14	-6.1	11	0	27	-0.6	90	38	14	10	13	0	102	51	0.9	11	20.1	26	10	0	2	28	9.5	
BETHEL	38	996.6	1002.2	12.2	3.3	7.7	0.7	17.2	10	-1.7	24	0	2	5.0	85	14	-52	5	11	0	0	0	1.1	3	11.6	7	30+	2	3	25	8.3	
COLD BAY	29	997.6	1001.5	9.4	4.4	7.0	-1.6	13.9	10	0.0	17	0	1	5.0	88	109	-1	34	24	0	0	0	2.1	27	20.6	17	30+	0	1	29	9.4	
FAIRBANKS	133	987.8	1004.6	15.6	4.4	10.1	3.6	22.2	15	0.0	9	2	1	1.7	58	4	-24	3	3	0	0	0	0.9	2	8.9	28	9+	1	9	20	7.9	
JUNEAU	4	1010.2	1010.8	13.3	6.1	9.6	0.2	17.2	16+	0.0	8	0	1	8.3	94	208	39	44	24	0	0	0	3.7	10	16.5	12	4	0	1	29	9.7	08
KING SALMON	13	998.3	1000.5	11.7	5.0	8.3	-0.5	15.6	9	-0.6	8	0	2	5.6	86	95	17	25	17	0	0	0	1.6	10	20.6	5	26	3	4	23	8.1	
KOTZEBUE	3	1004.1	1004.5	9.4	3.3	6.3	1.4	13.3	26	-1.7	10	0	2	3.3	81	36	5	10	17	0	0	0	0.7	8	13.4	31	20	4	3	23	7.9	
MC GRATH	106	991.2	1003.8	12.8	2.2	7.6	0.9	19.4	27	-1.1	24+	0	8	2.2	74	12	-54	4	8	0	0	0	0.3	34	10.3	17	20+	2	6	22	8.1	
NOME	4	1002.0	1002.9	9.4	2.2	5.8	0.3	14.4	26	-2.8	20	0	5	2.8	81	52	-16	16	14	0	0	0	0.4	2	13.9	2	15	3	9	18	7.7	25
ST. PAUL ISLAND	7	1001.4	1002.2	8.9	4.4	6.7	-0.3	10.6	11+	0.6	17	0	0	4.4	86	63	-15	19	17	0	0	0	1.0	36	15.6	6	30	0	4	26	9.3	
SHEMYA	37	1001.7	1005.3	11.1	6.1	8.7	-0.3	12.8	19	3.3	15	0	0	7.2	90	50	-8	9	22	0	0	0	3.0	24	19.2	19	5	1	7	22	8.5	
YAKUTAT	9	1006.4	1007.6	11.7	5.0	8.3	-1.3	20.0	14	-1.1	23	0	4	6.7	92	477	57	69	24	2	0	0	2.5	11	14.8	13	26	2	2	26	9.0	
ARIZONA																																
FLAGSTAFF	2131	790.7	1016.4	23.3	6.7	14.8	0.1	27.8	9	3.3	3+	0	0	6.7	65	52	11	25	11	13	0	0	0.8	21	7.6	22	13+	7	18	5	5.1	
PHOENIX	340	971.9	1009.8	35.0	21.7	28.3	0.1	39.4	22+	18.3	3+	24	0	16.1	53	51	32	47	6	6	0	0	1.7	12	14.8Y	S	1	20	5	5	3.0	79
TUCSON	788	924.8	1010.9	32.2	19.4	25.7	-1.2	37.2	7	17.2	30+	18	0	13.9	55	90	64	46	9	7	0	0	2.1	15	15.6	SE	28	20	2	8	3.6	79
WINSLOW	1492	853.0	1014.2	29.4	12.8	21.0	-0.5	32.8	23+	9.4	3	4	0	8.9	53	25	2	9	6	9	0	0	1.4	19	13.0	16	12	13	14	3	4.1	
YUMA	59	1001.7	1008.7	37.8	22.8	30.3	0.2	43.3	23+	18.9	30+	29	0	14.4	44	1	-9	1	2	2	0	0	1.0	18	11.2	N	27	22	5	3	2.5	89
ARKANSAS																																
FORT SMITH	136	998.3	1014.8	28.9	15.0	21.8	-2.0	34.4	25	7.2	23	4	0	15.0	69	32	-60	19	7	4	0	0	0.8	3	12.5	N	4	9	8	13	6.0	56
LITTLE ROCK	78	1005.4	1014.9	27.8	16.7	22.2	-1.3	33.9	6	10.0	17	5	0	16.7	74	36	-46	20	7	3	0	0	0.7	36	10.7	W	3	11	8	11	5.2	60
TEXARKANA	113	1001.7	1014.6	28.3	17.8	23.0	-1.7	32.8	3	12.8	22+	5	0	18.9	80	70	0	36	9	4	0	0	0.4	6				9	12	9	5.3	
CALIFORNIA																																
BAKERSFIELD	151	994.9	1012.4	30.6	16.7	23.8	-0.9	38.3	4	10.6	14	8	0	10.0	45	1	-1	1	1	0	0	0	1.2	33	11.6	18	19	23	3	4	2.0	
BISHOP	1252			31.1	7.8	19.5	-0.6	35.6	23+	2.2	14+	16	0			5	0	5	2		0	0						24	2	4	1.9	
BLUE CANYON	1609			22.2	11.7	17.0	-0.2	30.6	29	2.2	13	0	0			1	-15	1	3		0	0			13.9	2	28	24	5	1	1.8	
EUREKA U	13			17.8	11.1	14.4	0.9	25.0	29	8.3	13	0	0			34	18	34	3		0	0			10.7	SW	17	11	8	11	5.3	68
FRESNO	100	1000.3	1012.0	31.7	13.3	22.7	-0.8	38.3	4	8.9	15	15	0	10.6	51	1	-2	1	2	2	0	0	1.6	30	9.8	NW	18	24	3	3	1.6	92
LONG BEACH	10	1011.5	1012.8	28.3	16.7	22.4	0.6	37.2	16	11.7	14	7	0	14.4	66	T	-1	T	1	0	0	0	1.2	26	8.0	28	23	13	14	3	3.6	
LOS ANGELES	30	1008.8	1012.4	24.4	17.2	20.9	0.6	28.3	16	12.8	14	0	0	13.9	69	5	1	4	3	0	0	0	2.2	25	11.2Y	SE	19	12	11	7	4.3	
LOS ANGELES U	82			27.8	17.8	23.0	0.8	35.6	16	13.9	14	6	0			8	2	6	3		0	0			7.2	SE	19	13	14	3	3.7	65
MT SHASTA R	1080			25.6	7.2	16.4	0.0	35.0	5+	0.0	12	3	1			14	-8	8	2		0	0										
OAKLAND	2	1013.9	1014.1	22.8	15.0	18.9	0.5	33.3	27	11.7	14	1	0	12.8	72	2	-3	2	1	0	0	0	2.6	28	13.0	28	18	18	10	2	2.9	
RED BLUFF	104	999.7	1012.1	33.3	16.7	24.8	0.4	42.8	29	10.0	14	20	0	7.8	38	3	-7	2	2	2	0	0	0.2	23	13.0	NW	18	23	7	0	1.9	94
SACRAMENTO	5	1011.5	1012.3	31.1	13.3	22.2	0.2	38.9	29	8.9	15+	10	0	10.6	56	2	-3	2	2	0	0	0	2.0	21	10.3	SW	29+	25	4	1	1.6	97
SANDBERG R	1377			25.6	14.4	19.9	-0.8	32.2	22	4.4	14	1	0			1	-5	1	1		0	0			15.6	7	28	20	6	4	2.6	
SAN DIEGO	4	1011.5	1012.4	24.4	17.8	21.1	0.0	28.9	17	13.3	14	0	0	15.6	73	T	-4	T	0	0	0	0	1.9	30	9.8	NW	22	15	12	3	3.7	74
SAN FRANCISCO	2	1013.5	1014.2	23.3	12.2	17.8	0.1	33.9	29+	10.0	15	2	0	11.1	73	2	-3	2	1	0	0	0	3.8	29	17.9	WNW	11	20	8	2	2.9	
SAN FRANCISCO U	16			21.1	13.9	17.6	0.9	35.0	28	11.7	9+	2	0			3	-3	3	1		0	0			11.6	W	18+					79
SANTA CATALINA	478			24.4	16.1	20.0	-1.2	32.2	23	12.8	20+	1	0			T	-5	T	0	0	0	0						16	7	7	3.5	
SANTA MARIA	72			23.9	11.1	17.4	0.3	36.7	28	6.1	14	2	0			4	0	4	2		0	0						20	4	6	3.7	
STOCKTON	7	1012.2	1013.1	30.6	13.9	22.2	-0.4	37.8	29	8.9	13	11	0	9.4	49	1	-4	1	1	0	0	0	2.8	30	10.7	29	18	23	6	1	1.5	
COLORADO																																
ALAMOSA	2297			23.9	1.7	12.9	-0.3	27.2	21	-3.9	16	0	6			1	-19	T	3		0	0						18	10	2	3.1	
COLORADO SPRINGS	1873	814.8	1016.1	23.9	9.4	16.7	0.3	30.6	24	2.8	30	0	0	5.6	55	54	27	30	6	9	0	0	0.9	6	14.3	35	29	14	10	6	4.5	
DENVER	1610	838.8	1014.5	26.1	10.6	18.3	1.1	32.8	9	2.8	30	1	0	6.7	53	29	1	11	11	6	T	0	0.1	10	16.5	NE	29	11	12	7	4.7	69
GRAND JUNCTION	1480	853.7	1013.6	28.9	12.2	20.6	0.7	32.2	23+	6.1	15	3	0	4.4	39	7	-17	3	7	4	0	0	1.2	12	13.4	W	14+	19	8	3	2.9	84
PUEBLO	1428	857.8	1014.6	27.8	11.1	19.4	0.2	34.4	24	7.2	18	5	0	7.8	53	27	5	18	7	4	0	0	1.5	9	22.8	N	29	15	10	5	4.0	77

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 32.2 °C or above	Temperature: No. of days: Min. 0 °C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1013.5	1014.0	23.3	15.0	19.1	0.4	33.9	2	7.8	26+	1	0	12.8	68	153	52	76	9	1	0	0	1.0	33	17.0	35	15	5	11	14	6.5	
HARTFORD	52	1007.5	1013.8	23.9	11.1	17.4	0.1	35.0	2	2.8	27	1	0	11.1	70	154	61	68	9	1	0	0	1.2	33	12.5	SW	30	7	9	14	6.5	62
NEW HAVEN	2			22.2	12.2	17.2	-0.6	32.8	2	4.4	26	1	0			132	33	54	9		0	0			11.6	W	23	7	10	13	6.4	60
DELAWARE																																
WILMINGTON	24	1011.2	1014.2	23.9	13.3	18.5	-1.3	32.8	3	6.1	27+	2	0	12.2	70	217	116	94	11	2	0	0	1.2	33	11.2	6	21	5	9	16	7.2	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1011.9	1014.1	25.0	15.6	20.3	-0.6	34.4	3+	9.4	17+	4	0	12.8	66	174	77	105	12	1	0	0	1.0	34	13.0	NE	21	5	7	18	7.3	45
FLORIDA																																
APALACHICOLA U	4			29.4	22.2	25.8	-0.2	33.3	5	17.2	22	1	0			294	77	191	11	8	0	0			12.5	E	9	9	9	12	5.5	54
DAYTONA BEACH	9	1013.9	1015.1	31.1	21.7	26.2	-0.1	33.3	5	16.7	24	7	0	20.6	78	114	- 64	38	15	12	0	0	0.9	18	10.3	16	20	5	7	18	7.0	
FORT MYERS	5	1014.6	1014.8	31.7	23.3	27.7	0.3	33.9	4	22.2	26+	19	0	22.8	79	106	-110	30	19	14	0	0	0.9	15	13.0	34	6	5	10	15	6.9	
JACKSONVILLE	6	1013.5	1014.6	30.0	21.1	25.7	-0.7	35.0	5+	16.7	23	9	0	20.6	78	151	- 41	30	13	7	0	0	0.7	24	14.8	NW	19	7	9	14	6.3	58
KEY WEST	1	1013.9	1014.4	31.1	26.1	28.5	0.6	32.2	1	21.7	26	1	0	23.3	74	212	41	84	18	10	0	0	2.2	14	14.8	SW	24	3	14	13	6.9	74
LAKELAND U	65			31.1	22.2	26.7	-0.1	34.4	4	19.4	24	10	0			165	- 2	67	17		0	0						5	11	14	6.6	59
MIAMI	2	1014.2	1014.5	31.1	23.9	27.3	-0.1	33.9	1	21.1	25	7	0	23.3	83	203	- 37	72	18	18	0	0	1.0	14	10.3	17	25	1	12	17	7.6	
ORLANDO	33	1010.8	1014.9	31.1	22.8	26.7	0.1	33.9	4	18.9	24	12	0			159	- 25	51	16	15	0	0	0.9	20	13.4	21	28	4	10	16	7.1	
PENSACOLA	34	1010.5	1014.4	29.4	20.6	25.2	-0.4	33.3	4	14.4	22	7	0	20.6	77	91	-104	41	9		0	0	0.3	25	12.1	E	28+					44
TALLAHASSEE	17	1012.2	1014.4	31.7	20.0	25.7	0.1	36.7	3	13.3	23	11	0	20.6	78	271	131	139	11	7	0	0	0.0	25	10.3	22	15	8	10	12	6.0	
TAMPA	6	1014.2	1014.6	31.1	22.8	27.0	0.1	35.0	1	18.3	24	11	0	21.7	77	105	- 70	43	10	8	0	0	0.4	22	8.9	27	29+	5	7	18	7.1	57
WEST PALM BEACH	5	1014.2	1014.9	31.1	23.3	27.4	-0.4	33.3	2	22.2	30+	7	0	22.8	81	254	9	61	17	16	0	0	0.6	16	13.0	24	20	2	8	20	8.0	
GEORGIA																																
ATHENS	244	985.8	1014.1	27.8	16.1	22.1	-1.0	33.9	3	10.6	25	6	0	16.1	75	71	- 6	41	8	1	0	0	0.5	31	7.2	19	30+	11	9	10	5.4	
ATLANTA	308	978.3	1014.6	26.7	16.7	21.4	-1.4	32.2	2	11.7	25	1	0	15.6	75	55	- 28	15	9	1	0	0	0.4	31	8.5	NE	12	12	8	10	5.4	61
AUGUSTA	44	1008.8	1013.9	29.4	15.6	22.6	-1.5	34.4	4+	10.0	25	6	0	17.2	78	53	- 23	21	10	2	0	0	0.5	21	10.3	29	4	10	10	10	5.4	
COLUMBUS	117			30.0	18.3	24.2	-0.3	35.6	3	13.3	25	8	0	18.9	78	88	18	31	9		0	0	0.1	5	10.3	31	4	8	10	12	5.9	
MACON	108	1001.7	1014.7	30.0	16.7	23.4	-1.3	35.6	3+	11.1	10	7	0	17.2	75	68	- 3	26	9	3	0	0	0.3	33	11.2	W	4	6	13	11	6.3	61
ROME	194			27.8	15.0	21.3	-1.2	33.3	2	7.8	25	3	0			158	74	52	9		0	0										
SAVANNAH	14	1012.5	1014.4	30.6	18.9	24.7	-0.2	34.4	4+	12.2	10	7	0	19.4	79	45	- 88	22	9	7	0	0	0.5	20	12.1	SW	5	12	8	10	5.7	57
HAWAII																																
HILO	8	1013.9	1015.2	29.4	21.1	25.2	1.1	31.1	28	19.4	22	0	0	21.1	81	213	- 3	64	24	0	0	0	0.3	17	8.5	SE	28	2	13	15	7.2	28
HONOLULU	2	1014.2	1014.6	32.2	23.9	28.0	1.8	33.9	25+	21.7	2	23	0	19.4	63	4	- 21	2	6	0	0	0	4.2	7	13.0	N	18	7	16	7	5.3	73
KAHULUI	15	1012.2		31.1	21.7	26.2	0.4	33.3	24+	18.9	22+	6	0	18.9	65	16	9	12	4	0	0	0	4.2	6	13.4	NE	6	12	14	4	4.6	72
LIHUE	31	1010.5	1015.7	29.4	22.8	25.9	0.3	30.0	24+	19.4	30+	0	0	21.7	80	38	- 14	8	15	0	0	0	3.8	6	9.8	E	19	3	21	6	6.0	63
IDAHO																																
BOISE	865	915.0	1013.5	27.2	10.6	19.0	1.9	37.2	22	4.4	27	5	0	5.6	46	5	- 5	4	3	2	0	0	0.7	29	14.3	SW	18	16	8	6	3.8	90
IDAHO FALLS 42NW R	1460			26.1	5.0	15.6	2.2	32.2	23+	- 1.1	28	4	2			19	3	10	4													
IDAHO FALLS 46W R	1503			25.0	5.0	15.1	1.4	31.1	23+	- 1.7	27	0	1			12	3	6	5		0	0										
LEWISTON	431			28.3	12.8	20.3	2.8	37.2	22	6.7	30	6	0			6	- 17	3	5		0	0						13	8	9	4.5	
POCATELLO	1358	863.9	1014.7	26.1	7.2	16.5	0.8	33.3	22	1.1	13	3	0	3.3	48	21	5	10	5	3	0	0	1.3	20	17.0	S	11	11	12	7	4.9	69
ILLINOIS																																
CAIRO U	96			25.6	15.6	20.5	-2.0	32.8	3	8.3	30	2	0			124	48	38	10		0	0			11.2	SW	3	9	7	14	6.3	47
CHICAGO O HARE	201	991.5	1015.7	24.4	9.4	16.9	-0.6	32.2	2+	2.2	26	2	0	9.4	66	14	- 56	7	6	0	0	0	0.7	33	15.6	28	29	9	7	14	6.0	
CHICAGO MIDWAY	185	992.9		23.9	12.8	18.3	-0.6	32.8	1	6.1	30+	1	0	10.6	63	23	- 46	13	6	0	0	0	0.6	34	13.4	W	29	10	8	12	5.7	64
MOLINE	177	994.2	1015.8	23.9	10.6	17.2	-1.3	33.9	2	3.3	26	2	0	11.1	73	71	- 11	37	8	2	0	0	0.5	33	12.5	NW	29	12	4	14	5.6	66
PEORIA	199	991.9	1015.9	23.9	11.7	17.7	-1.4	32.2	2	5.0	28	1	0	10.6	67	78	0	51	5	3	0	0	1.1	36	13.4	W	29+	10	7	13	5.8	64
ROCKFORD	221	988.8	1015.6	23.9	10.6	16.9	-0.7	32.2	2+	3.3	26	2	0	10.0	68	30	- 59	17	5	1	0	0	0.8	33	10.7	29	29	10	9	11	5.3	
SPRINGFIELD	179	993.2	1015.1	23.3	12.2	17.8	-2.0	33.3	2	5.6	28+	3	0	11.7	70	120	45	36	11	3	0	0	1.1	36	11.6	W	3	11	6	13	5.6	71
INDIANA																																
EVANSVILLE	116	1001.0	1014.9	24.4	12.8	18.6	-2.6	32.8	2	5.6	16	2	0	14.4	79	85	12	31	10	5	0	0	0.4	3	8.9	N	15	12	4	14	5.7	54
FORT WAYNE	241	985.4	1015.4	21.7	9.4	15.6	-2.7	30.0	3+	1.7	26	0	0	9.4	70	72	4	29	10	1	0	0	0.5	34	15.2	W	29	9	12	9	5.5	68
INDIANAPOLIS	241	986.1	1015.1	24.4	12.8	18.4	-0.7	33.3	3	5.0	30	3	0	11.1	65	146	63	65	10	2	0	0	0.5	2	12.5	SW	29	9	9	12	5.9	60
SOUTH BEND	236	987.5	1015.3	22.2	11.1	16.8	-0.8	29.4	2	3.3	26	0	0	10.6	68	28	- 50	12	7	1	T	T	0.8	33	12.5	30	29	9	10	11	5.7	
IOWA																																
BURLINGTON	211			22.8	11.7	17.3	-1.6	32.2	2	5.6	26+	1	0	11.1	70	92	11		5	2	0		1.4	35	10.7	30	29	10	12	8	5.4	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	982.1	1016.7	23.3	10.6	16.9	-1.7	30.6	1	3.9	16	0	0	10.6	69	19	- 54	9	8	0	0	0	0.3	2	10.7	N	14	11	6	13	5.5	69
DUBUQUE	322			22.2	9.4	15.9	-0.6	30.0	1	2.2	30	0	0			42	- 55	22	5		0	0						11	4	15	6.0	
SIOUX CITY	334	977.0	1016.7	22.8	11.1	16.8	-1.8	28.3	21+	3.3	30	0	0	12.2	78	33	- 37	13	12	6	0	0	0.4	12	12.5	SE	24	11	7	12	5.5	65
WATERLOO	265	984.8	1016.3	23.3	9.4	16.4	-0.8	32.2	1	1.7	30	1	0	9.4	68	14	- 85	6	4	0	0	0	0.4	31	11.2	32	29+	13	6	11	5.2	
KANSAS																																
CONCORDIA	448	963.4	1015.8	25.0	12.2	18.6	-2.3	32.8	24	5.0	15	1	0	12.2	71	60	- 9	29	6	6	0	0	0.9	12	13.4	N	25	15	4	11	4.7	66
DODGE CITY	787	925.8	1015.5	26.1	12.8	19.4	-1.8	33.3	24	5.0	30	2	0	12.2	69	48	9	24	7	4	0	0	0.8	13	17.0	NE	29	12	9	9	4.5	79
GOODLAND	1113	890.6	1015.7	26.7	11.1	18.9	0.3	35.6	24	2.2	30	5	0	9.4	62	25	- 6	18	6	6	T	T	0.9	16	13.4	2	29	16	7	7	3.6	
TOPEKA	267	984.4	1015.9	25.0	12.8	18.8	-2.0	32.8	5	6.7	30+	1	0	13.3	75	37	- 39	13	8	6	0	0	0.7	6	11.6	5	1	11	6	13	5.8	63
WICHITA	403	968.2	1015.5	26.7	13.9	20.3	-1.5	33.3	5	5.6	30	3	0	12.8	67	18	- 64	9	7	6	0	0	0.7	11	16.5	NE	30	11	8	11	5.2	63
KENTUCKY																																
COVINGTON	265	983.7	1015.1	24.4	13.9	19.2	-0.4	33.3	3+	5.0	24	3	0	12.8	72	80	8	34	8	1	0	0	0.4	6	13.0	26	29	6	11	13	6.6	
LEXINGTON	294	980.0	1015.1	23.9	13.3	18.5	-2.2	31.1	3	6.1	16	0	0	12.8	73	102	31	56	12	2	0	0	0.4	14	9.4	22	29	8	5	17	6.5	
LOUISVILLE	145	997.0	1014.5	24.4	15.0	19.7	-1.2	31.7	2	7.2	16	0	0	13.9	71	66	- 1	18	10	2	0	0	0.2	2	11.2	W	29	7	7	16	6.5	56
LOUISIANA																																
ALEXANDRIA	28	1009.8	1014.1	29.4	18.3	23.8	-1.2	33.3	7+	11.7	22	5	0	19.4	82	141	61	38	10	7	0	0	0.3	1	13.0	32	30+	6	15	9	5.9	
BATON ROUGE	20	1011.5	1014.3	30.0	19.4	24.9	-0.6	33.9	8	13.9	22	9	0	19.4	76	67	- 23	33	10	5	0	0	0.2	36	11.2	1	6	6	12	12	6.4	
LAKE CHARLES	3	1013.2	1014.2	31.1	21.1	26.1	0.2	33.9	7+	15.6	22	12	0	21.1	79	90	- 12	22	12	11	0	0	0.5	5	10.3	12	8	10	12	8	5.2	
NEW ORLEANS	1	1012.9	1013.9	30.0	20.0	25.0	-0.7	32.8	8+	13.9	23	7	0	20.6	80	141	13	47	12	7	0	0	0.4	2	8.9	9	10+	10	7	13	5.7	
SHREVEPORT	77	1005.1	1014.1	28.9	18.9	24.1	-1.9	33.9	6	13.3	22	8	0	18.9	77	85	25	48	7	2	0	0	0.5	35	10.3	21	30	9	9	12	5.7	60
MAINE																																
CARIBOU	190			17.2	4.4	10.9	-1.2	26.7	10	- 1.1	27+	0	4			81	- 9	34	10		0	0						7	11	12	6.0	
PORTLAND	14	1011.2	1013.6	20.0	7.2	13.4	-1.4	30.6	2	- 1.1	27	0	1	9.4	77	98	8	47	7	1	0	0	1.0	26	13.9	W	23	11	9	10	5.3	69
MARYLAND																																
BALTIMORE	45	1008.8	1014.3	24.4	13.9	19.3	-0.8	35.0	3+	7.8	24+	4	0	12.8	71	216	131	98	11	1	0	0	1.0	32	11.6	W	24	7	7	16	7.0	45
MASSACHUSETTS																																
BLUE HILL OBS R	192			20.6	11.1	15.8	-1.1	32.2	2	4.4	26	1	0			98	- 3	39	7		0	0			17.4	SE	4					64
BOSTON	5	1012.9	1013.9	21.7	13.3	17.5	-1.0	33.3	2	7.8	27	1	0	10.6	67	87	- 1	31	8	0	0	0	0.7	26	13.4	W	30	12	7	11	5.4	64
NANTUCKET	13	1013.2	1013.7	20.0	10.6	15.1	-2.1	28.3	2	3.3	27	0	0	12.2	82	85	- 5	28	12	2	0	0	0.2	35	13.4	SW	23	8	6	16	6.6	56
PITTSFIELD	357			19.4	7.2	13.4	-1.1	30.0	2	- 0.6	27	0	1			143	28	65	10		0	0										
WORCESTER	301	977.7	1014.4	19.4	9.4	14.6	-1.4	31.1	2	2.8	27	0	0	8.3	72	142	42	57	7	0	0	0	1.8	30	14.8	29	23	11	9	10	5.6	
MICHIGAN																																
ALPENA	210	989.2	1014.5	20.0	6.1	13.2	-0.1	32.2	1	- 1.7	26	1	3	7.2	71	55	- 37	24	12	2	0	0	0.8	28	12.1	NW	29	7	11	12	6.0	55
DETROIT	190	991.9	1014.6	22.8	12.2	17.4	-0.9	32.2	2+	4.4	26	2	0	10.0	65					1	0		1.4	30	13.0	29	29					
DETROIT M WAYNE CO	193	990.9	1014.7	22.8	10.6	16.8	-1.2	31.7	1	3.3	16	0	0	11.1	73	38	- 21	13	6	2	0	0	1.1	29	13.0	NW	23	11	9	10	5.5	61
DETROIT WILLOW RUN	217	987.1	1015.3	21.7	9.4	15.5	-2.7	30.6	2	1.7	26	0	0	8.9	68	47	- 11	25	6	2	0	0	1.4	29	15.6	32	3	10	10	10	5.6	
FLINT	235	987.1	1015.0	20.6	7.8	14.2	-1.8	28.9	2	- 0.6	26	0	1	9.4	75	41	- 34	19	10	4	0	0	1.2	27	13.9	22	2	8	12	10	5.9	
GRAND RAPIDS	239	986.1	1015.2	23.3	9.4	16.3	-0.4	30.6	2+	1.1	26	0	0	10.0	73	49	- 27	19	9	1	0	0	1.1	29	17.9	NW	29	9	10	11	5.8	62
HOUGHTON LAKE	350	973.6	1015.5	20.0	6.7	13.2		28.9	2+	- 2.2	26+	0	3	8.9	77	57		28	10	3	0	0	1.2	30	10.3	27	29	8	12	10	5.8	
LANSING	256	983.1	1014.8	22.8	8.3	15.4	-1.3	31.7	2	- 2.8	26	0	2	9.4	71	31	- 35	10	9	2	0	0	1.3	29	18.3	W	29	7	11	12	6.4	62
MARQUETTE U	206			18.9	10.6	14.7	0.4	32.2	1	3.9	30	1	0			79	- 5	30	13		0	0			12.1	NE	29	9	11	10	5.3	65
MUSKEGON	191	992.6	1015.4	22.2	10.0	16.1	-1.2	29.4	2	0.6	26	0	0	10.0	70	35	- 43	15	9	1	0	0	1.0	31	10.3	30	29+	11	8	11	5.3	
SAULT STE MARIE	220	987.8	1014.2	18.3	7.8	13.0	-0.2	30.0	1	- 0.6	24	0	1	8.3	77	67	- 30	30	14	5	T	0	1.4	31	14.3	W	24	8	9	13	6.5	57
MINNESOTA																																
DULUTH	435	965.1	1016.7	18.9	6.7	12.7	0.3	26.7	9	- 0.6	26	0	2	7.8	75	39	- 34	32	5	1	T	T	1.4	28	15.2	W	4	9	9	12	5.7	66
INTERNATIONAL FALLS	359	973.2	1016.4	18.9	5.6	12.2	0.6	27.8	9	- 3.3	26	0	5	7.8	79	31	- 43	12	9	2	0	0	1.2	27	11.2	29	4	12	8	10	4.9	
MINNEAPOLIS	254	986.5	1016.7	21.7	9.4	15.7	-0.1	30.6	1	0.6	30+	0	0	9.4	70	43	- 19	29	8	4	0	0	0.7	31	13.9	NW	29	9	12	9	5.4	70
ROCHESTER	395	969.2	1016.9	21.7	8.3	15.0	-0.9	29.4	1	1.1	26	0	0	8.3	69	35	- 44	18	6	0	0	0	1.1	27	10.7	31	29	11	8	11	5.2	
ST CLOUD	315	978.7	1016.4	21.7	7.8	14.7	-0.2	28.9	10	- 1.1	26	0	1		72	24	- 37	19	4		0	0						11	7	12	5.4	
MISSISSIPPI																																
JACKSON	94	1002.4	1014.3	29.4	17.8	23.6	-1.2	32.8	7+	12.2	24	7	0	18.3	80	124	59	34	9	6	0	0	0.4	36	10.7	SW	9	7	13	10	5.9	56
MERIDIAN	88	1003.4	1014.5	29.4	17.2	23.3	-1.1	33.3	4+	11.7	23	6	0	17.8	77	84	0	30	8	6	0	0	0.3	29	9.4	30	4	4	15	11	6.4	
VICKSBURG U	71			27.8	19.4	23.6	-1.2	32.2	7+	12.8	30	3	0			175	112	71	13		0	0			9.8	SW	18	10	7	13	6.1	46

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	987.1	1015.3	24.4	13.3	18.8	-1.9	32.2	2+	6.7	24	2	0	11.7	67	84	- 14	47	9	3	0	0	0.8	2	13.4	NW	3	9	10	11	5.6	69
KANSAS CITY	226	989.2	1015.7	25.6	15.0	20.4	-1.4	32.2	5	10.0	30	1	0	13.9	69	66	- 15	28	6	5	0	0	0.6	5	9.8	N	14	11	6	13	5.6	62
SAINT JOSEPH	247			26.1	10.6	18.4	-1.9	31.1	5	5.0	24	0	0	12.2	76	67	- 20	36	7	5	0	0	0.4	2	9.4	29	3	12	7	11	5.2	
ST LOUIS	163	995.3	1015.4	24.4	13.3	18.7	-2.2	32.8	2	6.7	30+	2	0	13.3	75	55	- 15	10	11	2	0	0	1.1	32	11.6	N	14+	9	6	15	6.3	56
SPRINGFIELD	386	970.9	1015.7	24.4	12.2	18.3	-3.0	30.6	4	5.0	30	0	0	13.3	75	85	- 13	31	10	10	0	0	0.3	5	10.7	N	20	8	8	14	6.0	56
MONTANA																																
BILLINGS	1087	892.0	1014.5	26.1	11.1	18.6	2.8	33.3	10+	3.9	30	6	0	6.7	51	62	32	56	7	4	0	0	0.7	27	13.9	NW	28	14	7	9	4.7	79
GLASGOW	696			24.4	8.9	16.7	3.0	32.8	7	1.7	30	3	0			10	- 14	10	3		0	0						11	6	13	5.5	
GREAT FALLS	1116	889.3	1014.6	25.6	10.0	17.9	3.8	33.9	23	0.0	30	6	1	3.9	45	5	- 25	2	6	2	0	0	1.3	20	19.2	SW	7	10	9	11	5.6	78
HAVRE	787			25.0	7.8	16.3	3.2	33.3	18+	- 0.6	30	4	1			4	- 21	4	2		0	0			14.3	NW	29	10	11	9	4.9	78
HELENA	1167	882.2	1015.8	26.1	8.3	17.1	3.7	32.8	18+	- 1.7	30	6	1	3.9	46	9	- 15	3	6	2	0	0	1.7	29	15.2	W	11	11	6	13	5.5	70
KALISPELL	904	912.0	1016.0	24.4	6.1	15.2	2.6	31.1	6	- 2.8	30	0	1	7.2	64	7	- 19	4	3	4	0	0	0.4	5	13.0	1	29	9	11	10	5.5	
MILES CITY	801	922.8	1014.5	26.1	11.1	18.7	2.6	36.7	8	2.2	30	7	0	6.1	50	13	- 11		4	2	0		0.5	9								
MISSOULA	972	905.5	1016.4	26.1	8.3	17.2	4.2	33.9	6	3.9	30	2	0	6.7	58	24	- 2	15	5	7	0	0	0.4	34	15.6	SE	11	11	9	10	5.2	69
NEBRASKA																																
GRAND ISLAND	561	950.9	1016.5	25.6	10.0	17.7	-0.7	33.3	24	1.7	15	1	0	10.6	70	11	- 44	5	5	4	0	0	0.3	16	10.3	34	30+	12	6	1	4.8	
LINCOLN U	351			23.3	12.2	17.7	-2.4	30.0	10	5.0	15	0	0			54	- 19	32	9		0	0			13.4	S	12	13	4	13	5.2	59
NORFOLK	471			22.2	10.6	16.5	-1.8	29.4	10+	3.3	15	0	0			53	- 4	18	11		0	0						12	8	10	5.0	
NORTH PLATTE	846	919.1	1016.0	25.0	8.3	16.7	-0.9	32.8	9	0.6	30	2	0	8.9	67	53	11	21	8	6	0	0	0.5	12	14.8	SE	26	12	9	9	4.8	72
OMAHA	298	981.4	1016.6	23.9	11.1	17.6	-1.8	30.6	10	4.4	30	0	0	12.2	73	55	- 12	23	7	3	0	0	0.2	11	14.8	NW	3	11	6	13	5.5	67
SCOTTSBLUFF	1206	881.1	1015.5	25.6	8.9	17.2	0.4	33.3	24+	- 0.6	30	4	1	9.9	66	40	10	18	9	6	0	0	1.0	6	14.3	34	29	14	11	5	4.2	
VALENTINE	789			22.8	9.4	16.1	-0.5	33.9	9	0.6	30	3	0			67	35	28	7		0	0			13.0	SW	7	14	5	11	4.8	63
NEVADA																																
ELKO	1539	845.6	1014.5	27.8	5.0	16.3	1.9	33.3	22	0.6	16	6	0	1.1	42	11	3	5	4	1	0	0	0.1	17	15.6	23	13+	18	6	6	3.5	
ELY	1906	810.7	1013.9	25.0	5.6	15.1	0.9	30.0	17	- 4.4	14	0	2	1.1	46	34	20	31	4	4	0	0	2.7	20	17.0	[illegible]	11	18	6	6	3.4	84
LAS VEGAS	659	935.7	1010.5	34.4	18.9	26.7	0.1	39.4	8+	10.0	15	24	0	3.9	28	9	0	5	2	2	0	0	1.5	22	21.0	NW	27	20	6	4	2.8	87
RENO	1342	866.2	1014.7	27.2	2.8	14.8	-0.1	32.2	23+	- 1.7	14	2	6	2.8	51	3	- 3	3	2	1	0	0	0.5	24	15.2	NW	13+	21	6	3	2.4	91
WINNEMUCCA	1310	867.9	1014.2	27.8	5.0	16.4	1.7	34.4	22	- 0.6	2	8	1	- 1.7	34	9	0	5	2	3	0	0	0.5	29	12.5	SW	18	19	7	4	3.3	79
NEW HAMPSHIRE																																
CONCORD	104	1001.7	1014.2	21.1	6.7	13.9	-1.3	31.1	2	- 1.1	26	0	2	10.6	82	137	42	57	5	1	0	0	0.7	30	13.4	W	23	8	12	10	5.7	6[illegible]
MT WASHINGTON OBS	1909			5.6	- 0.6	2.7	-2.3	15.0	1	- 8.3	27	0	15			141	- 30	44	16	1	99	76						3	7	20	7.9	3[illegible]
NEW JERSEY																																
ATLANTIC CITY	20	1011.9	1014.3	23.3	13.3	18.4	-1.1	32.2	5	6.7	27+	1	0	13.9	77	159	75	79	11	3	0	0	0.4	32	11.2	9	21	5	9	16	7.1	50
ATLANTIC CITY U	3			22.8	16.1	19.5	-0.7	31.7	2	10.6	16	0	0			110	24	29	12						17.4	ENE	[illegible]					
NEWARK	2	1013.2	1014.2	23.3	15.0	19.2	-0.9	32.8	2	7.8	16	1	0	12.8	68	200	104	120	10	1	0	0	0.9	29	11.2	28	24	5	11	14	7.0	
TRENTON U	17			22.8	14.4	18.6	-0.9	33.3	2	7.8	16	1	0			214	125	87	12		0	0			11.2	NW	24	5	9	16	7.1	49
NEW MEXICO																																
ALBUQUERQUE	1619	840.5	1014.5	27.8	12.8	20.2	-0.9	32.8	21	8.3	28	2	0	7.2	50	26	2	13	7	6	0	0	0.4	10	15.2	E	30	20	6	4	3.1	78
CLAYTON	1515			25.0	11.1	18.1	-0.8	31.7	24	6.7	30	0	0			70	28	27	7		0	0						18	5	7	3.9	
RATON	1944			25.6	7.8	16.5	-0.1	28.9	29+	3.9	30	0	0			14	- 28	12	4		0	0						14	10	6	4.3	
ROSWELL	1102			29.4	13.9	21.6	0.7	34.4	25	10.0	29	9	0			25	- 22	14	4	6	0	0			14.8	NW	5	11	12	7	5.1	65
SILVER CITY	1638			27.2	12.8	19.9	-1.2	31.1	21	9.4	30	0	0			27	- 10	13	8		0	0						14	10	6	4.2	
NEW YORK																																
ALBANY	84	1003.7	1014.5	21.1	7.8	14.4	-2.0	30.0	2	- 0.6	27	0	2	10.6	80	142	52	65	10	2	0	0	1.0	28	15.2	W	30	5	11	14	6.5	6[illegible]
BINGHAMTON	485	956.0	1014.6	18.3	8.9	13.8	-1.5	30.0	2	2.2	26	0	0	9.4	76	83	8	33	9	0	0	0	1.3	26	14.3	W	30	2	10	18	7.6	49
BUFFALO	215	988.8	1014.4	19.4	10.0	14.8	-1.5	26.7	2	3.9	26	0	0	10.6	77	67	- 12	21	13	5	0	0	1.5	26	13.4	W	30	5	7	18	7.1	57
NEW YORK U	40	1010.5	1013.6	23.3	15.0	19.2	-1.1	32.8	2	7.8	26	1	0	12.2	67	224	126	141	9	1	0	0	0.8	34	15.2	NE	21	7	12	11	6.0	53
J.F. KENNEDY	4	1013.2	1014.0	23.3	15.0	19.0	-0.9	32.8	2	8.3	16	1	0	12.8	70	190	84	114	7	1	0	0	0.6	32	11.6	29	23+	5	11	14	6.7	
NEW YORK LA GUARDIA	3	1012.2	1014.1	23.3	17.2	20.2	-0.3	32.8	2	10.6	27	1	0	11.7	62	129	29	77	7	2	0	0	0.9	34	17.9	NE	21	6	10	14	6.7	
ROCHESTER	167	994.9	1015.1	20.6	9.4	15.1	-1.8	31.1	2	2.2	26	0	0	9.4	74	63	- 2	34	10	2	0	0	1.5	26	15.2	SW	30	6	8	16	6.7	55
SYRACUSE	125	999.0	1013.8	20.6	10.0	15.3	-1.6	31.7	2	1.1	27	0	0	10.6	75	121	49	53	11	2	0	0	1.2	27	13.0	W	30	8	9	13	6.1	53
NORTH CAROLINA																																
ASHEVILLE	652	940.1	1015.3	23.3	11.1	17.2	-1.7	28.3	3+	4.4	25	0	0	13.9	88	116	24	67	10	1	0	0	1.1	35	10.3	36	4	7	8	15	6.5	50
CAPE HATTERAS R	2	1013.5	1013.8	27.8	18.9	23.2	-0.2	31.1	2	11.1	25	0	0	18.3	74	165	13	66	10	4	0	0	1.1	24	13.4	S	20	11	5	14	5.7	75
CHARLOTTE	224	986.8	1013.9	27.2	15.6	21.5	-1.2	34.4	4	11.1	25+	4	0	15.0	72	138	49	71	12	3	0	0	0.4	1	13.0	NW	21	10	11	9	5.2	67

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
											No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
	Elevation (ground)	Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	C.	C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	983.4	1014.5	27.2	15.0	21.0	-0.2	33.9	3	7.2	17	3	0	15.0	73	91	- 2	48	11	4	0	0	0.5	32	8.0	W	22	12	6	12	5.4	50
RALEIGH	132	998.3	1014.0	27.8	15.6	21.7	-0.1	33.3	3+	6.1	17	5	0	15.6	73	91	- 7	46	6	3	0	0	0.2	21	10.3	32	29	12	9	9	5.4	60
WILMINGTON	9	1012.9	1014.3	29.4	18.9	24.3	0.3	35.0	3	12.2	17	6	0	18.3	74	155	- 5	67	11	4	0	0	0.5	25	14.8	NW	4	14	8	8	5.0	69
NORTH DAKOTA																																
BISMARCK	502	957.0	1016.6	23.3	6.1	14.8	0.0	34.4	12	- 1.7	14	3	3	6.7	62	22	- 8	15	6	3	0	0	0.8	13	18.8	NW	28	10	7	13	5.8	69
FARGO	273	984.1	1016.7	22.2	6.7	14.6	-0.3	31.7	12	- 1.7	26+	0	3	7.2	64	14	- 24	6	6	2	0	0	0.4	29	15.6	N	22	11	9	10	5.0	75
WILLISTON	579			23.9	7.2	15.6	1.6	36.1	7	- 2.2	14	3	2			10	- 18	6	4		T	T			18.8	N	28	10	7	13	5.3	72
OHIO																																
AKRON	368	970.9	1015.2	22.2	10.6	16.4	-1.3	31.1	3	2.2	26	0	0	10.6	73	51	- 15	20	10	2	0	0	0.5	29	10.3	22	29	6	10	14	6.4	
CINCINNATI OBS	232			23.9	13.3	18.6	-1.9	32.8	2+	5.6	16	3	0			118	50	37	11		0	0			7.6	SW	29					48
CLEVELAND	237	986.1	1015.1	21.7	10.6	16.1	-1.4	31.1	3	3.9	26+	0	0	10.0	69	42	- 31	19	9	4	0	0	0.8	26	17.0	SW	29	7	11	12	6.3	75
COLUMBUS	247	985.8	1015.4	22.8	11.7	17.3	-1.5	32.8	3	5.0	24+	1	0	12.2	74	90	23	29	12	1	0	0	0.8	36	13.0	W	29	6	11	13	6.5	60
DAYTON	305	979.3	1015.3	23.3	12.8	17.9	-1.4	32.2	3	6.1	16	1	0	12.2	73	92	26	29	11	2	0	0	0.4	1	13.9	SW	29	7	12	11	6.3	58
MANSFIELD	395			21.1	10.0	15.4	-2.0	28.9	3	2.8	26+	0	0			50	- 26	27	6	2	0	0						8	11	11	6.0	
TOLEDO	206	990.5	1015.5	23.3	10.0	16.5	-0.9	31.7	2+	1.1	26	0	0	10.0	70	30	- 24	20	8	1	0	0	0.8	28	13.4	W	29	9	13	8	5.6	62
YOUNGSTOWN	359	972.9	1015.3	21.1	8.9	15.1	-1.9	30.6	3	1.7	26	0	0	10.0	76	40	- 33	19	11	4	0	0	0.4	27	9.8	3	15	5	12	13	6.6	
OKLAHOMA																																
OKLAHOMA CITY	390	969.2	1015.0	26.7	16.1	21.4	-1.8	32.8	25+	8.9	30	2	0	15.6	74	72	- 5	27	6	5	0	0	0.4	11	16.1	NW	3	13	5	12	5.2	59
TULSA	198	991.2	1015.1	27.8	15.0	21.3	-1.9	32.8	26+	7.2	30	6	0	15.0	73	68	- 34	50	7	5	0	0	0.4	3	13.4	N	30	9	8	13	5.5	45
OREGON																																
ASTORIA	2	1016.3	1017.0	20.6	10.0	15.1	0.7	28.3	21	5.0	13	0	0	11.1	81	55	- 24	14	12	1	0	0	0.7	26	8.9	31	4+	9	7	14	6.0	
BURNS U	1265	874.0	1015.7	24.4	6.7	15.8	0.9	32.8	5	- 1.7	12	2	1	3.9	51	20	8	17	3		0	0	1.4	31				16	7	7	4.0	
EUGENE	109	1002.7	1016.3	25.0	11.1	18.1	1.7	34.4	4	6.7	1	2	0	11.1	71	37	4	14	9	1	0	0	0.7	30	10.3	23	17	9	7	14	5.6	
MEACHAM	1234	878.1	1015.8	20.0	8.3	14.2	1.0	31.1	22+	3.9	12	0	0	5.0	61	24	- 13	16	5		0	0	0.7	29				14	8	8	4.8	
MEDFORD	396	968.5	1015.7	27.8	9.4	18.4	0.6	37.8	4	4.4	12	5	0	8.9	61	48	33	37	5	1	0	0	1.0	29	10.7	29	22	16	5	9	4.0	
PENDLETON	452	962.4	1015.6	26.7	11.7	19.2	1.3	36.1	5	6.1	13	4	0	6.7	49	11	- 5	8	3	2	0	0	0.8	24	13.4	25	22	18	5	7	4.1	
PORTLAND	6	1014.9	1016.3	23.9	11.7	18.0	1.2	32.8	4	7.8	13	1	0	12.8	76	43	2	13	9	2	0	0	0.8	31	15.2	S	22	7	9	14	5.9	54
SALEM	60	1008.8	1016.3	25.6	9.4	17.3	0.4	33.3	4	5.6	13	1	0	12.2	77	42	7	19	10	1	0	0	0.6	30	8.9	35	30	10	8	12	5.5	
SEXTON SUMMIT R	1169	884.9	1015.0	21.7	9.4	15.5	0.1	31.7	4	2.8	12+	0	0			46	14	41	7		0	0						16	5	9	3.9	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.7	0.0	32.8	28	24.4	27+	2	0			9	- 22	4	6		0	0						13	12	5	4.4	
ENIWETOK	4	1008.8	1009.6	31.7	25.6	28.7	0.2	34.4	21	23.3	13+	13	0	24.4	79	239	80	45	19		0	0	1.3	10								
TAGUAC GUAM R	110			29.4	22.8	26.1	-0.2	30.6	28+	20.6	28	0	0			566	227	149	24		0	0			11.2	SE	16					39
KOROR R	29	1006.4	1010.0	31.1	25.0	28.1	0.9	32.2	30+	22.8	5+	5	0	24.4	81	12	- 47	3	8	1	0	0	5.7	9	12.1	SE	11+	5	10	15	7.1	70
KWAJALEIN	2	1009.5	1010.1	31.1	25.6	28.4	0.7	33.3	4	23.3	9	4	0	24.4	79	183	-181	57	14	1	0	0	1.9	21	11.6	NW	5+	0	0	30	10.0	62
JOHNSTON	2	1012.2	1012.9	30.0	26.1	27.8	0.2	30.6	24+	24.4	18+	0	0	22.8	75	319	60	93	24	1	0	0	0.7	11	11.2	18	18+	0	7	23	8.5	
MAJURO	3	1009.8	1010.3	30.0	25.0	27.7	0.8	31.7	14+	23.3	5+	0	0	23.9	80	354	48	73	22	3	0	0	0.5	8	8.9	N	4+	2	5	23	8.5	59
MARCUS ISLAND	6	1009.1	1011.0	31.7	25.6	28.3	-0.1	32.8	1	23.3	2	6	0	24.4	80	156	58	32	20	1	0	0	2.5	12	12.1	S	14	4	10	16	7.0	69
PAGO PAGO	4	1012.9	1012.9	29.4	23.3	26.4		31.1	30+	19.4	21	0	0	22.8	82	215		92	14	0	0	0	4.9	12	14.3	E	14	4	16	10	6.3	57
PONAPE R	37	1004.4	1009.9	31.7	22.2	26.9	0.6	33.3	21+	20.6	8	13	0	23.3	85	271	-131	77	18	2	0	0	1.1	18	8.5	NE	13	3	7	20	7.9	83
TRUK MOEN ISLAND	2	1009.5	1009.9	30.6	23.9	27.3	0.4	32.8	27	22.8	6+	4	0	23.9	84	317	- 2	75	21	0	0	0	1.2	28	15.6	NE	14	0	12	18	8.3	81
WAKE	3	1011.5	1011.7	30.6	25.6	28.1	0.0	31.7	14+	23.3	8	0	0	23.3	76	131	- 2	31	17	2	0	0	3.5	8	15.6	13	10	6	7	17	7.4	
YAP R	19	1007.5	1009.4	31.1	23.9	27.5	0.1	32.8	14	21.7	17	10	0	24.4	84	244	-112	47	21	3	0	0	2.0	22	8.9	S	3+	0	0	30	10.0	56
PENNSYLVANIA																																
ALLENTOWN	118	1000.7	1014.6	21.7	11.7	16.9	-1.3	33.9	2	4.4	16	1	0	12.2	77	158	63	51	12	1	0	0	0.9	30	11.2	26	24+	5	12	13	6.6	
ERIE	223	988.2	1014.9	20.6	11.7	16.2	-1.2	28.3	2	3.9	16	0	0	11.1	75	82	- 8	20	11	4	0	0	1.3	26	11.6	29	22	6	11	13	6.3	
HARRISBURG	103	1001.7	1014.5	24.4	14.4	19.3	-0.1	36.1	3+	7.2	26	3	0	12.2	67	155	84	107	13	1	0	0	1.1	31	11.6	E	21+	5	9	16	6.9	51
PHILADELPHIA	2	1013.2	1014.2	23.9	13.3	18.4	-0.8	32.8	3+	5.0	27	2	0	12.8	74	221	133	119	11	2	0	0	1.1	34	13.0	NE	21+	3	10	17	7.3	55
PITTSBURGH	347	971.6	1015.2	21.7	10.6	16.3	-1.6	30.6	3+	3.3	16	0	0	11.7	77	49	- 16	19	11	4	0	0	0.9	30	11.2	32	22	5	9	16	6.9	53
READING U	81			22.8	13.9	18.3	-1.4	33.9	2	7.2	26+	2	0			136	52	72	14		0	0			24.6	E	21	7	11	12	6.4	49
SCRANTON	283	981.0	1015.2	20.6	11.1	15.7	-1.3	32.2	2	3.9	26	1	0	11.7	80	69	- 7	20	13	1	0	0	0.5	22	13.4	NE	21	1	13	16	7.6	48
WILLIAMSPORT	160	995.9	1015.0	20.6	9.4	15.2	-2.6	32.8	2	3.3	16	1	0	11.7	85	133	50	34	11	6	0	0	1.2	27	8.9	24	23+	5	7	18	7.3	
RHODE ISLAND																																
BLOCK ISLAND	34			20.0	13.9	16.9	-0.9	28.3	2	8.9	16	0	0			120	39	54	11		0	0						11	6	13	5.8	
PROVIDENCE	16	1011.5	1013.9	21.7	11.1	16.3	-1.1	30.6	2	2.8	27	0	0	10.0	70	133	43	51	9	2	0	0	0.8	29	13.0	25	23	11	4	15	6.1	59

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1012.5	1014.0	29.4	19.4	24.3	0.1	33.9	4	12.2	10	5	0	18.9	76	56	- 92	34	9	4	0	0	0.7	22	17.4Y	SW	4	12	7	11	5.3	67
CHARLESTON U	3			28.9	21.7	25.1	0.1	33.9	4	17.2	23	4	0			51	-109	21	6		0	0			14.8	E	12					
COLUMBIA	66	1005.8	1015.5	30.0	16.7	23.2	-0.8	36.7	4	11.1	10	7	0	16.7	72	51	- 58	22	7	1	0	0	0.4	24	11.2	26	4	11	9	10	5.2	68
GNVLE SPARTANBURG	292	980.7	1014.7	26.1	16.1	21.1	-1.6	31.7	4	9.4	25	0	0	15.6	76	203	104	107	9	3	0	0	0.5	36	12.5	NW	4	12	8	10	5.0	65
SOUTH DAKOTA																																
ABERDEEN	395	967.9	1016.5	22.8	7.2	15.0	-0.9	30.6	12+	- 0.6	15	0	2	7.8	65	32	- 4	15	7	3	0	0	0.6	10	15.6	36	28	11	8	11	5.1	
HURON	391	969.9	1016.3	21.7	8.3	14.9	-1.7	29.4	9	1.7	15	0	0	10.0	77	68	29	31	7	3	0	0	1.1	13	13.9	S	7	14	4	12	5.1	74
RAPID CITY	964	905.5	1015.6	23.9	8.9	16.3	-0.2	33.3	11+	- 0.6	30	4	1	7.2	62	72	48	54	8	2	T	T	0.3	36	16.5	NE	29	13	9	8	4.4	72
SIOUX FALLS	432	965.5	1016.8	21.7	9.4	15.5	-1.1	29.4	9	1.7	30	0	0	13.0	73	161	95	102	10	5	0	0	0.3	10	11.2	7	24+	11	4	15	5.5	
TENNESSEE																																
BRISTOL	459	961.7	1015.2	24.4	13.9	19.1	-1.5	30.0	3	7.2	25	0	0	15.0	82	120	54	34	13	4	0	0	0.2	28	8.9	27	20	6	9	15	6.7	
CHATTANOOGA	203	990.2	1014.5	26.1	15.0	20.8	-2.4	32.2	2	9.4	25+	1	0	16.7	82	163	84	71	11	2	0	0	0.2	35	8.0	W	30	8	10	12	5.9	54
KNOXVILLE	299	979.7	1014.4	25.6	15.6	20.5	-1.8	31.1	3+	10.0	25	0	0	16.1	82	112	47	36	10	3	0	0	0.4	31	8.0	SW	30+	7	10	13	6.2	57
MEMPHIS	79	1004.7	1014.7	27.2	16.1	21.6	-1.7	32.8	3	10.6	30+	2	0	16.7	76	82	10	36	10	3	0	0	0.5	34	13.9	NW	30	8	11	11	5.9	61
NASHVILLE	180	992.6	1014.1	26.1	15.6	20.8	-1.8	32.2	2	8.9	24	1	0	16.1	78	98	25	29	10	4	0	0	0.8	8	14.3	NW	30	10	4	16	6.2	54
OAK RIDGE	276			25.6	15.0	20.3	-1.4	31.7	4+	8.3	24	0	0			107	23	45	12		0	0			13.0Y		15	8	8	14	6.4	
TEXAS																																
ABILENE	537	953.9	1014.2	28.9	18.9	24.0	-0.4	34.4	14	12.2	30	9	0	17.2	70	104	51	44	9	6	0	0	0.8	14	18.3	NW	17	8	9	13	6.0	55
AMARILLO	1096	892.7	1015.8	26.7	13.9	20.3	-1.8	32.2	24	8.3	30	1	0	13.3	70	61	15	43	5	4	0	0	2.2	16	18.8	NE	30	15	8	7	4.3	67
AUSTIN	182	992.2	1013.5	31.1	20.0	25.7	-0.5	35.0	6+	15.6	22	16	0	18.9	70	82	- 6	36	10	7	0	0	0.5	8	16.1	NE	27	11	11	8	4.9	61
BROWNSVILLE	5	1012.2	1012.7	32.8	22.2	27.5	0.0	35.6	5	17.2	24+	18	0	21.7	74	13	-114	7	7	3	0	0	2.4	12	11.6	E	17	17	10	3	3.5	66
CORPUS CHRISTI	12	1011.9	1013.5	32.2	22.2	27.1	-0.1	35.6	5	17.2	23+	16	0	21.7	77	72	- 40	25	10	4	0	0	1.8	12	14.3	N	30	12	11	7	4.6	74
DALLAS	147	997.[illegible]	1014.1	28.3	19.9	24.1	-1.4	33.9	2	13.9	24	8	0	18.3	75	69	- 5	23	7	3	0	0	0.9	8	12.5	N	30	12	7	11	5.2	57
DEL RIO	313	977.4	1012.9	32.8	20.6	26.5	-0.1	36.7	30	15.6	18	17	0	18.9	68	37	- 29	16	7	5	0	0	2.2	12	10.7	32	30	12	8	10	4.9	
EL PASO	1194	882.3	1012.5	29.4	16.1	23.0	-0.6	32.8	25+	11.1	30	6	0	13.3	57	45	17	30	8	7	0	0	0.3	7	13.4	W	29	15	8	7	3.9	79
FORT WORTH	164	993.9	1014.2	29.4	18.9	24.5	-1.4	34.4	4+	12.8	24	10	0	18.3	74	107	43	28	9	4	0	0	0.8	4	13.0	36	31	11	9	10	5.1	
GALVESTON U	2			28.9	23.3	26.2	-0.5	31.1	7	20.6	30+	0	0			203	74	149	8		0	0			11.2	N	30+					67
HOUSTON U	12			31.7	21.7	26.5	-0.1	34.4	15+	17.2	30	16	0			50	- 47	27	5		0	0										
HOUSTON	15	1011.[illegible]	1013.8	31.7	21.1	26.4	0.2	34.4	4	16.1	22	16	0	20.0	72	102	- 6	59	5	10	0	0	0.5	2	13.0	15	7	13	8	9	4.9	72
LUBBOCK	992	904.5	1014.1	27.8	16.1	22.0	0.1	33.9	29	10.6	28	5	0	15.0	69	55	- 5	32	6	5	0	0	0.9	13	15.6	4	2	8	12	10	5.8	
MIDLAND	869	916.4	1013.1	28.3	16.7	22.7	-1.4	33.3	25+	8.3	30	7	0	16.7	74	84	38	33	6	6	0	0	1.5	10	16.5	1	1	10	10	10	5.3	
PORT ARTHUR	5	1013.2	1013.9	31.7	20.6	26.1	0.4	33.9	30+	15.0	22	12	0	21.1	80	81	- 43	26	10	5	0	0	0.4	1	13.9	NE	7	11	12	7	5.0	63
SAN ANGELO	580	947.9	1013.5	28.9	18.3	23.4	-2.3	33.9	14+	12.2	24	5	0	18.9	81	61	- 6	24	11	7	0	0	0.7	13	13.4	26	3	8	12	10	5.6	
SAN ANTONIO	240	986.5	1013.9	31.1	19.4	25.3	-0.6	33.9	4	12.8	21	12	0	20.0	76	54	- 35	24	11	11	0	0	0.7	10	13.4	NE	27	10	11	9	5.1	69
VICTORIA	32	1009.8	1013.8	31.7	21.7	26.7	0.5	33.9	27+	16.1	22	17	0	21.1	76	61	- 47	24	9	9	0	0	0.9	8	20.6Y	NNE	27	12	8	10	5.0	
WACO	155	996.6	1014.2	31.1	20.6	25.8	-0.3	36.7	5	14.4	24	11	0	17.2	63	120	50	42	6	4	0	0	0.3	5	13.0	30	27	13	7	10	4.9	
WICHITA FALLS	314	978.7	1014.7	28.3	16.7	22.7	-2.6	35.0	2	10.0	30	9	0	17.2	77	189	130	53	10	6	0	0	0.9	1	16.1	36	30	10	5	12	5.7	
UTAH																																
MILFORD	1533			28.9	7.2	17.8	0.5	33.9	22	0.0	15	5	1			6	- 5	4	3		0	0						17	7	6	3.5	
SALT LAKE CITY	1286	872.[illegible]	1014.2	27.8	11.7	19.7	1.7	33.9	9+	6.1	30	6	0	5.6	46	21	8	18	6	4	0	0	1.8	14	17.9	S	10	13	9	8	4.5	83
WENDOVER	1291			27.2	13.3	20.3	1.0	32.8	8+	6.1	15	3	0			9	1	4	4		0	0										
VERMONT																																
BURLINGTON	101	[illegible]	1013.5	18.9	7.[illegible]	13.[illegible]	-1.5	27.2	2	0.6	27+	0	0	9.4	78	85	1	33	10	[illegible]	0	0	0.9	21	10.7	NW	24	7	8	15	6.5	60
VIRGINIA																																
LYNCHBURG	279			25.0	13.3	19.[illegible]	-1.1	33.3	3	5.6	17	2	0			158	73	75	9	2	0	0			8.9	E	19+	10	8	12	5.7	59
NORFOLK	7	1012.9	1013.9	25.6	16.7	21.1	-1.5	33.3	4	9.4	17	1	0	16.7	77	86	- 21	31	10	2	0	0	0.4	36	13.0	E	14	7	10	13	6.2	60
RICHMOND	49	[illegible]	1014.3	25.6	13.3	19.6	-1.7	33.3	3	4.4	17	2	0	13.9	77	129	36	48	11	1	0	0	0.6	36	8.9	N	15	7	10	13	6.3	55
ROANOKE	[illegible]	973.2	1014.7	24.4	13.3	18.9	-1.7	31.1	3+	6.1	17	0	0	12.2	69	184	101	68	11	1	0	0	1.2	31	8.9	27	22+	9	9	12	6.1	
WASHINGTON																																
OLYMPIA	59	1010.2	1017.3	22.2	8.3	15.2	0.5	30.0	4	2.8	12	0	0	10.0	75	50	- 4	20	9	2	0	0	0.2	23	10.7	25	22	7	8	15	6.5	
QUILLAYUTE	55	[illegible]	1017.1	19.4	9.4	14.3	0.3	28.9	21	5.0	7	0	0	11.1	85	89	- 30	51	13	1	0	0	0.4	18	8.9	S	8	7	6	17	6.9	43
SEATTLE TACOMA	122	[illegible]	1017.2	20.6	12.2	16.4	0.9	27.8	4	7.8	12	0	0	11.7	78	45	- 7	24	9	1	0	0	0.4	[illegible]	12.5	25	22	8	9	13	6.4	50
SPOKANE	718	[illegible]	1014.7	25.6	10.6	18.1	2.1	33.9	22+	4.4	30	2	0	5.6	49	13	- 6	13	2	2	0	0	0.8	20	12.1	SW	5	11	9	10	5.0	73
STAMPEDE PASS	1206			17.2	7.8	12.4	1.4	27.2	4	3.3	19+	0	0			35	- 76	9	10		0	0						7	7	16	6.7	
WALLA WALLA U	289			26.7	14.4	20.4	1.6	36.1	5	8.3	30	3	0			4	- 16	4	3		0	0			7.6	SE	14	13	5	12	4.9	76
YAKIMA	321	[illegible]	1014.9	27.5	10.6	19.2	2.9	35.0	5	6.7	19	3	0	8.9	55	22	13	8	8	5	0	0	1.5	27	9.4	26	22	12	9	9	4.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max 32.2 °C or above	Temperature: No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: 25 mm. or more	Precipitation: No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days: Partly cloudy, 4-7	No. of days: Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WEST INDIES																																
SAN JUAN P.R.	4	1013.2	1015.7	30.6	24.4	27.3	0.3	31.7	30+	22.2	11	0	0	23.3	82	165	11	50	2	9	0	0	2.6	9	15.2	E	28	5	20	5	5.9	74
SWAN ISLAND	9			30.6	25.6	27.9	- [illegible]	32.2	9	23.3	22+	1	0			83	- 4	23	17		0	0						3	15	12	6.6	
WEST VIRGINIA																																
BECKLEY	763	927.7	1015.2	20.0	10.6	15.4		27.2	3	2.8	16	0	0	11.7	81	205		73	13	2	0	0	0.9	20	11.2	27	22	7	4	19	7.1	
CHARLESTON	290	980.7	1014.6	25.0	13.3	19.2	-0.9	32.8	3	5.6	17	3	0	13.3	74	95	22	27	10	0	0	0	0.4	25	9.4	22	29	4	7	19	7.4	
ELKINS	600	945.1	1016.2	20.6	8.9	14.7	-2.2	28.3	3+	1.7	17	0	0	11.1	85	131	55	42	13	1	0	0	0.8	29	11.2	29	22	2	9	19	7.9	
HUNTINGTON	252	985.1	1014.9	23.3	13.3	18.4	-1.7	30.6	3+	5.6	16	0	0	13.9	80	143	79	35	13	3	0	0	0.3	23	7.6	26	23	5	10	15	6.9	
PARKERSBURG U	187			23.3	12.2	17.8	-2.2	31.7	3	3.9	16	0	0			71	4	21	0		0	0			8.9	[illegible]	29					47
WISCONSIN																																
GREEN BAY	208	990.2	1015.7	21.1	6.7	13.6	-2.2	30.6	1	- 2.2	26	0	2	7.2	67	51	- 43	18	4	0	0	0	1.8	29	13.9	NW	29	11	8	11	5.0	60
LA CROSSE	198	991.5	1016.1	23.3	9.4	16.3	-0.4	33.9	1	0.6	26	1	0	10.6	74	24	- 64	9	0	1	0	0	0.3	30	12.5	30	29	12	8	10	5.2	
MADISON	262	985.1	1015.5	21.7	6.1	13.9	-2.2	28.9	1	- 2.8	26	0	2	8.9	75	13	- 71	6	0	1	0	0	1.2	32	12.1	NW	29	12	8	10	4.8	73
MILWAUKEE	205	991.5	1016.8	20.6	9.4	15.1	- .7	29.4	2+	1.7	30	0	0	9.4	71	12	- 57	6	0	0	0	0	1.1	33	13.4	W	29	12	8	10	4.9	69
WYOMING																																
CASPER	1627	839.8	1015.1	25.6	7.8	16.8	1.4	31.1	8	0.6	30	0	0	2.8	46	10	- 13	4	0	3	T	0	1.9	26	14.3	34	24	15	6	9	4.6	
CHEYENNE	1867	815.8	1015.4	22.8	8.3	15.5	0.7	29.4	20+	0.6	30	0	0	4.4	55	54	26	30	3	5	T	0	2.1	31	20.1	NE	29	11	12	7	5.0	67
LANDER	1696	831.4	1015.2	23.9	8.9	16.3	1.3	30.6	8	1.7	16	0	0	3.9	49	15	- 6	8	0	2	T	0	1.0	25	25.0	W	24	11	10	9	5.[illegible]	64
SHERIDAN	1208	879.8	1015.3	25.0	7.8	16.4	1.6	33.9	8	- 1.1	30	1	1	4.4	49	25	- 5	10	0	0	0	0	1.0	30	15.6	NW	29	12	8	10	5.1	75

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

SEPTEMBER 1966

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	3	3	6
HUNTSVILLE	1	1	12
MOBILE	0	0	0
MONTGOMERY	0	0	0
ALASKA			
ANCHORAGE	553	1091	
ANNETTE	307	695	777
BARROW	1012	2790	2678
BARTER ISLAND	925	2529	2497
BETHEL	569	1342	1325
COLD BAY	607	1593	1424
FAIRBANKS	441	780	1145
JUNEAU	466	1113	1122
KING SALMON	533	1364	1148
KOTZEBUE	640	1398	1550
MC GRATH	577	1274	1179
NOME	670	1618	1670
ST. PAUL ISLAND	619	1777	1756
SHEMYA	511	1652	1553
YAKUTAT	537	1395	1159
ARIZONA			
FLAGSTAFF	185	231	315
PHOENIX	0	0	0
TUCSON	0	0	0
WINSLOW	4	4	6
YUMA	0	0	0
ARKANSAS			
FORT SMITH	8	8	12
LITTLE ROCK	3	3	9
TEXARKANA	0	0	0
CALIFORNIA			
BAKERSFIELD	1	1	0
BISHOP	34	34	42
BLUE CANYON	125	258	204
EUREKA U	209	738	785
FRESNO	1	1	0
LONG BEACH	0	0	12
LOS ANGELES	0	0	71
LOS ANGELES U	0	0	6
MT SHASTA R	129	242	182
OAKLAND	12	101	148
RED BLUFF	0	0	0
SACRAMENTO	4	5	12
SANDBERG U	64	86	30
SAN DIEGO	0	0	21
SAN FRANCISCO	57	281	219
SAN FRANCISCO U	78	471	468
SANTA CATALINA	29	44	25
SANTA MARIA	67	224	288
STOCKTON	5	5	6
COLORADO			
ALAMOSA	286	380	443
COLORADO SPRINGS	111	144	166
DENVER	61	70	132
GRAND JUNCTION	16	18	30
PUEBLO	33	37	54
CONNECTICUT			
BRIDGEPORT	55	55	66
HARTFORD	98	98	105
NEW HAVEN	100	100	99
DELAWARE			
WILMINGTON	84	84	51
DIST.OF COLUMBIA			
WASH NATL AP	41	41	33
FLORIDA			
APALACHICOLA U	0	0	0
DAYTONA BEACH	0	0	0
FORT MYERS	0	0	0
JACKSONVILLE	0	0	0
KEY WEST	0	0	0
LAKELAND U	0	0	0
MIAMI	0	0	0
ORLANDO	0	0	0
PENSACOLA	0	0	0
TALLAHASSEE	0	0	0
TAMPA	0	0	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	4	4	12
ATLANTA	5	5	18
AUGUSTA	0	0	0
COLUMBUS	0	0	0
MACON	0	0	0
ROME	8	8	24
SAVANNAH	0	0	0
IDAHO			
BOISE	68	93	132
IDAHO FALLS 42NW R	159	221	338
IDAHO FALLS 46W R	179	241	320
LEWISTON	19	49	123
POCATELLO	133	161	172
ILLINOIS			
CAIRO U	30	30	36
CHICAGO O HARE	127	140	129
CHICAGO MIDWAY	83	87	81
MOLINE	116	122	108
PEORIA	106	116	93
ROCKFORD	122	129	129
SPRINGFIELD	100	105	72
INDIANA			
EVANSVILLE	57	57	66
FORT WAYNE	188	209	114
INDIANAPOLIS	77	77	90
SOUTH BEND	128	163	117
IOWA			
BURLINGTON	111	117	93
DES MOINES	136	149	108
DUBUQUE	163	187	199
SIOUX CITY	131	145	117
WATERLOO	152	185	169
KANSAS			
CONCORDIA	76	82	57
DODGE CITY	54	59	33
GOODLAND	66	77	87
TOPEKA	64	66	57
WICHITA	33	33	33
KENTUCKY			
COVINGTON	70	70	75
LEXINGTON	62	65	54
LOUISVILLE	35	35	54
LOUISIANA			
ALEXANDRIA	0	0	0
BATON ROUGE	0	0	0
LAKE CHARLES	0	0	0
NEW ORLEANS	0	0	0
SHREVEPORT	0	0	0
MAINE			
CARIBOU	393	563	529
PORTLAND	264	312	260
MARYLAND			
BALTIMORE	68	68	48
MASSACHUSETTS			
BLUE HILL OBS R	157	165	130
BOSTON	88	89	69
NANTUCKET	179	194	127
PITTSFIELD	277	336	303
WORCESTER	218	241	187
MICHIGAN			
ALPENA	281	368	446
DETROIT	112	112	87
DETROIT M WAYNE CO	136	149	96
DETROIT WILLOW RUN	183	214	90
FLINT	241	295	165
GRAND RAPIDS	146	158	170
HOUGHTON LAKE	280	364	
LANSING	196	225	166
MARQUETTE U	225	333	380
MUSKEGON	155	170	160
SAULT STE MARIE	288	420	480
MINNESOTA			
DULUTH	304	485	510
INTERNATIONAL FALLS	334	455	546
MINNEAPOLIS	185	225	242
ROCHESTER	210	271	245
ST CLOUD	221	290	300
MISSISSIPPI			
JACKSON	0	0	0
MERIDIAN	0	0	0
VICKSBURG U	0	0	0
MISSOURI			
COLUMBIA	64	65	54
KANSAS CITY	29	31	39
ST JOSEPH	60	72	66
ST LOUIS	78	78	60
SPRINGFIELD	66	68	45
MONTANA			
BILLINGS	83	137	207
GLASGOW	136	219	348
GREAT FALLS	101	193	339
HAVRE	140	215	387
HELENA	117	176	384
KALISPELL	162	358	470
MILES CITY	87	151	186
MISSOULA	94	163	411
NEBRASKA			
GRAND ISLAND	108	128	114
LINCOLN U	106	114	81
NORFOLK	149	171	120
NORTH PLATTE	136	170	129
OMAHA	107	120	96
SCOTTSBLUFF	106	137	138
VALENTINE	179	230	186
NEVADA			
ELKO	126	161	268
ELY	177	221	305
LAS VEGAS	0	0	0
RENO	184	274	334
WINNEMUCCA	119	162	244
NEW HAMPSHIRE			
CONCORD	244	255	233
MT WASHINGTON OBS	837	1891	1749
NEW JERSEY			
ATLANTIC CITY	85	85	39
ATLANTIC CITY U	47	47	29
NEWARK	63	63	30
TRENTON U	79	79	57
NEW MEXICO			
ALBUQUERQUE	15	15	12
CLAYTON	57	79	72
RATON	99	124	163
ROSWELL	5	10	18
SILVER CITY	8	8	6
NEW YORK			
ALBANY	216	224	157
BINGHAMTON	252	276	288
BUFFALO	199	225	197
NEW YORK U	63	63	30
J.F. KENNEDY	60	60	36
NEW YORK LA GUARDIA	39	39	27
ROCHESTER	190	206	166
SYRACUSE	186	199	166
NORTH CAROLINA			
ASHEVILLE	87	89	75
CAPE HATTERAS R	0	0	0
CHARLOTTE	2	2	6
GREENSBORO	14	14	33
RALEIGH	11	11	21
WILMINGTON	0	0	0
NORTH DAKOTA			
BISMARCK	228	325	284
FARGO	230	314	284
WILLISTON	190	284	335
OHIO			
AKRON	148	161	105
CINCINNATI OBS	74	75	54
CLEVELAND	162	183	139
COLUMBUS	106	112	90
DAYTON	88	91	84
MANSFIELD	189	216	145
TOLEDO	147	163	133
YOUNGSTOWN	211	235	145
OKLAHOMA			
OKLAHOMA CITY	6	6	15
TULSA	13	13	18
OREGON			
ASTORIA	169	471	486
BURNS U	162	269	259
EUGENE	53	109	197
MEACHAM	241	553	496
MEDFORD	53	90	78
PENDLETON	48	77	111
PORTLAND	56	99	167
SALEM	74	142	179
SEXTON SUMMIT R	194	490	333
PENNSYLVANIA			
ALLENTOWN	136	136	90
ERIE	151	166	127
HARRISBURG	69	69	63
PHILADELPHIA	83	83	60
PITTSBURGH	156	164	114
PITTSBURGH U	125	127	80
READING U	91	91	54
SCRANTON	170	171	151
WILLIAMSPORT	196	205	120
RHODE ISLAND			
BLOCK ISLAND	101	101	94
PROVIDENCE	135	137	112
SOUTH CAROLINA			
CHARLESTON	0	0	0
CHARLESTON U	0	0	0
COLUMBIA	0	0	0
GNVLE-SPARTANBURG	6	6	9
SOUTH DAKOTA			
ABERDEEN	212	272	239
HURON	208	270	186
RAPID CITY	158	241	199
SIOUX FALLS	188	229	212
TENNESSEE			
BRISTOL	23	23	51
CHATTANOOGA	7	7	18
KNOXVILLE	9	9	30
MEMPHIS	9	9	18
NASHVILLE	13	13	30
OAK RIDGE	15	15	39
TEXAS			
ABILENE	0	0	0
AMARILLO	22	45	18
AUSTIN	0	0	0
BROWNSVILLE	0	0	0
CORPUS CHRISTI	0	0	0
DALLAS	0	0	0
DEL RIO	0	0	0
EL PASO	2	2	0
FORT WORTH	0	0	0
GALVESTON U	0	0	0
HOUSTON U	0	0	0
HOUSTON	0	0	0
LUBBOCK	3	11	18
MIDLAND	4	7	0
PORT ARTHUR	0	0	0
SAN ANGELO	0	0	0
SAN ANTONIO	0	0	0
VICTORIA	0	0	0
WACO	0	0	0
WICHITA FALLS	0	2	0
UTAH			
MILFORD	75	82	99
SALT LAKE CITY	57	61	81
WENDOVER	37	37	48
VERMONT			
BURLINGTON	280	323	300
VIRGINIA			
LYNCHBURG	46	46	51
NORFOLK	22	22	0
RICHMOND	47	47	36
ROANOKE	51	51	51
WASHINGTON			
OLYMPIA	161	389	337
QUILLAYUTE	208	619	
SEATTLE TACOMA	106	255	280
SPOKANE	67	139	202
STAMPEDE PASS R	320	960	957
WALLA WALLA U	22	44	87
YAKIMA	28	69	156
WEST VIRGINIA			
BECKLEY	172	204	
CHARLESTON	44	45	63
ELKINS	207	251	169
HUNTINGTON	60	63	63
PARKERSBURG U	86	86	60
WISCONSIN			
GREEN BAY	253	337	252
LA CROSSE	158	177	184
MADISON	252	303	239
MILWAUKEE	198	243	264
WYOMING			
CASPER	122	169	214
CHEYENNE	166	217	260
LANDER	142	191	229
SHERIDAN	138	224	275

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

SEPTEMBER 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama *																													
Alaska										0	0	2	0																
Arizona	1	1	0	0	3					0	0	4	0	4	10	0	0									0	0	5	3
Arkansas *																													
California										0	0	4	3													0	0	3	4
Colorado						0	0	2	4	0	0	2	4													0	0	4	4
Connecticut *																													
Delaware										0	0	3	0													0	0	3	0
Florida	7	7	0	0	5	0	0	3						1	3	3													
Georgia *																													
Hawaii *																													
Idaho *																													
Illinois *																													
Indiana *																													
Iowa *																													
Kansas	2	1	0	0	0	0	0	4	6					0	0	4	0									0	0	3	5
Kentucky *																													
Louisiana	1	1	0	0	1									1	0	0	0												
Maine *																													
Maryland																										1	0	6	0
Massachusetts														0	0	3	0									0	0	R4	0
Michigan														0	0	4	0												
Minnesota *																													
Mississippi						0	0	0	4	0	0	3	0	0	0	4	0									0	0	4	0
Missouri						0	0	4	0	0	0	4	0	0	0	4	0												
Montana *																													
Nebraska						0	0	0	5																				
Nevada *																													
New Hampshire *																													
New Jersey																												3	
New Mexico	1	1	0	0	2	0	0	0	?																	0	0	5	0
New York												3																5	
North Carolina						0	0	0	4	0	0	4	0	0	0	4	0									0	0	4	0
North Dakota *																													
Ohio	1	1	0	22	6	0	0	0	5																				
Oklahoma	2	1	0	0	?					0	1	4	0	0	0	4	0												
Oregon *																													
Pacific Area *																													
Pennsylvania										0	3	4	0	1	0	0	0												
Puerto Rico										0	0	°4	C													0	0	4	0
Rhode Island *																													
South Carolina	4	1	0	0	3					0	0	2	0	1	0	2	0												
South Dakota						0	0	3	5	0	0	4	0													0	0	5	0
Tennessee						0	0	0	?	0	0	°4	C		1											0	0	°4	C
Texas	3	3	0	2	2	0	0	0	4	0	0	4	0	3	1	0	0												
Utah *																													
Vermont *																													
U. S. Virgin Is.										0	0	°4	C																
Virginia																										0	0	4	0
Washington																										0	0	T5	4
West Virginia *																													
Wisconsin *																													
Wyoming *																													

°	Includes crop damage
C	Crop damage
R	Rain
T	Thunderstorms and heavy rain

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

SEPTEMBER 1966

Elmer R. Nelson, Office of Hydrology

The most significant flooding was in the Rio Grande Basin with heavy damages to crops and some damages to levees, dams, and highways. Total damages were estimated at over $500,000.

Severe flash flooding was reported on some small streams in New Jersey. Flooding reported elsewhere in the Country was mostly minor.

ATLANTIC SLOPE DRAINAGE

Minor flooding occurred on Assunpink Creek at Trenton, N. J., on the 21st and 22d. This overflow was due to heavy rainfall over central and northern New Jersey on the 20th and 21st. Over 7 inches of rain was recorded in some areas. Even though record drought had continued into mid-September, the heavy rainfall (2 to 3 inches) on the 14th and 15th created excessive soil moisture in some areas. However, much of the potential runoff became absorbed. There was no flood damage of significance on larger streams. Severe flash flooding was reported on some small streams. The Elizabeth River at Elizabeth, N. J., (drainage area 20.2 sq. mi.) reached its highest peak in 45 years of record. The city of Elizabeth was declared a disaster area.

MISSISSIPPI SYSTEM

Missouri Basin.--The only threat of flooding in the Missouri Basin during September was due to heavy rains within a 50-mile arc to the west and northwest of Sioux Falls, S. Dak.

Heavy rains (3 to 4 inches) during the evening of September 1 caused the West Fork of the Vermillion River to rise to near bankful stage during the evening. Severe thunderstorms with heavy rain during the afternoon and evening of the 10th caused some surface flooding in southwestern Sioux Falls and in scattered localities between Sioux Falls and Madison. Heavy rains caused washouts to fields and roads a few miles south of Madison. Rivers remained within banks and there was no damage due to overflow from rivers.

Arkansas Basin.--Heavy rain (6.41 inches) on the 3d, centered at Hominy, Okla., caused Hominy Creek at Skiatook, Okla., to crest at a stage of 30.4 feet, 14.4 feet above flood stage. Local light to moderate flooding occurred in southeast Tulsa, Okla. The heaviest rains occurred in the Joe and Mingo Creek Basins, where unofficial amounts of 4 to 6 inches were reported.

Lower Mississippi Basin.--Heavy rains during the afternoon and evening of the 18th resulted in some flash flooding of small streams in Shelby and Tipton Counties in western Tennessee. Almost 3 inches of rain occurred at Millington, Tenn., in a 90-minute period. Up to 7 inches of rain was reported from the Indian Creek area near Brighton, Tenn. A total of 3.36 inches of rain was recorded in 6-1/2 hours at Covington. The heaviest rainfall reported from an official weather gage was 7.15 inches at New Madrid, Mo., along the Mississippi River.

The heavy rains in the Indian Creek basin in southern Tipton County caused the creek to overflow its banks in the evening of the 18th. Several families were evacuated from their homes. Several head of livestock were drowned. The water began to recede about 10 p.m., but not until at least one car had to be abandoned on Highway 51. Cars in low-lying areas near Brighton, Tenn., were reported completely covered with water.

WEST GULF OF MEXICO DRAINAGE

Heavy rains on the 6th followed by additional heavy rains on the 8th and 9th caused minor flooding on the lower Frio River in Texas. The rains on the 6th ranged from 3 to 5 inches over an area about 20 miles wide extending from Catarina to Pleasanton. Locally heavy rains up to 2 inches occurred on the 8th and 9th. No damages were reported from the flooding.

The Rio Grande River at Presidio, Tex., went out of its banks on August 24 and continued in flood until September 20. Several crests occurred. The highest crest (18.6 ft.) occurred on August 31. This flooding was due to heavy rain over the Rio Conchos Basin in Mexico. Heavy damages resulted to crops and some damages to levees, dams, and highways.

FLOOD STAGE DATA

(All dates in September unless otherwise specified)

SEPTEMBER 1966

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
ATLANTIC SLOPE DRAINAGE	*Ft.*			*Ft.*	
Assunpink Creek: Trenton, N. J.	6	21	22	6.6	21
WEST GULF OF MEXICO DRAINAGE					
Frio: Tilden, Tex.	12	10	10	12.75	10
		12	12	12.50	12
Calliham, Tex.	12	11	12	12.4	11
WEST GULF OF MEXICO DRAINAGE	*Ft.*			*Ft.*	
Rio Grande: Presidio, Tex.	13	Aug. 24	20	17.0	Aug. 26
				18.6	Aug. 31
				18.5	2
				17.0	7,10
				17.8	14

* Provisional

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1966

ALBANY, N. Y.
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	86	10.4	92	250	.8
1000	30	125			332	.6
950	30	555	11.6	74	298	5.4
900	30	1,006	9.3	75	293	7.6
850	30	1,479	7.3	71	297	11.5
800	30	1,977	5.1	66	294	15.7
750	30	2,501	2.9	59	286	17.3
700	30	3,060	.5	48	281	16.3
650	30	3,649	-2.4	41	279	19.2
600	30	4,284	-5.[illegible]	40	274	23.1
550	30	4,954	-9.[illegible]	39	269	25.4
500	30	5,691	-14.2	34	268	29.9
450	30	6,480	-19.7	31	268	33.6
400	30	7,347	-26.0	31	267	36.5
350	30	8,300	-32.8	32	266	38.7
300	30	9,369	-40.3	40	263	40.4
250	30	10,590	-48.4		260	49.1
200	30	12,036	-54.0		261	56.3
175	30	12,890	-55.4		266	51.7
150	30	13,871	-56.1		263	42.2
125	30	15,027	-57.0		267	32.2
100	30	16,440	-56.6		270	25.1
80	30	17,856	-56.0		268	17.7
70	30	18,706	-55.1		270	15.2
60	30	19,694	-53.[illegible]		270	12.0
50	30	20,869	-52.3		257	9.3
40	30	22,317	-50.5		253	7.6
30	30	24,203	-48.3		251	4.[illegible]
25	30	25,406	-47.[illegible]		238	2.1
20	29	26,882	-46.0		208	2.1
15	28	28,794	-44.2		207	.6
10	22	31,518	-40.9		245	4.3
7	8	33,884	-39.4			
5						

ALBUQUERQUE, N. MEX.
841 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,619	14.3	70	68	3.9
1000	30	121				
950	30	564				
900	30	1,030				
850	30	1,525				
800	30	2,040	15.3	51	254	.6
750	30	2,583	12.7	49	285	4.1
700	30	3,161	[illegible].9	51	295	7.6
650	30	3,762	4.3	57	296	8.2
600	30	4,416	-.4	59	280	6.[illegible]
550	30	5,098	-5.2	54	266	9.3
500	30	5,849	-9.4	37	272	9.7
450	30	6,653	-14.5	28	280	11.3
400	30	7,539	-20.9	28	272	16.3
350	30	[illegible],511	-28.4	30	271	21.2
300	30	9,597	-36.9	29	269	28.0
250	30	10,834	-46.3		269	33.2
200	30	12,285	-54.9		273	42.7
175	30	13,131	-59.2		274	40.4
150	30	14,087	-63.0		275	35.4
125	29	15,200	-66.5		279	25.6
100	29	16,543	-67.0		296	13.0
80	29	17,897	-64.6		349	4.5
70	29	18,717	-62.3		29	5.6
60	29	19,673	-59.9		58	6.4
50	28	20,821	-57.3		83	6.0
40	28	22,239	-54.6		79	7.8
30	28	24,092	-51.7		82	[illegible].5
25	28	25,279	-49.5		82	9.3
20	27	26,748	-46.6		88	8.5
15	18	28,670	-44.5		80	12.8
10	9	31,471	-40.3			
7						
5						

AMARILLO, TEXAS
893 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,095	15.0	87	158	2.1
1000	30	121				
950	30	564				
900	30	1,032				
850	30	1,514	16.3	72	223	5.2
800	30	2,030	14.4	61	263	6.0
750	30	2,573	11.5	55	294	6.6
700	30	3,146	7.7	51	298	6.4
650	30	3,751	3.4	49	309	6.0
600	30	4,398	-.7	44	316	7.2
550	29	5,081	-5.2	39	311	8.4
500	29	5,831	-9.9	34	297	9.9
450	29	6,637	-15.3	28	293	14.[illegible]
400	29	7,516	-21.5	28	293	19.2
350	29	8,487	-28.6	27	290	23.5
300	29	9,572	-37.0	29	286	28.7
250	29	10,808	-46.2		283	33.4
200	29	12,260	-55.0		285	39.2
175	29	13,107	-58.5		284	35.9
150	28	14,069	-62.4		283	31.9
125	28	15,183	-66.2		288	24.7
100	27	16,532	-66.7		299	14.8
80	27	17,890	-64.0		339	[illegible]
70	27	18,711	-62.0		27	5.4
60	27	19,668	-59.8		60	6.8
50	27	20,815	-57.0		80	5.6
40	27	22,237	-54.1		88	5.2
30	27	24,092	-51.6		78	7.8
25	27	25,280	-49.6		84	9.1
20	24	26,749	-47.1		87	11.1
15	18	28,660	-45.0		82	7.2
10	6	31,399	-42.5			
7						
5						

ANCHORAGE, ALASKA
1000 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	45	6.1	87	177	1.9
1000	30	41			145	2.9
950	30	463	7.9	62	89	3.1
900	30	908	5.1	65	98	4.3
850	30	1,372	1.7	69	109	6.0
800	30	1,858	-1.8	74	120	9.3
750	30	2,370	-4.9	75	131	12.2
700	30	2,908	-8.0	72	138	12.0
650	30	3,478	-11.3	71	138	13.4
600	30	4,091	-14.9	66	144	15.0
550	30	4,742	-19.2	61	145	12.2
500	30	5,446	-23.9	56	152	11.8
450	30	6,201	-29.2	53	156	10.9
400	30	7,039	-35.3	51	163	11.3
350	30	7,957	-41.8	52	182	10.5
300	30	8,986	-48.2		197	13.0
250	30	10,174	-51.6		210	11.8
200	30	11,622	-50.9		228	12.4
175	30	12,492	-49.9		226	12.6
150	30	13,501	-49.5		233	12.2
125	30	14,694	-49.9		229	10.9
100	30	16,151	-50.1		233	11.3
80	29	17,610	-50.6		234	10.9
70	29	18,480	-50.6		234	10.7
60	28	19,484	-50.8		235	12.8
50	28	20,670	-51.2		239	12.4
40	28	22,120	-51.2		240	12.6
30	26	23,993	-51.1		249	14.6
25	26	25,179	-51.1		253	16.5
20	24	26,639	-50.3		262	18.3
15	17	28,561	-48.7		263	20.4
10	11	31,258	-47.3			
7						
5						

* ANNETTE, ALASKA
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	37	10.9	[illegible]	144	5.1
1000	30	112	10.9	84	152	6.6
950	30	542	9.1	81	162	14.2
900	30	986	6.4	82	173	16.5
850	30	1,453	3.9	76	183	17.7
800	30	1,943	1.1	74	191	18.1
750	30	2,457	-1.4	65	202	18.5
700	30	3,008	-4.2	55	207	19.2
650	30	3,586	-7.4	49	212	19.8
600	30	4,208	-11.1	46	219	23.3
550	30	4,871	-15.1	52	222	24.1
500	30	5,587	-19.5	54	226	25.3
450	30	6,361	-24.5	60	229	29.3
400	30	7,211	-30.1	50	233	29.5
350	30	8,149	-36.7	49	233	26.4
300	29	9,202	-43.5	49	222	28.6
250	29	10,410	-50.0		216	24.3
200	29	11,854	-54.0		218	22.7
175	29	12,711	-53.6		216	22.7
150	29	13,703	-53.4		219	22.7
125	29	14,875	-53.7		224	19.8
100	29	16,307	-53.9		226	16.9
80	29	17,743	-52.7		230	15.2
70	29	18,606	-52.3		229	13.0
60	29	19,601	-53.0		229	13.4
50	29	20,778	-52.6		239	13.0
40	29	22,219	-52.6		251	12.0
30	27	24,079	-52.4		264	12.2
25	27	25,259	-51.9		274	14.0
20	26	26,709	-51.3		284	10.7
15	21	28,596	-50.1		311	9.9
10	20	31,259	-47.3		298	10.9
7	14	33,695	-42.9		293	17.1
5	6	36,141	-36.3			

ATHENS, GA.
986 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	246	16.8	92	351	2.3
1000	30	125				
950	30	565	18.8	75	340	3.5
900	30	1,029	17.0	70	308	4.7
850	30	1,515	14.2	70	275	6.2
800	30	2,025	11.3	70	269	9.5
750	30	2,559	8.4	62	268	12.8
700	30	3,130	5.6	51	266	13.8
650	30	3,730	2.9	44	268	15.5
600	30	4,379	-.5	39	264	17.3
550	30	5,064	-4.5	35	263	19.2
500	30	5,816	-8.9	37	265	23.1
450	30	6,615	-14.5	39	265	25.1
400	29	7,506	-20.6	36	265	27.0
350	29	8,479	-27.7	30	264	31.1
300	29	9,569	-35.9	29	268	33.6
250	29	10,812	-44.9		265	40.4
200	29	12,271	-54.4		264	44.5
175	28	13,120	-58.9		263	44.1
150	28	14,077	-63.1		266	38.7
125	28	15,192	-65.6		268	27.8
100	28	16,546	-65.1		273	18.6
80	28	17,915	-62.2		292	8.4
70	28	18,744	-59.9		300	4.3
60	28	19,713	-57.3		310	.6
50	27	20,869	-55.2		85	4.9
40	27	22,301	-53.1		90	9.9
30	26	24,163	-50.3		90	11.7
25	22	25,341	-48.6		92	10.9
20	21	26,816	-46.5		90	10.3
15	14	28,743	-44.0		69	5.4
10						
7						
5						

* BARROW, ALASKA
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	8	-1.0	97	81	4.5
1000	30	67			97	4.5
950	30	478	-2.5	91	98	5.6
900	30	905	-2.2	81	141	3.7
850	30	1,359	-3.3	74	159	2.9
800	30	1,837	-5.[illegible]	65	176	4.3
750	30	2,344	-7.4	60	208	6.4
700	30	2,878	-10.1	60	216	[illegible].0
650	30	3,443	-13.5	56	219	[illegible].5
600	30	4,051	-17.3	51	226	8.5
550	30	4,696	-21.5	56	228	9.5
500	30	5,395	-26.0	53	235	10.9
450	30	6,144	-31.1	48	237	13.2
400	30	6,977	-36.9	46	238	14.8
350	30	7,889	-43.1		243	16.1
300	30	8,913	-49.9		241	16.7
250	30	10,092	-53.3		238	19.6
200	30	11,539	-49.9		239	16.3
175	30	12,414	-48.9		239	14.6
150	30	13,427	-48.7		239	14.4
125	30	14,625	-48.9		242	12.6
100	29	16,089	-49.3		232	12.2
80	29	17,549	-50.2		234	10.7
70	29	18,419	-50.7		238	10.3
60	29	19,420	-51.3		240	11.3
50	29	20,603	-51.9		244	11.5
40	29	22,046	-52.5		248	12.6
30	28	23,907	-52.8		254	12.6
25	28	25,083	-52.[illegible]		253	12.[illegible]
20	28	26,524	-52.4		261	14.6
15	27	28,391	-51.1		263	16.3
10	24	31,043	-48.3		261	22.5
7	12	33,476	-45.0			
5	5	35,725	-43.4			

BARTER IS., ALASKA
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	15	.1	92	113	2.9
1000	29	61			110	3.5
950	29	477	.9	87	110	2.3
900	29	909	1.3	77	169	[illegible].3
850	29	1,369	-.1	71	212	4.3
800	29	1,853	-2.3	71	220	5.8
750	29	2,362	-5.1	75	216	7.0
700	29	2,903	-8.1	72	225	7.6
650	29	3,472	-11.3	64	219	[illegible].1
600	29	4,086	-15.2	59	220	9.3
550	29	4,733	-19.8	61	218	10.7
500	29	5,440	-24.5	56	217	12.4
450	29	6,194	-29.5	53	229	15.7
400	29	7,031	-35.3	48	227	17.3
350	29	7,949	-41.9	55	226	17.7
300	29	8,977	-49.0		229	20.0
250	29	10,158	-53.8		231	22.9
200	29	11,600	-50.9		234	20.6
175	29	12,472	-49.5		233	15.7
150	29	13,483	-49.1		231	14.0
125	29	14,680	-49.2		235	13.4
100	29	16,141	-49.7		233	12.8
80	29	17,599	-50.3		238	11.[illegible]
70	29	18,469	-50.8		240	12.4
60	29	19,470	-51.3		250	12.6
50	29	20,653	-52.0		249	13.4
40	29	22,097	-52.4		251	13.8
30	29	23,954	-53.0		259	15.3
25	28	25,129	-52.9		260	16.9
20	27	26,573	-52.5		266	18.3
15	24	28,444	-51.2		266	20.0
10	14	31,130	-48.8			
7	5	33,470	-46.6			
5						

BETHEL, ALASKA
998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	39	5.7	93	355	2.1
1000	30	20			323	2.1
950	30	441	6.2	75	71	2.9
900	30	883	3.5	77	125	3.3
850	30	1,345	.6	76	126	3.1
800	30	1,830	-1.9	69	123	3.1
750	30	2,341	-4.6	64	124	3.3
700	30	2,882	-7.6	61	121	4.3
650	30	3,449	-10.9	57	133	4.9
600	30	4,068	-14.5	57	120	[illegible]
550	30	4,713	-18.8	54	134	3.5
500	30	5,426	-23.1	44	150	3.3
450	30	6,179	-28.3	42	164	2.7
400	30	7,024	-34.6	44	156	1.0
350	30	7,943	-41.3	46	173	1.7
300	30	8,975	-48.3		216	4.1
250	30	10,161	-52.4		255	6.4
200	30	11,609	-50.5		261	10.9
175	30	12,481	-49.8		256	10.5
150	30	13,489	-49.7		250	[illegible].7
125	30	14,682	-49.8		256	9.7
100	30	16,142	-49.8		246	10.1
80	30	17,599	-50.4		241	11.3
70	30	18,469	-50.5		240	10.9
60	30	19,473	-50.8		237	10.7
50	30	20,660	-50.9		241	12.6
40	30	22,112	-50.7		240	12.6
30	27	23,992	-50.3		249	14.4
25	27	25,182	-50.1		250	15.7
20	26	26,639	-49.6		254	17.5
15	18	28,519	-48.1		260	17.1
10	5	31,302	-43.7			
7						
5						

BISMARCK, N. DAK.
957 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	505	8.5	84	81	2.1
1000	30	139				
950	30	572	10.7	73	118	2.1
900	30	1,022	13.5	55	215	5.2
850	30	1,501	10.8	55	250	3.3
800	30	2,005	8.6	47	291	5.2
750	30	2,535	5.9	46	310	8.5
700	30	3,099	2.9	50	310	11.5
650	30	3,694	-.1	46	311	11.3
600	30	4,332	-4.0	47	307	13.4
550	30	5,007	-8.5	46	311	17.3
500	30	5,746	-13.1	44	310	17.7
450	30	6,535	-18.7	38	312	18.3
400	30	7,409	-25.2	38	310	19.4
350	30	8,364	-32.8	35	310	24.1
300	30	9,430	-41.3	33	306	28.4
250	30	10,644	-50.4		302	27.6
200	30	12,072	-57.6		298	32.2
175	30	12,915	-57.0		299	33.4
150	30	13,889	-57.8		299	32.8
125	29	15,036	-58.1		296	26.6
100	28	16,444	-58.6		302	22.5
80	28	17,848	-57.7		311	17.1
70	28	18,691	-57.0		319	13.2
60	28	19,669	-56.2		321	10.1
50	28	20,829	-55.3		331	9.3
40	27	22,261	-54.0		346	8.0
30	27	24,116	-51.4		315	6.8
25	26	25,312	-49.8		301	7.6
20	26	26,778	-47.7		296	8.4
15	22	28,674	-45.5		273	12.4
10	16	31,374	-41.2		282	16.5
7	8	33,767	-38.4			
5						

BOISE, IDAHO
916 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	868	13.5	58	132	3.1
1000	30	113				
950	30	552				
900	30	1,012	17.2	48	124	1.7
850	30	1,500	17.2	42	283	2.1
800	30	2,015	14.3	42	280	3.7
750	30	2,556	10.8	43	273	4.5
700	30	3,128	6.8	45	250	6.0
650	30	3,729	2.7	45	246	7.[illegible]
600	30	4,375	-1.5	45	242	10.1
550	30	5,057	-6.5	46	241	11.8
500	30	5,801	-11.7	44	240	12.8
450	30	6,595	-17.5	40	241	13.0
400	30	7,472	-24.0	40	249	13.4
350	30	8,432	-31.5	37	250	13.8
300	30	9,504	-40.0	32	255	13.6
250	30	10,724	-49.1		258	17.1
200	30	12,165	-55.4		263	19.2
175	28	13,024	-57.3		266	19.0
150	28	13,994	-59.0		263	20.8
125	27	15,131	-60.9		259	19.8
100	27	16,518	-60.5		258	13.2
80	27	17,909	-59.8		261	7.4
70	27	18,744	-58.7		273	5.4
60	27	19,714	-57.5		318	3.5
50	27	20,868	-56.6		7	4.3
40	27	22,286	-55.3		21	3.3
30	27	24,130	-53.1		25	5.8
25	27	25,310	-51.4		13	4.5
20	27	26,765	-49.5		340	5.1
15	23	28,653	-47.2		311	5.1
10	13	31,355	-43.2			
7						
5						

* BOOTHVILLE, LA.
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	24	1	23.2	91	313	1.9
1000	24	116	24.2	85	303	2.5
950	24	568	21.4	80	280	3.7
900	24	1,033	18.7	75	248	4.3
850	24	1,522	16.2	64	241	5.8
800	24	2,036	13.6	60	251	7.6
750	24	2,577	10.8	53	253	9.9
700	24	3,150	7.7	52	255	10.3
650	24	3,753	4.6	48	260	10.7
600	24	4,406	1.1	53	269	11.3
550	24	5,099	-2.6	47	273	11.5
500	24	5,851	-7.6	45	275	12.0
450	23	6,665	-13.0	38	277	13.6
400	23	7,552	-18.9	37	285	15.9
350	23	[illegible],532	-26.1	36	289	18.[illegible]
300	23	9,629	-34.4	36	289	20.0
250	23	10,879	-43.9		281	22.7
200	23	12,343	-54.1		274	29.1
175	23	13,189	-59.2		273	27.2
150	23	14,143	-64.2		275	28.0
125	23	15,245	-69.1		282	21.2
100	23	16,573	-69.3		282	12.2
80	23	17,917	-64.8		299	3.3
70	23	18,737	-62.0		42	1.2
60	22	19,692	-59.4		81	6.4
50	22	20,841	-56.8		93	10.3
40	22	22,261	-54.4		87	15.3
30	22	24,118	-50.8		87	20.4
25	22	25,311	-48.4		94	20.6
20	21	26,781	-46.1		89	20.6
15	21	28,708	-42.1		85	19.2
10	14	31,466	-38.0			
7						
5						

* BROWNSVILLE, TEXAS
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	7	22.6	90	173	1.0
1000	30	111	25.1	86	155	3.1
950	30	561	22.6	85	164	8.9
900	30	1,033	20.3	67	161	[illegible].4
850	30	1,525	17.6	60	148	4.3
800	30	2,041	14.6	57	62	3.5
750	30	2,584	11.8	51	47	4.5
700	30	3,160	8.4	48	31	6.0
650	30	3,769	5.0	44	28	4.5
600	30	4,419	1.6	41	356	3.1
550	30	5,110	-2.3	36	317	3.1
500	30	5,867	-7.0	37	302	3.7
450	30	6,680	-12.4	37	317	4.3
400	30	7,572	-18.4	34	309	6.4
350	30	8,555	-25.5	36	305	9.7
300	30	9,654	-33.9	32	305	12.4
250	30	10,906	-43.3		300	16.9
200	30	12,373	-54.1		296	18.8
175	30	13,218	-60.0		291	17.[illegible]
150	30	14,167	-65.9		300	18.3
125	29	15,256	-72.0		298	12.6
100	28	16,560	-72.9		352	[illegible].5
80	28	17,885	-67.6		61	10.9
70	28	18,694	-64.3		78	13.4
60	28	19,643	-61.8		84	16.5
50	26	20,776	-59.3		89	21.4
40	25	22,181	-56.2		85	23.9
30	25	24,026	-51.9		87	28.4
25	24	25,212	-49.6		87	28.4
20	24	26,683	-46.4		86	28.9
15	22	28,613	-43.0		87	29.1
10	22	31,371	-38.7		88	24.1
7	18	33,841	-35.0		110	25.4
5	6	36,209	-31.5			

BUFFALO, N. Y.
989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	218	11.4	90	217	2.[illegible]
1000	30	125				
950	30	554	12.7	71	265	6.0
900	30	1,008	10.2	70	273	8.9
850	30	1,482	7.2	67	277	11.5
800	30	1,979	5.1	62	280	13.2
750	30	2,504	2.3	61	283	15.7
700	30	3,059	-.4	51	281	17.5
650	30	3,649	-2.9	40	281	18.1
600	30	4,279	-6.7	33	277	19.6
550	30	4,950	-10.6	32	277	22.3
500	30	5,682	-15.1	34	276	25.6
450	30	6,467	-20.7	38	270	27.4
400	30	7,332	-26.4	33	272	31.[illegible]
350	30	8,284	-33.5	33	270	37.3
300	30	9,349	-41.0	21	268	39.[illegible]
250	30	10,567	-48.8		269	42.7
200	30	12,012	-54.1		268	45.5
175	30	12,867	-54.8		271	43.[illegible]
150	30	13,852	-55.6		274	36.3
125	30	15,009	-56.9		276	32.1
100	30	16,422	-56.7		279	24.7
80	29	17,834	-56.2		274	16.9
70	29	18,682	-55.7		274	13.8
60	29	19,666	-54.4		273	11.3
50	29	20,839	-52.5		273	[illegible].3
40	29	22,286	-50.6		269	7.0
30	29	24,172	-48.1		270	5.1
25	28	25,378	-46.8		256	4.7
20	25	26,868	-45.1		207	1.7
15	15	28,793	-43.2			
10						
7						
5						

*CANTON IS., PACIFIC AREA
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	30.5	63	83	9.3
1000	30	91	28.4	62	80	10.1
950	30	533	22.9	68	86	12.0
900	30	1,013	19.8	63	96	13.8
850	30	1,504	17.6	49	96	15.0
800	30	2,021	16.1	29	93	14.4
750	30	2,562	13.9	24	92	15.3
700	30	[illegible],145	10.6	23	93	15.5
650	30	3,754	7.2	23	85	16.3
600	30	4,411	3.3	22	83	17.9
550	30	5,105	-.6	19	89	18.1
500	30	5,867	-4.8	18	90	18.8
450	30	6,684	-9.5	17	89	17.7
400	30	7,590	-15.3	17	92	15.3
350	30	8,585	-22.1	18	94	11.3
300	30	9,699	-31.0	18	81	7.8
250	30	10,965	-41.3		68	8.5
200	30	12,442	-53.6		100	6.0
175	30	13,287	-60.5		123	3.5
150	30	14,230	-67.8		169	5.1
125	30	15,307	-74.9		131	5.2
100	30	16,589	-77.5		94	8.5
80	29	17,898	-68.6		93	5.6
70	29	18,703	-65.4		300	1.0
60	28	19,649	-62.1		275	8.5
50	28	20,788	-57.9		272	13.0
40	28	22,203	-55.7		272	23.9
30	28	24,049	-52.3		269	35.5
25	28	25,235	-49.9		269	36.1
20	26	26,704	-47.0		270	33.0
15	24	28,626	-44.0		267	22.3
10	16	31,397	-39.6		73	13.2
7	14	33,881	-33.4		83	45.1
5	5	36,292	-26.5			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1966

Standard pressure surface (mb.)	• CAPE HATTERAS, N. C. 1013 MB						• CARIBOU, ME. 990 MB						CHARLESTON, S. C. 1013 MB						CHIHUAHUA, MEXICO 858 MB						• COLD BAY, ALASKA 998 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	29	4	21.7	84	278	2.7	30	191	6.0	91	234	2.9	30	13	19.9	89	281	1.9	30	1,428	16.0	89	298	1.2	30	30	6.1	91	267	4.9
1000	29	116	21.7	77	293	3.9	30	107					30	122	21.4	85	300	1.7	30	106					30	12			259	4.1
950	29	556	19.5	67	287	7.6	30	532	8.5	72	255	7.0	30	568	20.7	73	287	3.1	30	547					30	435	4.6	90	284	6.4
900	29	1,024	16.5	62	286	8.0	30	976	6.4	69	274	10.3	30	1,034	17.8	69	273	4.7	30	1,019					30	872	2.4	88	294	5.2
850	29	1,509	13.4	58	280	9.1	30	1,444	4.3	60	278	11.8	30	1,521	14.7	66	260	6.6	30	1,511	16.7	83	288	1.0	30	1,333	.4	82	307	6.2
800	29	2,017	10.6	52	266	12.2	30	1,936	2.3	55	279	14.4	30	2,032	12.1	59	251	9.5	30	2,030	16.5	68	199	1.7	30	1,818	- 1.3	72	309	6.6
750	29	2,550	8.1	44	269	15.7	30	2,454	.0	55	276	16.9	30	2,572	9.4	55	251	12.6	30	2,570	12.8	71	156	2.9	30	2,330	- 3.5	69	305	8.2
700	29	3,120	5.5	41	269	19.0	30	3,006	- 2.4	52	278	20.0	30	3,141	6.7	45	255	15.9	30	3,152	8.8	73	139	3.3	30	2,874	- 6.2	67	312	7.4
650	29	3,721	2.6	36	270	22.1	30	3,585	- 5.6	50	282	22.7	30	3,745	3.5	41	257	17.7	30	3,756	5.2	65	119	4.5	30	3,452	- 9.2	58	314	9.5
600	29	4,367	- .9	34	268	22.7	30	4,215	- 8.9	45	278	25.4	30	4,392	.0	40	259	19.2	30	4,411	1.2	60	132	1.4	30	4,067	-12.9	56	315	8.0
550	29	5,050	- 4.8	31	263	25.8	30	4,882	-12.3	36	271	28.2	30	5,079	- 4.0	35	257	22.1	30	5,096	- 2.8	54	265	1.6	30	4,720	-16.9	51	297	6.8
500	28	5,803	- 9.5	29	261	28.4	30	5,607	-17.0	31	274	31.9	30	5,830	- 8.8	31	255	23.5	30	5,856	- 6.7	45	295	3.7	30	5,435	-21.5	49	305	8.2
450	28	6,605	-14.8	30	261	31.9	30	6,385	-22.3	31	271	31.3	30	6,638	-14.3	36	256	28.0	30	6,664	-12.1	42	295	6.8	30	6,200	-26.5	49	306	10.7
400	28	7,492	-21.1	30	257	33.0	30	7,246	-28.5	31	269	34.6	30	7,524	-20.3	37	255	30.9	30	7,561	-18.6	38	289	9.1	30	7,047	-32.0	43	296	12.6
350	28	8,466	-27.7	31	254	37.7	30	8,189	-35.4	29	271	36.3	30	8,500	-27.1	33	256	35.2	30	8,542	-25.5	34	283	14.4	30	7,977	-38.5	44	297	14.6
300	28	9,556	-35.8	31	255	41.8	30	9,245	-43.2		269	40.2	30	9,593	-35.3	31	254	39.0	30	9,641	-33.7	33	289	18.8	30	9,020	-45.4		302	17.9
250	28	10,799	-45.0		255	44.1	30	10,454	-49.7		266	48.6	30	10,838	-44.8		258	43.7	30	10,894	-42.9		278	22.0	30	10,226	-48.4		289	16.3
200	28	12,257	-54.8		257	52.4	30	11,899	-53.2		262	49.7	30	12,296	-55.1		258	47.6	30	12,364	-53.6		283	29.1	30	11,691	-49.4		284	20.8
175	28	13,103	-59.2		261	50.1	30	12,760	-52.9		260	46.4	30	13,139	-60.1		259	46.8	30	13,211	-59.0		287	28.7	29	12,567	-49.8		283	17.9
150	28	14,060	-63.1		262	44.9	30	13,753	-53.4		262	44.1	30	14,090	-64.4		264	38.3	30	14,165	-64.7		283	25.3	29	13,575	-50.0		284	19.4
125	28	15,175	-65.0		258	36.5	30	14,923	-54.1		265	37.1	30	15,195	-67.5		261	31.9	29	15,262	-69.9		281	17.3	29	14,766	-50.2		276	17.5
100	28	16,536	-64.2		260	27.6	30	16,355	-54.0		262	28.0	30	16,538	-66.7		269	19.4	29	16,580	-71.8		306	[illegible].0	29	16,221	-50.5		267	14.0
80	28	17,911	-60.8		261	12.8	30	17,790	-53.4		261	20.6	30	17,901	-62.9		277	9.9	28	17,911	-67.4		59	7.6	29	17,674	-50.7		268	10.5
70	28	18,746	-58.0		257	9.3	30	18,650	-52.5		264	16.9	30	18,727	-60.7		283	3.1	28	18,723	-63.1		85	9.9	29	18,544	-50.5		260	10.5
60	28	19,721	-56.2		251	3.7	29	19,655	-51.7		261	13.8	30	19,691	-58.0		92	2.1	27	19,678	-60.8		82	14.0	28	19,542	-50.5		254	10.1
50	28	20,883	-54.5		110	4.3	29	20,838	-51.0		255	13.0	30	20,848	-55.5		90	7.6	26	20,820	-58.[illegible]		88	17.3	28	20,730	-50.5		241	9.1
40	28	22,318	-52.6		103	6.6	29	22,294	-49.4		247	10.9	30	22,279	-53.3		86	11.8	24	22,237	-55.7		86	21.2	28	22,185	-50.3		240	9.7
30	28	24,186	-50.0		96	8.5	27	24,182	-47.6		234	8.7	30	24,145	-50.3		90	15.5	23	24,090	-51.6		86	24.7	26	24,064	-49.7		242	8.5
25	27	25,381	-47.8		89	11.5	27	25,388	-46.9		235	7.8	30	25,341	-48.4		94	17.1	22	25,284	-49.4		86	25.3	26	25,258	-49.2		251	8.4
20	26	26,868	-46.0		83	10.9	27	26,871	-45.5		236	5.4	26	26,816	-46.3		85	16.3	21	26,756	-47.1		82	26.4	26	26,723	-48.4		255	9.1
15	21	28,796	-43.9		74	9.5	26	28,796	-43.6		214	3.3	21	28,753	-43.5		72	14.6	10	28,686	-43.5				24	28,632	-47.1		258	11.1
10	9	31,519	-40.4				15	31,511	-40.5		252	5.4	7	31,527	-37.9										16	31,332	-45.5			

Standard pressure surface (mb.)	COLUMBIA, MO. 987 MB						DAYTON, OHIO 981 MB						DEL RIO, TEXAS 977 MB						DENVER, COLO. 840 MB						DODGE CITY, KANS. 926 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	30	238	14.2	84	112	1.0	30	297	12.7	91	81	1.4	30	314	21.9	86	103	6.4	30	1,611	11.8	71	212	3.1	30	792	13.8	88	270	.8
1000	30	129					30	132					30	114					30	126					30	135				
950	30	563	15.8	70	321	1.0	30	566	14.7	72	134	1.2	30	565	21.7	82	130	10.3	30	566					30	575				
900	30	1,023	13.8	67	343	4.5	30	1,022	12.0	69	315	1.9	30	1,031	20.2	77	164	13.6	30	1,029					30	1,032	15.7	69	199	1.9
850	30	1,504	11.2	66	329	5.8	30	1,500	9.3	67	285	5.8	30	1,524	17.6	77	174	10.3	30	1,514					30	1,517	14.3	61	253	1.9
800	30	2,008	8.9	60	324	7.6	30	2,001	7.1	61	280	9.5	30	2,041	15.2	70	182	5.1	30	2,026	14.3	55	295	4.1	30	2,027	12.3	50	316	4.9
750	30	2,535	6.6	54	312	9.3	30	2,531	4.9	50	285	11.7	30	2,586	12.0	64	227	1.2	30	2,565	11.7	51	304	5.4	30	2,565	9.7	43	324	7.6
700	30	3,106	3.9	45	305	10.9	30	3,091	2.4	47	284	13.8	30	3,162	8.5	58	341	2.7	30	3,143	7.9	53	311	7.2	30	3,136	6.5	43	319	8.2
650	30	3,699	.7	43	301	14.8	30	3,683	- .6	47	282	15.9	30	3,772	4.9	53	313	4.9	30	3,748	3.4	57	302	10.1	30	3,737	2.9	45	309	10.1
600	30	4,343	- 3.2	41	294	17.1	30	4,323	- 4.0	43	282	19.0	30	4,420	1.1	49	303	5.6	30	4,394	- 1.4	58	298	12.8	30	4,385	- 1.4	46	303	12.8
550	30	5,019	- 7.0	38	296	18.1	30	4,999	- 8.1	43	278	21.8	30	5,107	- 3.1	46	294	6.0	30	5,074	- 6.0	50	290	13.6	30	5,067	- 6.0	43	303	15.0
500	30	5,766	-11.6	34	297	19.4	30	5,738	-12.8	37	277	22.3	30	5,864	- 7.4	39	295	6.6	30	5,822	-10.7	38	284	15.0	30	5,813	-10.[illegible]	36	300	17.3
450	30	6,558	-16.9	29	299	22.1	30	6,528	-18.2	35	278	25.1	30	6,674	-12.7	36	292	9.7	30	6,621	-16.0	33	285	16.1	30	6,609	-16.0	29	296	19.8
400	30	7,441	-23.3	30	297	24.5	30	7,405	-24.3	32	279	29.1	30	7,568	-18.8	36	293	11.8	30	7,503	-22.2	29	288	18.3	30	7,495	-22.4	29	295	21.8
350	30	8,404	-30.4	31	290	28.9	30	8,365	-31.5	32	275	32.6	30	8,549	-25.8	35	289	15.3	30	8,470	-29.7	27	288	21.0	30	8,462	-29.7	29	297	24.3
300	30	9,481	-38.6	29	284	33.4	30	9,438	-39.5	28	278	38.5	30	9,648	-34.2	37	288	20.8	30	9,550	-38.4	27	284	22.9	30	9,543	-38.1	30	291	26.6
250	30	10,710	-47.6		284	38.9	30	10,662	-48.2		275	46.0	30	10,898	-43.8		286	22.7	30	10,779	-47.[illegible]		283	27.0	30	10,774	-47.4		284	35.7
200	29	12,152	-55.2		287	41.6	30	12,104	-55.6		274	49.5	29	12,361	-54.3		287	27.6	30	12,223	-55.5		284	31.9	30	12,220	-55.6		283	42.2
175	29	13,000	-57.4		286	38.9	29	12,946	-56.6		275	47.0	29	13,207	-59.3		291	26.4	30	13,070	-57.7		283	33.4	30	13,065	-58.2		284	42.2
150	29	13,970	-59.5		285	35.7	29	13,919	-58.4		277	41.0	29	14,160	-64.5		289	25.1	30	14,038	-59.8		283	29.9	30	14,029	-61.3		290	35.4
125	29	15,104	-62.1		289	29.3	29	15,060	-60.3		277	33.2	29	15,259	-69.6		287	18.5	30	15,169	-62.7		286	22.0	30	15,151	-64.2		290	27.4
100	29	16,483	-62.1		296	19.8	29	16,450	-60.3		279	25.1	28	16,581	-71.6		324	8.2	30	16,542	-63.2		299	14.0	30	16,513	-65.1		298	16.9
80	29	17,865	-60.7		302	10.9	29	17,845	-59.1		282	16.3	28	17,909	-67.6		43	6.6	30	17,919	-61.6		313	9.3	30	17,876	-63.5		316	9.1
70	29	18,698	-59.5		318	8.0	29	18,684	-57.7		288	10.9	27	18,719	-63.9		70	7.6	30	18,749	-60.3		335	7.6	30	18,700	-61.2		344	6.6
60	29	19,664	-57.9		333	5.6	29	19,659	-56.1		285	7.4	27	19,670	-60.9		77	10.7	30	19,714	-58.7		354	6.0	30	19,660	-59.0		12	5.4
50	29	20,823	-55.7		318	4.3	29	20,823	-54.3		288	6.2	27	20,809	-58.7		87	14.8	29	20,864	-56.8		8	4.7	29	20,815	-56.7		39	4.3
40	29	22,249	-53.3		307	3.7	29	22,261	-51.7		266	4.5	27	22,220	-55.6		89	17.3	28	22,293	-54.1		14	4.5	28	22,245	-53.9		33	1.2
30	29	24,113	-50.3		264	2.3	28	24,138	-49.4		230	.6	27	24,068	-51.8		85	21.8	25	24,157	-50.7		353	3.1	26	24,101	-51.1		30	2.3
25	28	25,301	-48.7		304	1.7	28	25,335	-48.1		129	.6	27	25,254	-49.9		86	21.8	25	25,350	-49.0		299	1.6	26	25,290	-49.5		61	3.5
20	27	26,766	-47.1		276	1.2	26	26,817	-46.4		78	2.7	27	26,720	-47.3		87	21.2	23	26,826	-46.8		264	1.7	26	26,758	-47.4		65	5.8
15	24	28,673	-45.5		271	2.7	24	28,732	-44.0		75	3.9	23	28,633	-43.7		81	19.8	19	28,756	-44.5		241	3.9	26	28,670	-45.0		76	6.6
10	8	31,424	-41.8				15	31,515	-40.6		82	5.8	13	31,368	-41.1				10	31,536	-40.7				24	31,403	-41.1		70	4.5
7																									14	33,807	-38.6			
5																									5	36,090	-37.2			

Standard pressure surface (mb.)	EL PASO, TEXAS 883 MB						ELY, NEV. 811 MB						EMPALME, MEXICO 1010 MB						• FAIRBANKS, ALASKA 989 MB						FLINT, MICH. 988 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	30	1,193	17.9	75	331	.8	30	1,908	7.3	62	198	6.0	30	12	26.1	84	48	4.3	29	135	7.5	64	7	3.3	30	234	9.4	91	237	1.9
1000	30	110					30	142					30	102	26.5	83	71	3.7	29	39					30	129				
950	30	556					30	581					30	553	24.9	74	148	4.7	29	463	7.8	59	66	4.7	30	561	13.2	70	279	5.2
900	30	1,027					30	1,038					30	1,031	22.7	65	156	5.4	29	907	5.4	62	156	3.9	30	1,013	10.9	67	295	8.5
850	30	1,518	19.5	57	197	1.6	30	1,517					30	1,527	19.9	61	149	6.0	29	1,372	2.5	66	179	4.5	30	1,488	7.7	68	301	10.3
800	30	2,039	16.5	58	213	3.7	30	2,022	11.8	49	190	5.6	30	2,048	16.4	61	141	7.4	29	1,860	- .7	68	206	5.4	30	1,986	5.1	60	298	11.1
750	30	2,581	13.1	58	247	3.3	30	2,563	11.2	42	180	5.4	30	2,591	12.7	59	143	[illegible].0	29	2,366	- 4.0	64	220	6.0	30	2,509	2.7	50	290	12.8
700	30	3,164	9.0	59	8	1.0	30	3,137	7.3	43	211	8.5	30	3,170	8.9	53	150	7.2	29	2,913	- 7.6	69	210	8.0	30	3,066	.1	42	292	13.8
650	30	3,766	4.7	60	60	1.2	30	3,739	2.8	48	227	10.1	30	3,778	5.2	45	154	7.4	29	3,480	-11.0	68	213	7.8	30	3,653	- 2.7	38	289	15.7
600	30	4,423	.3	56	281	.8	30	4,386	- 1.7	44	216	12.2	30	4,430	2.1	33	161	7.2	29	4,097	-14.8	64	213	8.0	30	4,289	- 6.1	35	289	18.3
550	30	5,111	- 3.7	47	280	4.3	30	5,069	- 6.1	44	220	10.5	30	5,121	- 1.[illegible]	31	176	4.3	29	4,743	-19.1	61	221	7.6	30	4,960	-10.0	35	287	21.2
500	30	5,865	- 8.0	39	285	7.2	30	5,813	-11.0	40	236	9.7	30	5,880	- 6.7	31	231	3.5	29	5,452	-24.1	59	216	7.2	30	5,694	-14.4	32	288	24.9
450	30	6,673	-13.3	42	282	11.1	30	6,610	-16.8	33	238	10.1	30	6,692	-12.0	30	249	4.9	29	6,207	-29.4	55	221	7.6	30	6,488	-19.6	30	286	27.8
400	30	7,566	-19.6	42	281	13.8	30	7,488	-23.4	29	245	11.5	30	7,587	-18.1	23	263	10.3	29	7,045	-35.3	49	222	9.9	30	7,350	-25.6	32	284	31.5
350	30	8,544	-26.9	34	278	18.8	30	8,450	-31.3	29	246	13.6	30	8,570	-25.4	23	267	13.6	29	7,962	-41.9	42	223	11.3	30	8,304	-32.8	32	283	34.6
300	30	9,638	-35.3	35	273	25.1	30	9,522	-40.1	29	249	16.1	30	9,670	-33.7	23	271	18.1	29	8,990	-49.1		220	13.0	30	9,372	-40.9	24	281	38.3
250	30	10,886	-44.2		271	31.5	30	10,744	-48.3		254	17.5	30	10,924	-42.9		275	23.7	29	10,172	-53.3		229	14.8	30	10,590	-49.1		285	42.5
200	30	12,352	-54.0		275	38.5	29	12,189	-55.0		257	25.8	29	12,394	-53.8		267	26.0	29	11,615	-51.5		232	15.2	30	12,033	-54.0		283	46.0
175	30	13,199	-59.0		277	36.5	29	13,037	-57.4		252	24.5	29	13,240	-59.9		265	27.6	29	12,486	-49.9		236	13.4	30	12,889	-54.4		284	41.6
150	30	14,154	-64.2		277	32.8	29	14,004	-60.3		254	24.5	29	14,187	-66.5		262	22.9	29	13,495	-49.6		230	11.8	30	13,874	-55.3		282	38.9
125	30	15,257	-68.6		280	23.5	29	15,132	-63.2		259	19.0	28	15,273	-71.9		267	18.6	29	14,690	-49.2		236	12.2	30	15,032	-56.7		283	31.7
100	30	16,586	-69.8		292	10.9	29	16,499	-63.7		263	9.9	28	16,584	-72.3		292	5.6	29	16,152	-49.4		237	12.6	28	16,447	-57.8		285	23.9
80	30	17,925	-65.9		21	5.2	29	17,870	-62.3		300	3.3	26	17,905	-68.3		71	8.5	28	17,612	-49.9		238	11.1	28	17,860	-56.[illegible]		291	17.7
70	30	18,739	-63.7		61	[illegible].4	29	18,697	-60.9		360	1.7	23	18,716	-64.4		83	13.2	28	18,483	-50.1		241	11.1	27	18,714	-55.4		294	12.0
60	30	19,691	-60.6		78	9.3	29	19,657	-59.5		45	3.9	21	19,668	-61.0		83	15.0	28	19,489	-50.4		242	12.6	27	19,700	-54.3		293	8.4
50	30	20,833	-57.7		89	11.8	29	20,802	-57.8		75	4.9	20	20,803	-58.7		89	19.2	28	20,677	-51.0		246	13.2	26	20,870	-53.[illegible]		279	7.2
40	30	22,249	-55.4		87	12.2	29	22,217	-55.6		46	6.0	18	22,219	-56.1		91	20.6	28	22,127	-51.4		245	13.4	26	22,312	-51.2		266	7.8
30	30	24,096	-52.2		82	16.9	29	24,061	-52.8		44	3.1	14	24,080	-52.1		83	24.5	27	23,997	-51.4		252	15.3	25	24,188	-48.2		263	7.6
25	30	25,282	-49.9		87	16.7	28	25,241	-50.9		11	1.2	11	25,256	-50.1		87	23.7	27	25,182	-51.1		256	18.3	25	25,394	-46.7		267	7.0
20	30	26,748	-47.7		88	17.1	27	26,695	-48.6		256	3.9	9	26,723	-47.5				26	26,640	-50.6		261	19.8	23	26,870	-45.4		253	4.5
15	27	28,661	-44.5		83	15.3	25	28,586	-46.3		244	7.0							26	28,519	-49.7		268	21.8	7	28,813	-43.2			
10	11	31,414	-40.3				22	31,298	-42.5		264	9.7							21	31,180	-48.0		274	23.9						
7							12	33,679	-39.4										6	33,628	-43.3									
5							6	36,004	-34.1																					

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	FORT WORTH, TEXAS 994 MB						GLASGOW, MONT. 935 MB						* GRAND JUNCTION, COLO. 854 MB						* GREAT FALLS, MONT. 888 MB						GREEN BAY, WIS. 990 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	30	180	19.8	89	227	.6	30	696	10.6	67	79	4.5	30	1,474	14.7	52	123	7.0	30	1,123	12.3	60	241	4.9	30	210	8.3	83	286	2.9
1000	30	130					30	124					30	113					30	113					30	128				
950	30	575	20.3	76	227	3.5	30	557					30	557					30	552					30	560	13.3	70	306	8.0
900	30	1,041	18.3	74	252	4.9	30	1,012	15.2	47	132	4.1	30	1,023					30	1,013					30	1,010	10.7	67	305	8.9
850	30	1,529	15.6	69	277	4.9	30	1,495	13.8	42	299	1.6	30	1,514	15.4	50	126	8.4	30	1,495	14.4	46	257	6.8	30	1,485	7.7	64	304	10.1
800	30	2,042	13.0	61	297	5.8	30	2,003	10.8	43	311	4.9	30	2,030	15.4	44	132	7.6	30	2,005	11.9	47	281	7.8	30	1,982	5.0	58	303	10.3
750	30	2,587	10.1	54	315	5.6	30	2,537	7.6	45	295	7.4	30	2,569	12.6	43	194	3.1	30	2,538	8.4	52	264	8.5	30	2,505	2.5	49	309	12.8
700	30	3,154	6.8	49	313	4.5	30	3,102	3.9	50	289	11.[illegible]	30	3,150	8.4	47	255	5.4	30	3,110	4.8	51	259	11.[illegible]	30	3,062	- .4	50	308	14.8
650	30	3,760	3.2	46	316	7.2	30	3,698	.0	50	290	13.[illegible]	30	3,751	3.6	55	256	7.0	30	3,711	1.2	47	265	13.6	30	3,647	- 3.3	45	307	17.3
600	30	4,405	- .5	44	307	8.7	30	4,336	- 3.8	47	286	14.[illegible]	30	4,402	- 1.3	55	258	9.5	30	4,351	- 3.2	52	268	13.8	30	4,281	- 6.6	40	308	18.3
550	30	5,094	- 4.3	39	308	10.5	30	5,014	- 8.2	42	289	18.3	30	5,080	- 6.2	55	260	10.3	30	5,031	- 7.6	49	273	15.3	30	4,949	-10.5	39	305	20.4
500	30	5,843	- 8.6	38	301	12.8	30	5,751	-13.2	36	296	17.3	30	5,830	-10.8	43	269	10.7	30	5,772	-12.2	41	278	15.[illegible]	30	5,683	-15.1	38	303	21.8
450	30	6,651	-14.0	38	294	14.8	30	6,537	-18.9	37	293	19.8	30	6,628	-15.9	35	271	11.8	30	6,563	-17.7	38	284	15.7	30	6,467	-20.1	33	304	23.9
400	30	7,537	-20.3	34	293	17.9	30	7,411	-25.3	34	295	19.2	30	7,510	-22.3	32	275	15.0	30	7,442	-24.2	40	291	17.7	30	7,333	-26.3	33	303	27.0
350	30	8,513	-27.4	35	290	20.8	30	8,365	-32.5	37	297	22.0	30	8,477	-29.9	32	267	18.3	30	8,402	-31.6	40	297	20.6	30	8,286	-33.4	32	303	28.4
300	30	9,604	-35.7	32	287	25.1	30	9,432	-41.1	28	300	23.1	30	9,556	-38.6	31	264	20.0	30	9,475	-40.0	38	278	20.8	30	9,351	-41.0	27	300	32.1
250	30	10,846	-45.4		285	28.7	30	10,645	-50.7		297	24.3	30	10,783	-47.9		267	26.2	30	10,694	-49.8		283	23.3	30	10,570	-49.2		297	36.7
200	30	12,301	-55.3		287	35.9	30	12,070	-57.4		294	28.9	30	12,228	-55.1		269	31.9	30	12,125	-57.1		285	27.0	30	12,014	-54.1		301	37.7
175	30	13,144	-59.5		290	34.8	30	12,913	-57.[illegible]		294	29.3	30	13,075	-57.8		273	31.9	30	12,968	-58.0		282	26.8	30	12,871	-54.2		300	36.7
150	30	14,099	-63.5		292	31.9	30	13,884	-58.3		293	29.5	30	14,041	-60.5		272	28.4	30	13,938	-58.8		279	28.0	30	13,858	-55.3		300	36.9
125	29	15,212	-66.6		293	25.1	30	15,029	-58.7		294	26.4	30	15,168	-63.3		280	20.8	29	15,086	-59.2		274	21.8	30	15,019	-56.4		300	33.0
100	28	16,553	-67.8		302	15.9	30	16,431	-58.5		296	22.0	30	16,536	-64.0		287	11.7	27	16,485	-58.4		271	18.6	30	16,433	-56.7		301	24.5
80	27	17,905	-64.6		346	5.2	30	17,834	-57.6		297	15.2	30	17,904	-62.6		309	4.9	26	17,892	-58.0		287	9.9	30	17,849	-56.1		298	18.3
70	27	18,724	-62.3		28	4.3	30	18,678	-56.[illegible]		308	12.8	29	18,732	-61.2		355	4.5	26	18,734	-57.1		291	8.5	30	18,698	-55.7		303	15.0
60	27	19,681	-59.3		63	5.2	30	19,654	-56.6		324	10.1	29	19,691	-59.6		17	4.9	25	19,710	-56.6		308	6.0	30	19,683	-54.6		302	11.8
50	27	20,830	-56.7		77	6.8	30	20,812	-55.9		351	7.4	29	20,836	-57.7		47	5.4	24	20,866	-55.[illegible]		322	5.1	30	20,852	-53.4		300	7.0
40	26	22,256	-54.3		87	10.3	30	22,236	-54.4		346	7.2	29	22,249	-55.6		21	3.9	24	22,289	-54.9		353	5.6	30	22,294	-51.6		286	6.4
30	25	24,108	-51.2		82	14.6	30	24,084	-52.8		348	7.2	29	24,095	-52.3		357	2.5	23	24,130	-53.2		352	6.6	30	24,172	-48.7		263	7.8
25	25	25,299	-48.9		78	14.0	29	25,263	-51.2		327	6.6	29	25,279	-50.3		13	1.6	23	25,307	-51.9		9	8.2	29	25,373	-46.9		258	11.1
20	20	26,777	-46.2		80	15.7	28	26,720	-49.1		317	8.2	29	26,741	-48.4		188	.8	23	26,759	-49.8		353	6.4	28	26,862	-45.0		256	12.4
15	15	28,680	-44.1		87	13.2	27	28,623	-46.0		292	10.1	29	28,643	-45.9		218	1.2	22	28,668	-46.2		319	6.6	25	28,779	-43.3		259	11.8
10							25	31,351	-42.0		275	13.4	29	31,362	-42.5		253	3.5	21	31,382	-42.1		271	11.1	20	31,505	-40.1		269	12.4
7							16	33,708	-38.1		262	18.5	25	33,791	-38.1		244	2.9	11	33,703	-39.5		269	18.[illegible]	7	33,850	-37.5			
5							11	36,016	-34.3				5	36,160	-34.0				6	36,024	-35.0									

Standard pressure surface (mb.)	GREENSBORO, N. C. 983 MB						GUAM, MARIANA IS. 997 MB						HILO, HAWAII 1014 MB						HUNTINGTON, W. VA. 986 MB						* INTERNAT. FALLS, MINN. 973 MB					
SURFACE	30	273	16.0	91	341	1.4	30	111	24.9	94	233	1.9	30	11	22.2	87	227	4.9	30	246	14.8	92	124	.4	30	360	7.3	87	270	2.5
1000	30	129					30	88					30	133	22.9	82	228	3.7	30	129					30	134				
950	30	568	18.1	68	342	3.1	30	541	23.6	87	243	6.8	30	586	19.4	90	100	4.5	30	564	15.9	72	348	1.0	30	561	11.2	74	270	6.2
900	30	1,031	15.9	63	311	3.9	30	1,011	21.1	82	251	7.0	30	1,043	16.4	90	86	6.8	30	1,024	13.4	72	284	4.5	30	1,010	9.4	69	290	10.5
850	30	1,515	13.2	62	287	5.8	30	1,505	18.6	79	262	6.4	30	1,529	13.6	89	83	5.2	30	1,503	10.8	69	279	7.6	30	1,482	6.6	64	300	11.8
800	30	2,023	10.5	57	281	9.1	30	2,025	16.0	75	242	5.4	30	2,039	11.5	74	95	4.5	30	2,007	8.4	68	274	10.3	30	1,978	4.3	50	302	13.2
750	30	2,556	7.9	57	277	13.4	30	2,569	13.1	73	231	4.1	30	2,586	10.1	51	99	5.1	30	2,538	5.7	63	274	15.0	30	2,494	1.9	45	305	15.2
700	30	3,125	4.9	54	270	16.3	30	3,150	9.9	72	195	3.3	30	3,151	8.5	40	96	4.5	30	3,101	3.1	51	273	16.9	30	3,055	- .9	41	308	17.1
650	30	3,727	1.7	45	268	18.1	30	3,761	6.6	70	187	4.[illegible]	30	3,764	5.7	34	98	4.3	30	3,696	.0	52	276	18.6	30	3,637	- 4.2	43	312	18.8
600	30	4,368	- 1.3	37	270	21.4	30	4,417	2.8	71	169	5.4	30	4,411	2.4	33	116	4.3	30	4,336	- 3.2	44	274	21.4	30	4,270	- 7.6	38	314	22.3
550	30	5,055	- 5.3	38	269	23.3	30	5,114	- 1.3	71	150	4.1	30	5,105	- 1.6	34	116	2.5	30	5,016	- 7.0	37	276	22.7	30	4,937	-11.5	37	315	26.2
500	30	5,800	- 9.[illegible]	33	266	25.4	30	5,872	- 5.7	76	124	4.9	30	5,863	- 6.3	29	191	2.1	30	5,758	-11.6	36	273	25.8	30	5,667	-15.8	36	316	31.1
450	30	6,604	-15.3	35	265	28.2	30	6,688	-10.3	65	107	6.8	30	6,677	-11.9	30	221	6.0	30	6,556	-16.9	32	269	27.8	30	6,441	-21.5	34	313	29.5
400	30	7,485	-21.6	34	263	29.9	30	7,591	-15.7	64	100	8.7	30	7,570	-18.5	35	235	[illegible].7	30	7,434	-22.9	31	269	30.1	30	7,310	-27.8	34	315	34.8
350	30	8,455	-28.7	34	262	35.0	30	8,585	-22.4	50	85	9.5	30	8,551	-26.0	32	236	13.6	30	8,399	-30.0	30	270	35.2	30	8,256	-34.8	31	312	38.1
300	30	9,542	-36.6	32	262	39.6	30	9,699	-30.7	45	73	13.0	30	9,648	-34.3	29	240	18.5	30	9,478	-38.4	32	269	37.7	30	9,314	-42.8	29	310	40.6
250	30	10,781	-45.6		263	44.7	30	10,967	-41.0		62	17.9	30	10,898	-43.8		248	24.3	30	10,708	-47.3		272	42.7	30	10,521	-50.9		312	42.2
200	30	12,239	-54.3		265	50.1	30	12,443	-53.4		56	22.9	30	12,361	-54.9		253	28.4	30	12,157	-55.2		269	48.4	30	11,953	-56.2		307	41.4
175	30	13,087	-58.3		267	49.7	30	13,288	-60.7		54	27.6	30	13,202	-61.0		245	27.0	30	13,005	-57.3		271	46.8	30	12,802	-55.3		306	39.4
150	30	14,048	-61.6		270	42.7	30	14,229	-68.5		53	29.3	30	14,146	-66.8		242	24.3	30	13,974	-59.6		273	41.0	30	13,785	-55.9		305	37.1
125	30	15,171	-64.0		267	32.4	30	15,300	-76.5		63	30.5	30	15,235	-71.2		232	12.2	30	15,108	-61.6		275	32.[illegible]	30	14,945	-55.8		303	33.0
100	30	16,537	-63.4		272	21.6	18	16,567	-78.9		81	28.6	29	16,547	-73.3		113	4.5	30	16,492	-61.0		276	22.3	30	16,364	-56.1		303	27.0
80	30	17,913	-61.0		279	12.8	13	17,847	-72.9		97	30.3	29	17,866	-69.4		94	16.1	30	17,881	-59.5		279	15.5	30	17,785	-55.1		307	20.8
70	29	18,743	-59.2		279	8.0	11	18,641	-67.9		102	22.9	29	18,667	-66.5		91	20.0	30	18,719	-58.1		282	9.9	30	18,637	-54.8		310	17.5
60	29	19,715	-56.3		278	4.1	9	19,575	-65.0				29	19,607	-63.0		92	23.5	30	19,695	-56.1		279	7.2	30	19,624	-54.6		316	14.8
50	29	20,879	-54.4		276	2.9	9	20,697	-60.4				29	20,738	-59.5		87	25.1	30	20,859	-54.2		268	3.5	29	20,801	-53.9		320	11.7
40	29	22,313	-52.7		104	3.3	9	22,101	-56.5				29	22,144	-56.8		88	27.6	30	22,298	-51.6		249	2.1	29	22,237	-52.8		320	8.7
30	29	24,183	-49.6		96	6.2	9	23,934	-54.3				29	23,983	-52.8		93	28.4	28	24,174	-49.4		70	1.6	29	24,101	-50.8		305	6.6
25	28	25,376	-47.6		100	6.6	[illegible]	25,111	-51.3				29	25,166	-50.4		91	29.1	26	25,374	-47.8		96	3.3	29	25,292	-49.4		289	6.6
20	23	26,851	-45.5		97	4.1	7	26,576	-48.2				28	26,633	-47.9		92	33.[illegible]	24	26,843	-45.9		101	2.3	29	26,761	-47.2		273	10.7
15	15	28,750	-44.3		96	5.8							19	28,544	-43.9		97	35.0	19	28,746	-43.8		214	1.7	29	28,677	-44.1		264	14.2
10																			5	31,467	-41.1				21	31,413	-40.1		257	16.3
7																									6	33,860	-36.1			

Standard pressure surface (mb.)	JACKSON, MISS. 1003 MB						* JACKSONVILLE, FLA. 1015 MB						JOHN F. KENNEDY INT. ARPT.NY 1014 MB						JOHNSTON IS., PACIFIC AREA 1013 MB						KEY WEST, FLORIDA 1014 MB					
SURFACE	30	94	19.7	92	174	.4	30	5	22.0	91	260	1.9	30	5	16.2	77	337	3.9	30	3	26.8	78	97	11.5	22	3	27.5	80	160	4.9
1000	30	122			126	1.2	30	135	22.4	86	267	2.7	30	124	15.7	73	343	4.1	30	121	25.7	81	93	12.6	22	127	26.5	82	154	6.0
950	30	567	20.2	76	266	3.1	30	587	21.1	76	276	4.3	30	561	14.1	68	348	6.0	30	575	21.9	90	89	14.0	22	577	22.8	88	146	6.6
900	30	1,033	17.8	75	279	5.4	30	1,050	18.5	73	249	5.4	30	1,014	11.8	65	325	4.5	30	1,041	19.2	80	87	14.4	22	1,049	19.9	78	157	6.8
850	30	1,520	14.7	75	274	7.0	30	1,539	15.7	69	248	7.4	30	1,491	9.6	60	287	6.8	30	1,532	16.5	75	87	12.8	22	1,540	17.3	71	170	7.4
800	30	2,031	12.0	68	272	9.5	30	2,052	13.0	60	244	11.1	30	1,993	7.1	57	281	11.1	30	2,047	14.4	66	89	11.7	22	2,056	14.2	69	176	6.2
750	30	2,571	9.3	61	276	10.5	30	2,593	10.5	52	247	12.6	30	2,523	4.7	52	277	15.5	30	2,590	11.9	53	88	9.3	22	2,594	11.1	64	190	6.0
700	30	3,139	6.5	51	279	11.8	30	3,164	7.3	53	248	15.3	30	3,082	2.0	48	273	18.3	30	3,166	9.4	39	92	[illegible].2	22	3,172	8.3	58	202	4.3
650	30	3,743	3.2	45	284	12.4	30	3,768	4.1	48	249	16.3	30	3,677	- .7	45	272	20.6	30	3,778	[illegible].0	34	91	7.4	22	3,779	5.2	53	206	5.6
600	30	4,389	- .2	37	280	13.0	30	4,419	.7	45	258	15.3	30	4,313	- 4.0	48	269	23.9	30	4,428	2.4	29	86	8.0	22	4,431	1.5	52	211	6.6
550	30	5,077	- 4.0	35	280	14.0	30	5,100	- 3.2	42	255	18.1	30	4,992	- 8.0	45	266	26.6	30	5,118	- 1.9	30	101	5.4	22	5,117	- 2.7	49	215	5.8
500	30	5,826	- 8.5	28	281	16.5	30	5,861	- 8.0	39	257	20.0	30	5,731	-12.6	41	268	29.9	30	5,877	- 6.7	35	93	5.2	22	5,876	- 7.3	49	226	7.8
450	30	6,630	-13.8	29	282	18.1	30	6,668	-13.0	38	255	22.9	30	6,528	-17.7	43	265	35.5	30	6,686	-11.7	33	104	3.3	22	6,682	-12.5	48	228	7.2
400	30	7,521	-20.1	29	279	21.4	30	7,560	-18.9	38	255	25.1	30	7,401	-23.5	37	266	40.2	30	7,585	-17.7	32	30	1.4	22	7,580	-18.1	43	220	7.8
350	30	8,497	-27.2	27	278	25.1	30	8,541	-25.9	36	253	28.2	30	8,363	-30.8	36	267	45.1	30	8,571	-24.8	33	299	3.9	22	8,564	-24.8	36	223	9.7
300	30	9,589	-35.5	29	281	28.0	30	9,640	-34.1	30	253	32.4	30	9,440	-39.0	34	267	46.[illegible]	30	9,673	-33.4	34	272	7.6	22	9,666	-33.0	27	238	10.1
250	30	10,833	-45.0		279	31.5	30	10,891	-43.7		254	36.9	30	10,666	-48.1		264	49.7	30	10,927	-43.3		260	13.0	22	10,923	-43.0		245	11.5
200	30	12,291	-54.8		274	32.4	30	12,356	-54.4		255	41.8	30	12,112	-54.6		264	59.1	30	12,390	-55.4		261	19.8	22	12,387	-55.0		250	11.8
175	30	13,136	-59.2		273	29.9	30	13,201	-60.1		256	41.8	30	12,963	-56.2		263	55.6	30	13,229	-62.0		266	19.6	22	13,227	-61.5		261	10.7
150	30	14,091	-63.5		278	29.5	30	14,150	-65.4		256	34.4	30	13,938	-58.1		266	47.2	30	14,168	-68.0		266	16.3	22	14,168	-67.7		266	11.1
125	30	15,201	-66.6		283	23.5	30	15,250	-68.6		264	25.6	30	15,081	-59.4		267	39.0	30	15,250	-72.2		260	8.0	22	15,249	-72.9		266	7.6
100	29	16,542	-67.2		289	13.8	30	16,583	-68.0		262	13.8	30	16,475	-58.6		267	32.2	29	16,557	-73.6		61	6.2	22	16,559	-71.5		32	2.7
80	29	17,897	-63.9		309	4.3	30	17,936	-64.0		285	4.7	29	17,880	-57.4		268	23.9	29	17,869	-70.5		82	16.9	22	17,893	-67.2		73	9.9
70	29	18,720	-61.0		334	2.5	30	18,758	-61.2		59	1.9	29	18,727	-55.6		267	18.8	28	18,668	-67.0		89	21.2	22	18,702	-64.7		73	13.4
60	29	19,683	-58.5		84	3.7	30	19,721	-58.[illegible]		84	8.5	29	19,712	-54.5		264	11.7	25	19,601	-63.8		90	22.9	22	19,649	-62.0		82	21.4
50	29	20,834	-56.3		94	6.8	29	20,869	-56.4		90	12.4	29	20,884	-52.8		268	7.2	24	20,731	-59.9		92	22.7	21	20,787	-58.4		85	25.1
40	29	22,259	-53.8		84	12.4	28	22,290	-54.1		89	16.3	29	22,330	-50.9		272	4.1	24	22,136	-56.8		91	23.1	21	22,201	-55.6		87	27.2
30	28	24,118	-51.1		89	14.6	27	24,149	-51.0		90	19.2	28	24,206	-48.6		220	.8	23	23,975	-53.1		90	25.6	20	24,049	-51.9		82	27.0
25	28	25,308	-49.0		91	16.1	27	25,339	-49.1		89	19.8	25	25,393	-47.5		147	.4	21	25,155	-51.4		90	27.8	20	25,239	-49.0		85	26.6
20	28	26,780	-46.6		86	16.3	27	26,810	-46.6		84	20.2	22	26,871	-45.9		213	.8	19	26,618	-47.9		95	32.8	20	26,715	-46.1		88	26.4
15	26	28,696	-44.1		85	16.7	23	28,729	-43.4		76	19.2	17	28,786	-43.7				11	28,543	-45.5				19	28,643	-43.0		81	27.8
10	16	31,416	-40.7		49	8.4	5	31,428	-40.8																17	31,396	-39.8		87	30.1
7	8	33,776	-37.6																						12	33,877	-35.5		99	21.2
5																									5	36,192	-33.3			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1966

Standard pressure surface (mb.)	KING SALMON, ALASKA 998 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	15	6.4	92	87	2.9
1000	29				157	1.7
950	29	424	6.8	79	105	5.8
900	29	865	4.1	83	103	6.2
850	29	1,328	1.2	83	112	7.4
800	29	1,814	- 1.2	79	127	8.4
750	29	2,327	- 3.9	75	135	8.2
700	29	2,868	- 7.1	73	130	7.0
650	29	3,442	-10.3	64	126	7.4
600	29	4,056	-14.0	63	122	5.8
550	29	4,707	-18.3	61	106	5.1
500	29	5,417	-23.0	61	101	4.1
450	29	6,174	-28.2	54	103	4.3
400	29	7,016	-34.2	50	103	3.3
350	29	7,937	-40.8	53	91	1.9
300	29	8,971	-46.9		313	1.9
250	29	10,169	-50.2		246	3.3
200	29	11,626	-49.4		255	7.0
175	29	12,502	-48.7		238	8.4
150	29	13,515	-48.9		236	8.9
125	29	14,711	-49.4		253	10.3
100	29	16,174	-49.1		244	8.4
80	28	17,637	-49.8		235	10.9
70	28	18,510	-50.0		233	11.1
60	27	19,521	-50.2		236	11.7
50	26	20,714	-50.4		244	10.7
40	25	22,173	-50.3		238	11.5
30	24	24,053	-49.9		244	11.5
25	21	25,251	-49.3		249	11.7
20	20	26,716	-48.7		251	12.2
15	8	28,617	-47.5			
10						
7						

Standard pressure surface (mb.)	+ KOROR, CAROLINE IS. 1008 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	30	28.4	78	204	3.1
1000	30	96	27.7	78	202	4.3
950	30	547	23.9	78	216	8.0
900	30	1,022	21.2	71	218	8.5
850	30	1,516	18.3	66	225	7.0
800	30	2,033	15.3	61	225	6.2
750	30	2,577	12.5	57	223	5.1
700	30	3,155	9.3	56	211	3.5
650	30	3,767	6.0	51	208	1.7
600	30	4,419	2.3	50	160	3.5
550	30	5,114	- 1.6	46	115	4.7
500	30	5,871	- 5.9	42	114	7.0
450	30	6,686	-10.7	41	104	10.1
400	30	7,587	-16.0	37	104	12.8
350	30	8,579	-22.8	35	96	17.3
300	30	9,691	-31.2	33	82	22.5
250	30	10,956	-41.2		69	28.6
200	30	12,430	-53.8		66	35.5
175	30	13,274	-61.0		67	41.8
150	30	14,214	-68.3		70	47.8
125	30	15,290	-74.7		78	42.9
100	30	16,577	-75.5		85	26.6
80	29	17,879	-70.2		85	21.8
70	29	18,681	-65.7		88	16.1
60	29	19,625	-62.1		86	12.2
50	29	20,758	-59.3		81	8.0
40	28	22,165	-55.6		72	2.5
30	28	24,009	-52.6		90	4.7
25	28	25,192	-50.3		108	5.1
20	26	26,654	-47.6		101	6.0
15	26	28,563	-45.1		103	15.2
10	25	31,294	-40.7		98	31.7
7	16	33,722	-37.7			

Standard pressure surface (mb.)	KOTZEBUE, ALASKA 1004 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	5.5	84	87	1.9
1000	30	36			186	1.6
950	30	454	4.2	76	139	3.5
900	30	893	1.8	78	181	3.5
850	30	1,353	- .4	73	187	4.7
800	30	1,836	- 2.5	72	182	5.2
750	30	2,344	- 5.4	74	189	5.6
700	30	2,885	- 8.5	74	193	5.8
650	30	3,454	-11.9	67	202	6.2
600	30	4,065	-15.7	67	197	6.0
550	30	4,715	-19.6	58	205	6.2
500	30	5,417	-24.5	58	211	6.0
450	30	6,176	-29.4	55	218	7.8
400	30	7,007	-35.5	50	231	9.3
350	30	7,924	-42.3	53	243	10.1
300	30	8,950	-49.5		250	11.8
250	30	10,128	-54.5		253	12.2
200	30	11,569	-51.1		252	13.0
175	30	12,440	-49.9		250	10.9
150	30	13,448	-49.5		243	11.3
125	30	14,642	-49.7		241	10.5
100	30	16,101	-50.0		239	9.7
80	30	17,558	-50.3		237	10.1
70	30	18,427	-50.7		242	9.1
60	30	19,431	-51.2		240	10.7
50	29	20,616	-51.7		243	11.5
40	29	22,061	-52.1		246	12.2
30	27	23,926	-52.0		254	15.0
25	26	25,111	-51.7		260	15.5
20	23	26,560	-51.1		258	17.1
15	20	28,445	-49.9		264	20.6
10	8	31,024	-49.6			
7						

Standard pressure surface (mb.)	KWAJALEIN, MARSHALL IS. 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	27.5	82	116	1.9
1000	30	103	26.9	83	117	2.5
950	30	556	23.6	90	120	3.9
900	30	1,028	20.7	89	117	4.9
850	30	1,521	17.8	85	108	5.8
800	30	2,038	15.3	81	99	7.0
750	30	2,584	12.5	72	91	7.4
700	30	3,163	9.5	70	87	7.8
650	30	3,772	6.0	68	91	10.5
600	30	4,424	2.2	68	93	11.8
550	30	5,122	- 1.5	61	91	13.0
500	30	5,880	- 5.6	59	87	12.4
450	30	6,693	-10.4	46	88	12.0
400	30	7,597	-15.9	42	88	12.4
350	30	8,584	-23.0	43	86	11.3
300	30	9,701	-31.5	43	81	10.3
250	30	10,963	-41.9		92	9.3
200	30	12,432	-54.4		61	8.2
175	30	13,268	-61.3		47	6.0
150	30	14,212	-69.2		43	5.1
125	29	15,274	-76.1		71	4.3
100	28	16,559	-77.1		81	16.5
80	25	17,850	-72.2		91	17.3
70	25	18,647	-67.4		91	14.[illegible]
60	22	19,581	-63.6		75	14.6
50	22	20,718	-59.5		87	8.7
40	21	22,119	-57.0		80	6.4
30	21	23,960	-54.1		70	7.2
25	21	25,134	-51.5		89	9.9
20	21	26,591	-48.8		90	12.8
15	21	28,493	-45.6		89	22.9
10	17	31,230	-41.7		93	37.7
7	13	33,669	-36.8			

Standard pressure surface (mb.)	LAKE CHARLES, LA. 1013 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	20.8	91	44	2.5
1000	30	122	22.7	84	48	2.5
950	30	571	21.0	77	291	.6
900	30	1,036	18.0	78	244	1.9
850	30	1,525	15.6	66	274	2.9
800	30	2,037	12.9	59	282	4.1
750	30	2,576	10.3	56	282	5.8
700	30	3,150	7.2	53	283	6.2
650	30	3,757	4.0	48	285	8.2
600	30	4,404	.8	45	285	10.3
550	30	5,096	- 3.2	40	285	11.7
500	30	5,848	- 7.7	38	291	12.6
450	29	6,658	-13.2	36	293	13.0
400	29	7,547	-19.6	34	285	13.8
350	29	8,524	-27.1	35	280	16.9
300	29	9,618	-35.3	32	282	18.5
250	29	10,864	-44.4		280	24.1
200	29	12,425	-54.7		281	26.6
175	29	13,171	-59.4		278	28.2
150	29	14,125	-64.1		282	26.4
125	29	15,229	-68.4		283	21.0
100	29	16,562	-69.3		299	11.7
80	29	17,906	-65.1		355	5.2
70	29	18,725	-62.1		60	5.6
60	29	19,683	-60.0		79	9.3
50	28	20,829	-57.5		85	11.8
40	28	22,248	-54.4		89	16.5
30	28	24,103	-51.3		87	19.6
25	28	25,293	-49.3		85	22.3
20	26	26,765	-46.2		88	21.4
15	20	28,686	-43.4		81	18.8
10	9	31,428	-40.0			
7						

Standard pressure surface (mb.)	LANDER, WYO. 832 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,696	11.5	59	252	2.7
1000	30	123				
950	30	564				
900	30	1,027				
850	30	1,512				
800	30	2,023	13.9	47	264	1.7
750	30	2,557	10.8	49	280	3.9
700	30	3,136	7.0	50	276	6.0
650	30	3,736	2.6	53	272	9.9
600	30	4,384	- 2.0	54	273	13.2
550	30	5,062	- 6.7	45	283	13.6
500	30	5,808	-11.7	40	287	14.8
450	30	6,600	-17.0	34	289	15.5
400	30	7,482	-23.3	31	284	17.7
350	30	8,444	-30.9	30	279	20.2
300	30	9,518	-39.8	30	275	24.5
250	30	10,740	-48.7		279	25.4
200	29	12,177	-56.1		284	26.6
175	29	13,023	-57.5		280	27.8
150	29	13,994	-58.8		283	24.7
125	29	15,133	-60.9		283	20.0
100	29	16,517	-61.7		282	11.5
80	29	17,902	-60.4		300	7.8
70	29	18,735	-59.3		309	5.8
60	29	19,703	-58.3		338	4.9
50	29	20,852	-57.3		1	5.2
40	29	22,270	-55.0		1	5.4
30	29	24,120	-52.1		357	5.6
25	29	25,304	-50.4		315	4.9
20	26	26,761	-48.2		283	6.0
15	19	28,648	-45.3		270	8.5
10						
7						
5						

Standard pressure surface (mb.)	LAS VEGAS, NEV. 936 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	660	21.4	35	239	3.7
1000	30	82				
950	30	533				
900	30	1,005	24.5	32	231	2.1
850	30	1,503	21.5	32	214	2.9
800	30	2,024	17.6	37	193	7.8
750	30	2,562	13.2	40	183	10.5
700	30	3,147	8.8	42	179	11.7
650	30	3,747	3.9	46	179	12.4
600	30	4,400	- .7	41	182	11.1
550	30	5,079	- 5.1	34	195	10.3
500	30	5,832	- 9.4	31	227	9.5
450	30	6,633	-15.2	29	238	12.2
400	30	7,517	-21.8	27	242	15.0
350	30	8,485	-29.3	28	244	17.1
300	30	9,566	-37.9	28	249	20.6
250	30	10,798	-46.5		255	27.8
200	30	12,254	-53.4		253	33.0
175	30	13,108	-56.6		257	30.9
150	30	14,077	-60.3		253	26.6
125	30	15,205	-63.6		258	21.6
100	30	16,566	-65.2		256	12.4
80	29	17,936	-62.5		244	1.2
70	29	18,762	-61.0		79	1.9
60	29	19,723	-59.2		82	5.2
50	28	20,871	-57.0		68	7.6
40	28	22,291	-54.8		72	6.4
30	28	24,144	-51.8		75	6.6
25	28	25,331	-49.7		77	7.8
20	27	26,797	-47.8		94	5.1
15	20	28,702	-45.4		130	2.7
10	7	31,363	-42.9			
7						
5						

Standard pressure surface (mb.)	■ LIHUE, HAWAII 1012 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	36	24.0	85	67	6.6
1000	30	139	23.8	81	67	8.9
950	30	580	20.4	88	69	10.7
900	30	1,052	17.1	86	73	10.5
850	30	1,538	14.0	80	74	9.3
800	30	2,049	12.1	60	85	8.2
750	30	2,586	11.8	27	89	6.6
700	30	3,164	9.2	23	79	4.9
650	30	3,767	5.8	23	80	3.5
600	30	4,424	2.2	29	69	1.2
550	30	5,111	- 2.4	26	285	2.1
500	30	5,869	- 7.6	28	260	4.1
450	30	6,675	-13.3	30	254	6.6
400	30	7,568	-19.4	31	252	9.9
350	30	8,547	-26.5	31	254	14.0
300	30	9,642	-34.8	30	252	17.5
250	30	10,889	-44.2		260	25.1
200	30	12,349	-55.3		256	29.7
175	30	13,190	-60.7		251	26.8
150	30	14,138	-65.7		244	21.6
125	30	15,234	-69.2		239	10.9
100	29	16,560	-71.6		130	4.1
80	28	17,884	-68.9		87	13.8
70	26	18,688	-65.8		90	17.9
60	26	19,630	-62.8		88	22.3
50	26	20,760	-59.6		89	24.9
40	25	22,161	-57.1		87	28.4
30	25	23,996	-53.4		93	29.1
25	25	25,175	-50.9		89	28.9
20	24	26,635	-48.3		90	31.9
15	24	28,546	-44.4		91	30.5
10	22	31,277	-41.1		87	32.8
7	21	33,724	-36.8		91	26.2
5	11	36,052	-34.5			

Standard pressure surface (mb.)	LITTLE ROCK, ARK. 1005 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	79	17.7	87	319	2.1
1000	30	126	18.3	82	347	2.1
950	30	567	19.0	71	321	2.1
900	30	1,030	16.5	71	284	4.5
850	30	1,516	13.9	67	291	7.6
800	30	2,026	11.6	60	300	7.8
750	30	2,562	9.2	54	299	8.4
700	30	3,134	6.0	54	305	9.7
650	30	3,733	2.6	48	297	10.7
600	30	4,382	- 1.1	44	291	12.2
550	30	5,064	- 5.1	44	288	14.4
500	30	5,814	- 9.6	36	289	15.2
450	30	6,610	-15.0	35	285	18.6
400	30	7,501	-21.4	33	292	21.6
350	30	8,472	-28.4	33	289	24.9
300	30	9,559	-36.6	34	289	30.1
250	30	10,798	-45.6		287	36.9
200	30	12,254	-54.7		288	38.7
175	30	13,101	-58.2		287	35.2
150	29	14,061	-62.1		285	32.6
125	29	15,178	-65.3		287	27.2
100	29	16,533	-65.8		293	18.[illegible]
80	28	17,897	-63.0		300	8.9
70	28	18,722	-60.8		318	6.4
60	28	19,697	-58.2		10	3.7
50	27	20,838	-55.3		106	.8
40	27	22,269	-53.0		79	2.7
30	26	24,128	-50.6		79	6.4
25	26	25,320	-48.8		79	7.6
20	25	26,784	-47.2		70	9.7
15	21	28,702	-44.4		89	7.8
10	6	31,468	-39.5			
7						
5						

Standard pressure surface (mb.)	MCGRATH, ALASKA 991 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	103	4.4	84	302	1.4
1000	30	30				
950	30	450	7.0	68	82	2.5
900	30	895	5.2	67	133	7.0
850	30	1,359	2.3	70	152	8.4
800	30	1,847	- .9	72	160	7.8
750	30	2,358	- 4.0	71	163	7.0
700	30	2,901	- 7.1	66	169	7.0
650	30	3,471	-10.4	61	178	7.6
600	30	4,088	-14.4	58	163	6.6
550	30	4,737	-18.9	56	164	6.6
500	30	5,446	-23.8	49	164	6.8
450	30	6,200	-29.1	49	182	6.4
400	30	7,042	-34.8	49	181	3.5
350	30	7,961	-41.3	50	192	3.5
300	30	8,993	-48.1		257	3.3
250	30	10,181	-52.2		258	8.4
200	30	11,629	-50.2		235	7.8
175	30	12,504	-49.1		245	8.5
150	30	13,516	-49.0		235	9.1
125	30	14,714	-48.8		236	10.3
100	30	16,179	-49.2		234	9.3
80	30	17,641	-49.6		235	10.3
70	30	18,515	-49.7		235	10.7
60	30	19,523	-50.0		235	11.1
50	30	20,714	-50.2		238	11.8
40	30	22,170	-50.4		241	12.6
30	30	24,046	-50.5		251	13.8
25	28	25,232	-50.3		251	15.9
20	26	26,689	-49.8		260	18.3
15	23	28,566	-49.2		262	21.2
10	8	31,230	-47.4			
7						
5						

Standard pressure surface (mb.)	+ MAJURO, MARSHALL IS. 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	28.7	79	69	1.7
1000	30	100	27.3	75	98	2.3
950	30	547	23.3	75	111	3.9
900	30	1,024	20.3	72	110	5.4
850	30	1,517	17.6	69	104	7.8
800	30	2,034	14.8	66	96	7.8
750	30	2,580	12.2	60	95	8.2
700	30	3,155	9.3	51	92	10.7
650	30	3,766	5.8	52	91	11.8
600	30	4,418	2.1	50	91	12.8
550	29	5,114	- 1.3	46	88	12.6
500	28	5,873	- 5.6	40	87	13.2
450	28	6,694	-10.3	35	90	13.2
400	28	7,594	-15.6	30	83	12.6
350	28	8,589	-22.2	27	87	13.4
300	28	9,705	-30.3	25	83	13.0
250	28	10,976	-40.4	25	79	11.1
200	28	12,457	-53.2		68	8.9
175	28	13,304	-60.2		66	9.7
150	28	14,250	-67.6		80	8.9
125	28	15,328	-74.7		84	5.2
100	28	16,614	-76.0		87	13.6
80	28	17,925	-69.7		86	17.7
70	28	18,726	-66.2		91	14.6
60	28	19,673	-60.9		95	8.4
50	26	20,815	-58.6		82	1.6
40	26	22,225	-55.8		83	2.5
30	26	24,074	-51.6		145	2.1
25	26	25,265	-49.0		165	4.1
20	26	26,737	-46.8		120	6.0
15	25	28,653	-43.9		101	10.1
10	9	31,422	-40.3			
7						

Standard pressure surface (mb.)	+ MARCUS IS., N. PACIFIC 1010 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	9	29.5	77	119	5.8
1000	30	99	27.9	73	119	7.0
950	30	551	23.9	71	123	8.4
900	30	1,024	21.1	64	128	8.5
850	30	1,518	18.5	59	122	8.0
800	30	2,037	15.8	53	124	7.8
750	30	2,581	13.2	48	125	9.1
700	30	3,161	10.1	44	124	8.7
650	30	3,772	6.7	43	127	8.4
600	30	4,428	3.0	42	134	8.2
550	30	5,122	- .8	40	129	7.2
500	30	5,884	- 5.0	38	118	5.8
450	30	6,698	- 9.8	35	119	7.4
400	30	7,605	-15.5	33	115	6.2
350	30	8,600	-22.1	28	98	3.7
300	30	9,715	-30.6	26	91	1.9
250	30	10,982	-40.8	28	49	2.5
200	29	12,465	-52.6		5	5.4
175	29	13,315	-58.9		40	7.2
150	29	14,268	-65.1		47	12.8
125	29	15,361	-71.3		67	18.1
100	29	16,669	-73.5		84	22.7
80	29	17,985	-69.6		85	24.1
70	29	18,787	-65.9		84	24.5
60	29	19,729	-62.8		90	27.4
50	29	20,863	-59.4		94	29.9
40	29	22,275	-55.2		90	30.3
30	27	24,128	-51.6		91	31.7
25	25	25,315	-49.1		94	35.4
20	16	26,788	-46.4		99	34.0
15	9	28,691	-42.9			
10	[illegible]	31,411	-38.8			
7	5	33,853	-35.2			

Standard pressure surface (mb.)	■ MEDFORD, OREG. 970 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	401	11.3	81	196	.8
1000	30	141				
950	30	576	14.0	69	279	1.2
900	30	1,030	13.9	67	333	1.0
850	30	1,511	12.4	57	125	2.3
800	30	2,018	10.2	52	213	2.3
750	30	2,551	7.6	46	222	4.3
700	30	3,118	4.6	39	222	6.0
650	30	3,717	1.0	38	228	6.8
600	30	4,358	- 3.0	37	230	8.4
550	30	5,038	- 7.5	34	235	10.7
500	30	5,777	-12.3	34	235	11.7
450	30	6,567	-17.9	34	235	13.4
400	30	7,444	-24.5	36	241	14.0
350	30	8,403	-31.8	34	246	16.1
300	30	9,475	-39.9	33	250	16.9
250	30	10,698	-48.3		257	16.3
200	30	12,142	-55.4		269	18.3
175	30	12,990	-56.8		268	18.6
150	30	13,963	-58.5		254	18.3
125	30	15,104	-60.1		251	15.2
100	29	16,495	-60.7		249	11.3
80	29	17,890	-59.0		242	7.2
70	29	18,728	-58.1		268	3.5
60	29	19,699	-57.4		323	.8
50	29	20,855	-56.4		46	2.5
40	28	22,280	-54.9		55	4.9
30	28	24,127	-53.0		41	5.8
25	28	25,308	-51.4		43	6.2
20	28	26,764	-49.6		20	6.2
15	26	28,664	-46.9		349	2.9
10	26	31,371	-43.6		269	7.0
7	12	33,838	-39.3			

Standard pressure surface (mb.)	MERIDA, MEXICO 1013 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	11	22.6	95	101	4.1
1000	30	126	23.9	94	115	8.5
950	30	578	23.3	82	134	14.2
900	30	1,049	21.0	70	136	13.4
850	30	1,543	18.2	64	136	12.2
800	30	2,061	15.1	59	145	10.7
750	30	2,600	11.9	60	139	10.3
700	30	3,180	8.8	55	141	10.3
650	30	3,787	5.3	59	140	8.9
600	30	4,441	1.6	60	133	8.7
550	30	5,125	- 2.4	56	127	7.6
500	30	5,890	- 6.6	50	121	7.2
450	30	6,700	-11.8	53	108	5.8
400	30	7,600	-17.2	40	102	5.2
350	30	8,587	-24.1	33	90	2.3
300	30	9,692	-32.3	29	206	1.0
250	30	10,951	-42.2		277	5.4
200	30	12,420	-54.1		281	8.0
175	30	13,263	-60.7		296	7.4
150	30	14,206	-67.1		338	9.1
125	30	15,289	-72.8		22	10.3
100	30	16,588	-73.5		57	13.4
80	30	17,915	-67.7		88	16.1
70	30	18,721	-65.6		94	18.1
60	30	19,664	-62.5		90	21.4
50	29	20,802	-58.5		91	25.8
40	27	22,217	-54.8		89	26.6
30	27	24,069	-52.1		91	29.3
25	20	25,250	-48.9		94	28.9
20	13	26,717	-45.3		94	27.2
15						
10						
7						

Standard pressure surface (mb.)	• MIAMI, FLA. 1014 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	24.4	94	261	.6
1000	30	125	26.0	87	154	1.4
950	30	580	22.9	85	166	6.6
900	30	1,048	20.3	75	188	6.0
850	30	1,540	17.3	73	203	6.4
800	30	2,057	14.4	70	207	6.4
750	30	2,597	11.3	66	207	7.2
700	30	3,175	8.3	59	221	7.2
650	30	3,785	5.1	54	230	8.5
600	30	4,435	1.4	50	230	10.1
550	30	5,122	- 2.7	52	236	10.9
500	30	5,881	- 7.1	44	250	11.1
450	30	6,691	-12.1	44	241	11.5
400	30	7,587	-18.1	43	233	11.3
350	30	8,572	-24.8	36	236	13.2
300	30	9,676	-33.0	31	241	13.6
250	29	10,932	-43.1		244	15.3
200	29	12,398	-54.9		254	15.7
175	29	13,238	-61.5		267	16.9
150	29	14,180	-67.8		273	14.4
125	29	15,261	-72.6		276	8.9
100	28	16,570	-71.7		44	2.5
80	26	17,904	-67.0		93	8.0
70	26	18,716	-63.8		83	13.2
60	24	19,664	-61.6		87	18.8
50	24	20,802	-58.2		[illegible]	24.9
40	24	22,216	-55.2		89	27.0
30	23	24,066	-51.6		92	27.8
25	23	25,254	-49.2		88	28.9
20	21	26,741	-45.7		87	29.9
15	15	28,694	-42.2		91	28.2
10	12	31,465	-38.7		91	26.2
7	7	33,936	-35.8			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1966

* MIDLAND, TEXAS 916 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	874	18.0	89	121	2.9
1000	30	115				
950	30	560				
900	30	1,026	19.0	78	158	5.1
850	30	1,519	18.3	70	206	[illegible].2
800	30	2,037	15.5	65	258	4.5
750	30	2,580	12.1	60	298	4.3
700	30	3,157	8.7	54	311	5.2
650	30	3,761	4.6	50	317	5.4
600	30	4,414	.4	44	316	5.4
550	30	5,102	- 3.5	36	315	7.2
500	30	5,855	- 7.9	36	297	9.9
450	30	6,660	-13.2	32	288	12.2
400	30	7,554	-19.4	31	289	14.8
350	30	8,533	-26.6	32	287	18.8
300	30	9,627	-35.1	38	284	23.1
250	30	10,873	-44.3		282	29.7
200	30	12,335	-54.4		284	36.3
175	30	13,182	-58.8		289	35.5
150	29	14,135	-63.9		292	30.9
125	29	15,240	-68.0		295	24.1
100	29	16,576	-68.7		302	12.0
80	29	17,918	-65.8		21	6.0
70	29	18,734	-62.9		53	6.6
60	28	19,687	-60.0		81	7.8
50	28	20,833	-57.2		90	9.5
40	28	22,249	-55.3		88	11.8
30	27	24,098	-51.8		85	14.8
25	26	25,284	-49.5		87	15.7
20	25	26,755	-46.8		90	16.7
15	23	28,677	-43.5		84	15.3
10	19	31,428	-40.3		84	14.2
7	8	33,876	-37.2			
5						

MONTERREY, MEXICO 966 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	423	20.9	91	272	.8
1000	29	116				
950	29	562	21.4	86	168	.4
900	29	1,032	20.2	80	128	5.2
850	29	1,525	18.4	71	134	8.7
800	29	2,044	15.5	63	129	6.6
750	29	2,587	12.7	51	116	3.7
700	29	3,166	9.1	47	52	2.5
650	29	3,771	5.1	52	345	4.1
600	29	4,426	1.0	56	332	4.9
550	29	5,110	- 2.9	51	332	3.7
500	29	5,871	- 7.2	35	327	3.5
450	29	6,681	-12.2	32	321	3.5
400	29	7,577	-18.2	31	288	4.5
350	29	8,561	-25.2	33	278	8.4
300	29	9,662	-33.6	28	288	13.0
250	29	10,916	-43.3		293	16.7
200	29	12,383	-54.2		291	20.4
175	29	13,228	-59.9		289	20.2
150	29	14,177	-66.1		294	17.3
125	29	15,266	-72.2		296	10.1
100	27	16,572	-73.8		330	6.0
80	24	17,891	-67.6		52	9.9
70	20	18,702	-64.3		77	13.6
60	18	19,647	-62.1		82	17.3
50	17	20,780	-58.5		87	21.0
40	17	22,191	-55.7		79	22.5
30	17	24,037	-51.9		79	26.0
25	16	25,225	-49.0		83	27.4
20	12	26,699	-46.6		77	27.4
15	5	28,571	-44.6			
10						
7						
5						

MONTGOMERY, ALA. 1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	61	19.6	90	338	1.0
1000	30	126	20.1	88	40	1.0
950	30	570	20.2	78	235	1.4
900	30	1,036	17.7	75	260	4.5
850	30	1,524	14.7	75	262	6.6
800	30	2,035	12.1	69	268	8.2
750	30	2,571	9.4	59	266	10.1
700	30	3,144	6.6	55	270	11.5
650	30	3,748	3.7	49	266	13.2
600	30	4,397	.2	47	269	13.8
550	30	5,085	- 3.8	44	266	15.9
500	30	5,836	- 8.3	36	264	18.6
450	30	6,643	-13.4	34	268	20.2
400	30	7,533	-19.6	30	268	21.8
350	30	8,511	-26.7	31	265	23.3
300	30	9,605	-34.9	30	264	25.8
250	30	10,853	-44.0		269	28.9
200	30	12,317	-54.2		263	31.9
175	30	13,163	-59.1		265	33.8
150	30	14,120	-63.4		269	30.1
125	30	15,230	-66.8		269	22.7
100	30	16,576	-66.8		275	14.6
80	29	17,937	-63.4		293	7.6
70	29	18,762	-60.7		300	2.9
60	29	19,727	-58.1		75	2.9
50	29	20,880	-55.7		81	7.2
40	29	22,311	-53.0		87	11.1
30	29	24,175	-50.2		87	13.0
25	29	25,370	-48.5		87	14.0
20	27	26,846	-46.3		85	14.8
15	27	28,770	-43.3		80	15.0
10	27	31,526	-38.7		78	13.8
7	22	33,993	-35.3		91	8.4
5	13	36,374	-31.3			

* NANTUCKET, MASS. 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	14	14.6	87	2	1.6
1000	30	116	14.9	78	2	1.4
950	30	547	13.3	67	289	3.3
900	30	1,003	11.2	62	283	5.2
850	30	1,479	9.0	56	271	8.9
800	30	1,979	6.7	52	268	13.0
750	30	2,504	4.2	48	268	15.9
700	30	3,066	1.6	42	268	20.4
650	30	3,655	- 1.2	41	268	22.5
600	30	4,295	- 4.6	33	268	27.0
550	30	4,968	- 8.3	32	265	28.2
500	30	5,709	-12.9	30	264	33.0
450	30	6,496	-18.3	30	264	37.7
400	30	7,375	-24.3	31	262	42.7
350	30	8,335	-31.1	25	261	47.8
300	30	9,410	-39.2	21	258	52.3
250	30	10,635	-48.0		257	58.7
200	30	12,082	-55.0		257	63.5
175	30	12,931	-57.2		259	60.8
150	30	13,903	-58.3		259	50.5
125	29	15,045	-59.6		259	44.3
100	29	16,441	-58.9		261	35.0
80	29	17,847	-56.7		264	20.6
70	29	18,694	-55.3		262	15.0
60	29	19,681	-54.0		256	12.0
50	29	20,855	-52.6		250	11.7
40	29	22,300	-51.1		250	8.4
30	28	24,175	-49.2		215	2.9
25	27	25,375	-47.7		117	2.9
20	25	26,856	-46.2		82	5.8
15	24	28,774	-43.7		79	6.4
10	21	31,496	-40.7		126	1.4
7	15	33,911	-36.5		331	3.3
5	[illegible]	36,326	-33.2			

* NASHVILLE, TENN. 994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	177	16.3	94	206	.6
1000	30	127				
950	30	567	17.8	75	234	4.1
900	30	1,027	15.2	76	259	6.8
850	30	1,510	12.4	72	263	8.0
800	30	2,017	9.8	67	269	8.9
750	30	2,551	7.0	64	275	9.9
700	30	3,116	4.4	55	278	11.5
650	30	3,715	1.1	58	279	12.0
600	30	4,357	- 2.3	53	276	14.2
550	30	5,037	- 6.2	47	273	16.3
500	30	5,783	-10.8	36	273	19.6
450	30	6,583	-15.8	33	270	22.0
400	30	7,464	-22.0	30	268	24.7
350	30	8,433	-28.9	32	268	26.4
300	30	9,517	-37.1	30	270	30.7
250	30	10,754	-46.1		272	36.3
200	30	12,208	-54.3		271	41.2
175	30	13,057	-57.7		271	39.4
150	30	14,021	-61.0		274	34.6
125	30	15,147	-63.2		275	27.4
100	30	16,519	-63.0		280	19.6
80	30	17,897	-60.8		287	11.7
70	30	18,731	-59.1		292	5.8
60	30	19,702	-56.5		295	3.5
50	30	20,864	-54.3		310	1.4
40	30	22,301	-52.2		113	.8
30	30	24,172	-49.6		86	6.6
25	30	25,370	-47.6		86	6.6
20	27	26,855	-45.6		79	8.4
15	27	28,779	-43.6		89	9.7
10	21	31,519	-39.9		82	8.4
7	6	33,982	-34.8			
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NOME, ALASKA 1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	7	5.5	84	30	1.7
1000	30	25			254	.6
950	30	440	4.4	79	103	3.3
900	30	884	2.1	78	147	4.3
850	30	1,344	- .3	75	154	4.5
800	30	1,827	- 2.8	76	162	5.8
750	30	2,333	- 5.6	75	167	6.4
700	30	2,875	- 8.4	68	177	6.[illegible]
650	30	3,442	-11.3	64	175	6.6
600	30	4,058	-15.0	62	181	5.8
550	30	4,704	-19.2	59	190	5.8
500	30	5,414	-23.6	55	194	4.5
450	30	6,167	-28.7	55	205	4.1
400	30	7,011	-34.5	48	228	5.2
350	30	7,932	-41.1	45	244	6.4
300	30	8,964	-48.6		243	10.3
250	30	10,146	-53.6		235	11.5
200	30	11,588	-50.9		244	10.7
175	30	12,459	-49.9		250	9.7
150	30	13,468	-49.7		247	9.1
125	30	14,661	-49.6		245	9.5
100	30	16,121	-49.6		242	9.3
80	30	17,578	-50.3		246	8.4
70	30	18,449	-50.4		240	9.1
60	30	19,454	-50.8		244	9.7
50	30	20,641	-51.1		241	10.1
40	30	22,091	-51.5		244	11.5
30	29	23,959	-51.3		248	13.0
25	29	25,145	-50.9		251	15.[illegible]
20	29	20,599	-50.4		252	15.7
15	23	28,495	-49.2		255	17.5
10	14	31,183	-47.2			
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* NORTH PLATTE, NEBR. 919 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	848	10.1	83	121	1.2
1000	30	138				
950	30	572				
900	30	1,024	13.3	71	197	3.3
850	30	1,506	13.3	62	234	7.2
800	30	2,015	11.6	54	270	6.8
750	30	2,548	8.8	51	295	8.4
700	30	3,121	5.3	52	307	11.8
650	30	3,720	1.3	50	311	15.3
600	30	4,361	- 3.1	53	309	18.5
550	30	5,041	- 7.5	49	305	20.8
500	30	5,782	-11.6	40	301	21.4
450	30	6,574	-17.1	35	294	22.1
400	30	7,455	-23.3	35	293	23.5
350	30	8,418	-30.7	34	296	27.2
300	30	9,493	-39.5	36	293	27.6
250	30	10,715	-48.8		294	31.1
200	30	12,156	-56.1		293	35.5
175	30	13,000	-58.0		289	35.0
150	30	13,968	-59.4		292	32.1
125	30	15,104	-61.4		297	24.1
100	30	16,482	-62.3		303	16.5
80	30	17,862	-61.2		314	11.7
70	30	18,692	-60.1		326	9.3
60	30	19,658	-58.3		344	7.4
50	30	20,810	-56.7		345	6.8
40	30	22,233	-54.0		321	4.7
30	30	24,094	-50.7		305	5.1
25	30	25,287	-48.9		274	4.7
20	30	26,758	-46.8		257	6.4
15	29	28,673	-44.2		259	5.2
10	23	31,404	-40.4		251	4.7
7	16	33,793	-37.2		261	12.0
5	8	36,137	-33.0			

* OAKLAND, CALIF. 1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	6	15.1	85	294	3.5
1000	30	119	14.3	87	284	4.1
950	30	555	15.9	65	308	7.8
900	30	1,013	16.6	42	320	8.9
850	30	1,499	15.2	32	307	4.5
800	30	2,010	12.9	30	234	3.3
750	30	2,546	9.9	26	188	4.1
700	30	3,118	6.6	25	188	6.6
650	30	3,715	3.0	24	196	7.2
600	30	4,366	- 1.2	26	199	7.6
550	30	5,045	- 5.7	27	211	6.2
500	30	5,795	-10.6	29	222	6.2
450	30	6,591	-16.2	27	236	8.2
400	30	7,474	-22.4	28	251	9.7
350	30	8,440	-29.9	27	263	12.6
300	30	9,519	-38.5	24	260	13.2
250	30	10,746	-47.7		266	14.6
200	30	12,193	-54.8		261	19.6
175	30	13,041	-57.2		261	22.1
150	30	14,012	-59.3		259	20.4
125	30	15,145	-62.2		257	18.8
100	30	16,519	-62.9		258	11.7
80	30	17,896	-61.3		249	1.7
70	30	18,726	-60.1		164	.4
60	29	19,691	-58.9		75	4.9
50	28	20,837	-57.4		76	5.1
40	28	22,251	-55.7		82	4.9
30	28	24,094	-52.6		66	5.8
25	26	25,270	-50.7		67	5.2
20	26	26,730	-48.4		87	2.5
15	19	28,648	-45.7		52	1.0
10	16	31,350	-43.1		219	3.7
7	7	33,713	-39.2			
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OKLAHOMA CITY, OKLA. 969 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	392	17.2	87	336	1.2
1000	30	123				
950	30	568	18.2	75	245	1.6
900	30	1,027	17.0	70	262	5.2
850	30	1,514	15.1	63	295	5.2
800	30	2,026	12.7	54	294	7.8
750	30	2,563	10.0	48	304	9.5
700	30	3,136	6.6	45	317	8.5
650	30	3,737	3.0	43	318	9.5
600	30	4,385	- 1.3	45	313	10.3
550	30	5,066	- 5.3	39	298	11.7
500	30	5,816	- 9.5	30	289	14.2
450	30	6,615	-14.8	26	283	16.9
400	30	7,502	-21.3	26	284	20.6
350	30	8,474	-28.6	26	281	26.0
300	30	9,560	-37.0	30	281	33.6
250	30	10,797	-46.2		278	42.5
200	30	12,249	-55.1		283	42.2
175	30	13,095	-58.8		286	40.8
150	30	14,054	-62.6		285	36.7
125	30	15,169	-65.3		288	26.6
100	28	16,529	-66.0		302	16.1
80	28	17,889	-63.2		321	7.4
70	28	18,714	-61.0		345	4.5
60	28	19,676	-58.7		46	4.5
50	27	20,825	-56.0		59	3.3
40	27	22,252	-53.4		85	5.4
30	26	24,113	-50.6		77	7.8
25	26	25,305	-48.9		82	9.7
20	25	26,778	-46.6		86	11.1
15	18	28,706	-43.6		80	10.9
10	7	31,427	-40.3			
7						
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OMAHA, NEBR. 969 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	403	12.4	88	79	1.0
1000	30	139				
950	30	574	15.1	74	182	1.9
900	30	1,030	13.5	68	268	3.7
850	30	1,509	11.1	63	307	5.2
800	30	2,014	9.1	57	322	7.6
750	30	2,544	6.6	53	321	11.3
700	30	3,111	3.4	51	315	12.6
650	30	3,703	.0	55	314	14.2
600	30	4,346	- 3.5	45	318	15.7
550	30	5,022	- 7.7	41	317	19.2
500	30	5,765	-12.0	37	309	20.8
450	30	6,558	-17.4	39	307	22.0
400	30	7,435	-23.8	39	305	21.8
350	30	8,396	-31.1	36	302	24.3
300	30	9,470	-39.9	35	299	27.6
250	30	10,691	-48.5		299	33.0
200	30	12,134	-55.4		297	37.9
175	30	12,982	-57.0		293	36.9
150	30	13,955	-58.4		293	32.8
125	29	15,096	-60.6		298	27.8
100	29	16,482	-61.4		303	21.8
80	29	17,872	-59.5		311	14.2
70	29	18,707	-58.9		321	10.7
60	28	19,677	-57.4		336	8.2
50	28	20,834	-55.5		338	5.1
40	28	22,264	-53.2		326	3.5
30	28	24,132	-49.8		286	4.5
25	28	25,328	-48.4		274	6.4
20	26	26,805	-46.3		273	6.6
15	17	28,704	-44.3		261	8.7
10	11	31,381	-41.7		273	19.6
7	5	33,733	-38.8			
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PAGO PAGO AMERICAN SAMOA + 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	28.1	74	116	11.1
1000	30	120	26.3	71	112	12.2
950	30	574	22.1	74	99	12.6
900	30	1,040	18.7	74	91	11.8
850	30	1,530	16.8	62	87	10.1
800	30	2,046	15.6	45	74	8.2
750	30	2,592	12.8	44	65	5.6
700	30	3,168	9.6	41	56	2.9
650	30	3,781	6.1	35	331	2.1
600	30	4,431	2.3	30	296	3.9
550	30	5,127	- 1.4	27	287	6.4
500	30	5,884	- 6.0	29	279	8.9
450	30	6,700	-10.9	26	283	10.7
400	30	7,598	-16.4	25	283	15.5
350	30	8,590	-22.9	22	280	21.4
300	30	9,701	-31.4	20	270	24.7
250	30	10,965	-41.7		268	26.0
200	30	12,439	-53.6		254	30.3
175	30	13,285	-60.0		247	30.3
150	30	14,232	-66.6		249	27.4
125	30	15,316	-73.2		255	22.9
100	30	16,611	-74.8		268	13.2
80	30	17,924	-69.6		286	9.5
70	29	18,726	-65.4		276	7.6
60	29	19,673	-61.8		270	5.8
50	28	20,810	-58.2		278	7.8
40	28	22,225	-55.4		287	7.0
30	27	24,078	-50.8		264	3.9
25	22	25,270	-48.3		165	.4
20	20	26,747	-45.5		41	3.3
15	16	28,676	-41.3		59	3.5
10	7	31,457	-36.2			
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* PEORIA, ILL. 992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	200	13.3	83	13	2.7
1000	30	132				
950	30	568	14.9	67	28	3.9
900	30	1,023	12.2	66	10	4.1
850	30	1,500	9.3	67	333	5.1
800	30	2,001	7.3	58	310	6.8
750	30	2,533	5.1	53	303	8.9
700	30	3,092	2.3	49	305	12.4
650	30	3,686	- .7	48	301	14.0
600	30	4,323	- 4.2	46	297	16.9
550	30	5,003	- 8.0	45	292	18.8
500	30	5,739	-12.4	40	290	20.6
450	30	6,531	-17.7	39	297	23.3
400	30	7,407	-23.9	38	290	25.6
350	29	8,370	-31.4	34	288	29.1
300	29	9,442	-39.7	24	291	31.3
250	28	10,667	-48.4		288	36.7
200	28	12,111	-54.9		287	40.0
175	28	12,962	-56.5		285	37.9
150	28	13,936	-58.0		289	34.8
125	27	15,082	-59.8		288	28.6
100	27	16,473	-60.4		294	22.5
80	27	17,868	-58.9		301	13.6
70	27	18,707	-57.7		307	8.7
60	27	19,683	-56.4		313	5.6
50	27	20,845	-54.7		291	4.3
40	27	22,280	-52.2		288	4.7
30	27	24,155	-49.0		259	4.3
25	27	25,355	-47.5		260	1.6
20	27	26,836	-45.8		174	1.6
15	25	28,768	-43.1		94	1.9
10	24	31,521	-39.7		94	2.5
7	21	33,985	-36.0		270	.4
5	6	36,281	-31.7			

QUILLAYUTE, WASH. 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	58	11.2	95	101	1.4
1000	30	137	12.2	93	70	2.5
950	30	567	11.9	79	101	.4
900	30	1,020	10.3	67	218	3.5
850	30	1,494	8.7	61	231	5.2
800	30	1,994	6.4	60	240	7.4
750	30	2,522	4.0	56	242	9.9
700	30	3,080	1.1	57	241	10.5
650	30	3,671	- 2.0	50	243	11.8
600	30	4,306	- 5.4	41	245	13.8
550	30	4,978	- 9.5	41	242	16.7
500	30	5,714	-14.3	38	242	17.1
450	30	6,502	-20.0	40	239	19.0
400	30	7,368	-26.2	40	239	21.8
350	30	8,320	-33.4	41	236	23.9
300	30	9,386	-41.1	34	240	26.2
250	30	10,602	-49.9		244	31.3
200	30	12,036	-56.0		250	31.5
175	29	12,875	-56.7		250	31.1
150	29	13,850	-57.6		250	27.6
125	29	14,997	-58.5		251	24.3
100	28	16,394	-57.9		246	20.4
80	26	17,811	-56.4		244	15.7
70	26	18,660	-55.9		250	11.7
60	24	19,651	-55.5		256	7.8
50	23	20,814	-54.9		281	5.1
40	23	22,243	-54.0		333	2.7
30	21	24,091	-52.9		359	5.2
25	21	25,269	-52.2		12	5.8
20	20	26,724	-50.7		340	7.4
15	18	28,622	-48.1		323	9.9
10	12	31,339	-43.7		297	5.6
7	5	33,680	-40.5			
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* PITTSBURGH, PA. 973 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	353	11.5	91	356	.6
1000	30	131				
950	30	563	13.3	77	268	1.6
900	30	1,017	11.1	72	286	4.5
850	30	1,492	8.4	68	287	7.8
800	30	1,991	6.1	61	290	11.1
750	30	2,519	3.7	56	290	13.4
700	30	3,076	1.2	50	281	15.9
650	30	3,667	- 1.3	43	282	18.6
600	30	4,304	- 4.6	40	283	20.8
550	30	4,978	- 8.5	42	279	22.1
500	30	5,718	-13.1	40	273	26.4
450	30	6,508	-18.6	35	271	28.2
400	30	7,381	-24.7	30	273	31.7
350	30	8,339	-31.6	29	271	35.0
300	30	9,412	-39.5	30	271	38.1
250	30	10,636	-48.4		272	42.9
200	30	12,080	-55.3		269	47.4
175	30	12,930	-55.8		272	46.6
150	30	13,907	-57.8		276	39.6
125	29	15,054	-59.2		276	32.6
100	29	16,451	-59.2		277	25.1
80	29	17,853	-57.8		281	13.6
70	28	18,692	-56.9		277	10.7
60	27	19,669	-55.1		281	7.6
50	27	20,838	-53.3		278	5.6
40	27	22,282	-51.1		261	4.5
30	27	24,162	-48.9		260	3.7
25	27	25,364	-47.2		264	3.1
20	27	26,845	-45.9		237	1.6
15	27	28,770	-43.6		8	1.0
10	20	31,511	-40.0		79	2.5
7	7	33,964	-36.4			
5						

PONAPE, CAROLINE IS. + 1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	39	29.6	72	299	.6
1000	30	88	28.9	71	248	.6
950	30	539	24.3	73	204	1.9
900	30	1,015	20.9	72	192	3.3
850	30	1,509	18.1	64	168	2.7
800	30	2,027	15.4	56	96	2.7
750	30	2,571	12.7	52	97	4.3
700	30	3,149	9.8	49	97	6.2
650	30	3,760	6.3	49	97	9.1
600	30	4,415	2.6	45	101	11.5
550	30	5,109	- 1.1	40	99	12.8
500	30	5,870	- 5.2	36	100	12.2
450	30	6,687	- 9.7	32	95	11.8
400	30	7,592	-15.3	31	91	11.3
350	30	8,587	-22.1	29	90	13.4
300	30	9,702	-30.5	28	88	14.6
250	30	10,970	-40.9	30	77	17.5
200	30	12,448	-53.1		62	19.8
175	30	13,295	-60.1		60	18.6
150	30	14,239	-67.5		70	17.1
125	30	15,318	-74.5		76	14.6
100	30	16,604	-75.9		83	18.6
80	29	17,912	-69.4		87	18.5
70	28	18,717	-66.4		84	15.0
60	27	19,662	-62.0		85	9.5
50	27	20,800	-58.1		78	1.9
40	26	22,214	-54.9		237	.6
30	25	24,067	-51.9		34	.4
25	23	25,249	-50.0		105	2.9
20	18	26,724	-47.0		123	5.1
15	12	28,636	-44.3			
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1966

Standard pressure surface (mb.)	PORTLAND, ME. 1012 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	20	10.4	86	303	3.1
1000	30	122	11.9	74	331	3.3
950	30	552	11.6	66	284	5.1
900	30	1,003	9.0	60	281	6.6
850	30	1,475	6.5	57	281	9.1
800	30	1,971	4.8	44	280	11.5
750	30	2,491	2.8	39	276	15.0
700	30	3,052	.3	35	273	18.1
650	30	3,638	- 2.8	33	274	20.8
600	30	4,274	- 6.5	29	270	24.3
550	30	4,942	-10.2	30	268	26.8
500	30	5,679	-14.8	31	266	30.3
450	30	6,461	-20.3	28	266	33.4
400	30	7,332	-26.4	29	265	36.1
350	30	8,285	-33.3	29	265	43.1
300	30	9,351	-41.0	27	265	48.4
250	30	10,570	-48.7		259	53.8
200	30	12,016	-54.0		258	55.8
175	30	12,871	-54.9		259	52.3
150	29	13,851	-55.9		257	45.8
125	29	15,008	-56.7		260	36.9
100	29	16,424	-56.4		262	27.8
80	29	17,842	-55.3		262	19.2
70	29	18,695	-54.4		264	15.5
60	29	19,687	-53.0		260	11.3
50	29	20,866	-51.5		247	8.7
40	29	22,319	-50.0		245	5.4
30	28	24,210	-48.4		231	4.1
25	28	25,414	-47.0		248	3.1
20	28	26,896	-45.5		229	1.4
15	23	28,828	-43.7		248	1.2
10	14	31,590	-40.9		112	2.9
7	8	34,009	-37.2			

Standard pressure surface (mb.)	RAPID CITY, S. DAK. 906 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	966	12.5	73	352	1.9
1000	29	123				
950	29	560				
900	29	1,017	13.1	69	333	1.0
850	29	1,500	14.6	54	267	2.3
800	29	2,011	12.2	51	297	5.6
750	29	2,542	9.1	51	308	8.2
700	29	3,117	5.4	53	308	9.3
650	29	3,709	1.6	56	301	12.2
600	29	4,360	- 2.5	54	303	14.2
550	29	5,032	- 7.2	57	302	15.5
500	29	5,780	-12.3	49	303	16.5
450	29	6,570	-17.8	42	308	18.3
400	29	7,448	-24.0	36	304	19.4
350	29	8,408	-31.6	38	304	19.8
300	29	9,479	-40.4	35	301	23.1
250	29	10,696	-49.9		291	28.7
200	29	12,127	-56.9		291	32.2
175	29	12,972	-57.5		292	32.8
150	29	13,943	-58.8		291	28.7
125	28	15,078	-60.9		295	24.1
100	28	16,463	-61.6		300	19.0
80	28	17,849	-60.4		311	13.6
70	28	18,682	-59.3		316	9.5
60	28	19,652	-58.1		331	6.6
50	26	20,810	-56.8		347	6.0
40	25	22,235	-55.1		339	5.1
30	24	24,084	-52.3		333	5.2
25	24	25,267	-50.9		298	4.9
20	24	26,727	-48.6		269	7.4
15	18	28,644	-45.2		285	8.2
10	9	31,457	-41.5			
7						

Standard pressure surface (mb.)	ST. CLOUD, MINN. 979 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	316	9.5	89	278	1.6
1000	30	138				
950	30	570	13.3	69	279	3.9
900	30	1,021	11.6	59	298	7.0
850	30	1,497	8.5	57	308	9.3
800	30	1,997	6.2	51	310	10.3
750	30	2,522	4.2	40	316	13.0
700	30	3,084	1.4	44	317	16.3
650	30	3,674	- 1.8	44	316	16.9
600	30	4,311	- 5.6	41	318	17.3
550	30	4,980	- 9.7	40	318	21.0
500	30	5,719	-14.2	35	317	24.3
450	30	6,502	-19.5	32	317	24.3
400	30	7,376	-25.8	30	318	29.1
350	30	8,329	-33.3	28	315	33.0
300	30	9,393	-41.5	33	314	34.6
250	30	10,607	-50.0		311	36.5
200	30	12,043	-55.4		304	38.3
175	30	12,893	-55.6		302	35.5
150	30	13,874	-56.4		301	35.9
125	30	15,028	-57.4		300	30.1
100	30	16,435	-57.7		302	24.7
80	30	17,844	-56.8		310	18.1
70	30	18,690	-56.3		317	14.8
60	29	19,666	-55.7		321	11.3
50	29	20,829	-54.7		322	9.1
40	29	22,262	-52.8		320	6.6
30	29	24,129	-50.4		286	5.8
25	29	25,323	-48.6		269	8.9
20	28	26,793	-46.4		270	13.2
15	24	28,694	-44.1		259	15.7
10	16	31,426	-40.9		272	15.7
7	6	33,780	-37.2			

Standard pressure surface (mb.)	ST. PAUL IS., ALASKA 1002 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	10	6.1	89	344	2.1
1000	30	24			173	5.4
950	30	446	4.1	90	333	3.7
900	30	883	1.7	89	317	3.1
850	30	1,342	- .4	82	305	2.3
800	30	1,826	- 2.0	72	301	3.7
750	30	2,336	- 4.0	67	299	4.7
700	30	2,881	- 6.8	62	306	5.2
650	30	3,453	- 9.8	57	298	5.6
600	30	4,071	-13.4	62	294	3.9
550	30	4,726	-17.3	59	292	5.1
500	30	5,438	-21.5	55	296	5.4
450	30	6,210	-26.5	54	285	5.6
400	30	7,050	-32.3	54	283	8.0
350	30	7,979	-38.8	49	283	8.0
300	30	9,021	-46.0		283	11.3
250	29	10,222	-51.2		279	12.6
200	29	11,672	-50.5		282	17.3
175	29	12,544	-50.2		286	17.7
150	29	13,550	-50.7		282	17.7
125	29	14,736	-51.1		285	15.9
100	29	16,188	-51.0		278	12.8
80	29	17,639	-51.1		268	11.3
70	29	18,507	-51.3		271	11.3
60	28	19,508	-51.2		264	9.7
50	28	20,693	-51.2		261	10.3
40	28	22,145	-51.0		252	10.5
30	24	24,020	-50.1		256	12.0
25	24	25,213	-49.5		254	10.7
20	22	26,681	-48.6		264	12.2
15	19	28,580	-47.5		269	13.6
10	11	31,311	-44.9			
7						

Standard pressure surface (mb.)	SALEM, OREG. 1009 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	61	11.5	94	165	1.6
1000	30	138	13.0	88	127	1.0
950	30	570	13.2	74	24	2.9
900	30	1,026	12.8	65	345	2.1
850	30	1,505	11.4	56	287	2.3
800	30	2,010	9.1	50	277	4.3
750	30	2,538	6.5	48	258	5.8
700	30	3,106	3.4	44	263	8.5
650	30	3,698	.1	40	252	10.9
600	30	4,339	- 3.7	39	247	12.6
550	30	5,014	- 8.0	38	239	13.2
500	30	5,755	-13.2	39	237	15.7
450	30	6,544	-18.7	37	234	18.1
400	30	7,417	-24.9	38	238	19.6
350	30	8,373	-32.3	38	243	20.0
300	30	9,442	-40.3	40	242	21.2
250	30	10,663	-48.9		244	22.5
200	30	12,102	-55.8		257	25.4
175	30	12,949	-57.2		256	23.9
150	30	13,921	-58.1		255	24.1
125	30	15,065	-59.5		249	20.4
100	30	16,459	-59.4		251	15.5
80	29	17,863	-57.7		241	11.3
70	29	18,706	-57.2		250	5.4
60	29	19,681	-56.6		313	2.3
50	29	20,838	-55.7		22	3.5
40	29	22,261	-54.7		45	6.4
30	28	24,106	-53.2		42	7.6
25	28	25,283	-51.9		27	7.8
20	27	26,734	-50.1		10	7.6
15	25	28,621	-47.6		346	6.6
10	21	31,308	-44.0		311	4.9
7	12	33,675	-42.0			

Standard pressure surface (mb.)	SALT LAKE CITY, UTAH 872 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,288	14.1	61	143	6.0
1000	30	117				
950	30	558				
900	30	1,022				
850	30	1,509	17.9	44	152	8.7
800	30	2,026	15.6	42	179	8.4
750	30	2,562	11.7	45	215	6.8
700	30	3,144	7.6	47	236	9.3
650	30	3,743	3.1	48	239	11.1
600	30	4,392	- 1.8	53	235	10.3
550	30	5,073	- 6.4	49	245	10.1
500	30	5,818	-11.4	43	253	10.9
450	30	6,612	-16.9	38	257	11.5
400	30	7,491	-23.4	35	255	13.2
350	30	8,453	-30.9	37	252	14.0
300	30	9,527	-39.8	39	256	15.3
250	30	10,747	-48.8		257	19.4
200	30	12,189	-55.3		265	23.3
175	30	13,037	-57.1		264	23.1
150	30	14,007	-59.6		269	23.3
125	30	15,140	-62.2		269	18.5
100	30	16,514	-63.0		271	12.2
80	30	17,892	-61.6		306	6.0
70	30	18,721	-60.2		333	3.7
60	30	19,686	-58.9		27	4.1
50	30	20,833	-57.6		36	4.5
40	30	22,249	-55.4		31	4.9
30	30	24,095	-52.6		353	3.7
25	30	25,278	-50.5		338	2.3
20	28	26,732	-48.6		274	5.2
15	27	28,635	-46.2		264	8.5
10	15	31,304	-42.8		261	18.3
7						
5						
4						

Standard pressure surface (mb.)	SAN DIEGO, CALIF. 997 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	124	17.3	83	359	1.7
1000	30	100				
950	30	542	18.1	70	353	1.2
900	30	1,006	20.4	43	153	.8
850	30	1,498	18.9	39	191	3.1
800	30	2,016	16.0	39	187	6.6
750	30	2,556	12.4	34	185	8.5
700	30	3,136	8.6	32	186	9.5
650	30	3,738	4.9	31	190	10.5
600	30	4,393	1.1	28	196	10.1
550	30	5,081	- 3.2	26	211	10.1
500	30	5,837	- 7.8	25	222	11.7
450	30	6,642	-13.6	25	233	14.0
400	30	7,534	-20.3	25	243	16.9
350	30	8,508	-27.8	25	247	22.9
300	30	9,599	-35.8	26	252	30.5
250	30	10,843	-44.4		254	37.9
200	30	12,311	-53.0		254	42.5
175	30	13,164	-57.2		256	43.7
150	30	14,129	-61.7		255	35.0
125	30	15,247	-65.2		253	24.1
100	30	16,600	-66.2		254	12.0
80	30	17,956	-64.2		50	2.1
70	30	18,777	-61.9		75	6.8
60	30	19,735	-59.8		80	9.1
50	30	20,881	-57.1		87	9.9
40	29	22,298	-54.5		88	9.5
30	29	24,151	-51.7		83	12.0
25	29	25,339	-49.5		89	13.4
20	29	26,808	-47.2		90	12.2
15	29	28,720	-45.1		83	10.7
10	29	31,448	-41.6		90	8.7
7	27	33,882	-38.3		103	7.6
5	18	36,229	-34.0			
4						

Standard pressure surface (mb.)	* SAN JUAN, P. R. 1015 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	6	25.3	88	141	3.5
1000	30	136	24.9	86	115	9.5
950	30	585	22.3	85	91	14.4
900	30	1,056	19.7	79	92	14.8
850	30	1,548	17.1	70	96	14.2
800	30	2,063	14.5	62	93	14.8
750	30	2,603	11.9	51	96	12.6
700	30	3,182	8.7	48	97	11.3
650	30	3,782	5.4	37	93	10.7
600	30	4,442	1.7	34	93	10.7
550	30	5,131	- 2.3	34	93	9.9
500	30	5,890	- 6.7	31	86	10.3
450	30	6,696	-11.9	29	83	11.7
400	30	7,597	-17.8	26	75	11.8
350	30	8,581	-25.0	28	68	11.5
300	30	9,683	-33.5	25	64	13.0
250	30	10,935	-43.7		60	12.2
200	30	12,397	-55.2		54	11.7
175	30	13,237	-61.5		45	9.1
150	30	14,179	-67.2		49	10.7
125	30	15,266	-71.4		47	8.9
100	30	16,579	-72.0		59	8.5
80	30	17,903	-68.3		76	16.1
70	30	18,709	-65.4		81	20.2
60	29	19,652	-62.0		84	21.8
50	29	20,788	-58.4		86	22.9
40	29	22,201	-55.3		87	24.9
30	27	24,051	-51.7		94	24.1
25	24	25,243	-49.8		96	23.5
20	21	26,711	-46.3		91	25.3
15	20	28,637	-42.4		83	30.7
10	9	31,402	-37.7			
7						
5						
4						

Standard pressure surface (mb.)	SAN NICOLAS, CALIF. 992 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	174	15.2	82	303	6.8
1000	28	105				
950	28	545	18.3	54	317	3.9
900	28	1,009	19.4	32	278	1.4
850	28	1,498	17.5	33	197	3.1
800	28	2,014	15.2	33	177	5.1
750	28	2,557	11.9	32	174	7.0
700	28	3,130	8.2	30	170	7.2
650	28	3,738	4.3	26	180	7.0
600	28	4,384	.5	22	202	7.4
550	28	5,076	- 3.9	19	209	7.8
500	28	5,821	- 9.1	17	221	9.3
450	28	6,627	-15.1	19	229	11.5
400	28	7,507	-20.7	25	242	15.0
350	28	8,481	-28.0	23	250	17.9
300	28	9,568	-36.7	25	253	26.8
250	28	10,808	-45.2	22	255	35.7
200	28	12,269	-53.4	20	257	40.4
175	28	13,120	-57.7	20	258	40.4
150	28	14,084	-62.1	19	253	35.7
125	27	15,198	-65.8		254	25.6
100	27	16,549	-66.7		268	9.9
80	27	17,903	-64.9		357	1.7
70	27	18,723	-62.4		82	8.5
60	27	19,681	-59.9		80	10.3
50	27	20,826	-57.6		83	11.3
40	26	22,242	-54.8		94	11.1
30	24	24,093	-51.9		82	11.8
25	24	25,281	-49.6		87	13.6
20	24	26,750	-47.1		87	13.8
15	20	28,683	-44.5		83	8.4
10	19	31,417	-41.8		96	11.3
7	17	33,862	-37.5		147	4.5
5	6	36,138	-36.3			
4	6	37,694	-33.9			

Standard pressure surface (mb.)	* SAULT STE. MARIE, MICH. 988 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	221	9.2	92	39	1.4
1000	30	118				
950	30	545	10.8	75	284	4.7
900	30	996	9.1	71	302	10.1
850	30	1,467	6.0	73	304	12.6
800	30	1,962	3.5	70	300	13.8
750	30	2,483	1.2	57	295	16.7
700	30	3,037	- 1.7	56	297	16.9
650	30	3,621	- 4.4	45	296	18.5
600	30	4,250	- 8.1	40	298	19.2
550	30	4,916	-12.3	39	297	20.8
500	30	5,643	-17.0	37	291	22.0
450	30	6,422	-22.1	33	293	23.1
400	30	7,282	-28.3	32	292	26.0
350	30	8,226	-35.1	30	290	30.9
300	30	9,283	-43.1	29	290	33.4
250	30	10,490	-50.4		292	34.6
200	30	11,931	-54.1		296	35.2
175	30	12,788	-53.7		291	35.4
150	30	13,778	-53.9		288	34.8
125	30	14,946	-54.6		289	29.9
100	30	16,372	-54.9		291	24.9
80	30	17,799	-54.4		294	17.3
70	30	18,655	-54.1		291	14.8
60	30	19,645	-53.5		295	12.0
50	30	20,818	-52.9		295	9.7
40	30	22,263	-51.2		278	7.8
30	30	24,142	-48.7		260	8.5
25	30	25,345	-47.2		255	10.3
20	29	26,827	-45.3		242	11.3
15	29	28,757	-42.9		247	11.5
10	20	31,511	-39.8		261	10.3
7						
5						
4						

Standard pressure surface (mb.)	SHEMYA, ALASKA 1001 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	38	8.5	92	250	5.4
1000	30	46			241	11.5
950	30	469	6.6	90	285	9.9
900	30	912	5.0	80	291	10.1
850	30	1,377	2.7	76	298	10.7
800	30	1,865	.8	64	294	11.8
750	30	2,381	- 1.7	57	281	13.8
700	30	2,928	- 4.2	51	282	14.6
650	30	3,508	- 7.4	45	281	15.7
600	30	4,129	-11.0	44	273	19.2
550	30	4,791	-15.1	44	271	20.8
500	30	5,507	-19.6	42	270	24.5
450	30	6,277	-24.6	41	274	27.0
400	30	7,131	-30.3	40	274	30.3
350	30	8,068	-36.7	39	275	34.6
300	30	9,121	-42.9	36	275	39.6
250	30	10,339	-46.5		284	53.2
200	30	11,813	-49.4		285	54.0
175	30	12,683	-51.5		285	48.8
150	30	13,681	-52.7		287	44.1
125	30	14,854	-53.7		282	37.1
100	30	16,286	-54.3		280	25.8
80	30	17,717	-54.1		281	20.8
70	29	18,579	-54.2		281	16.7
60	28	19,570	-53.7		279	14.8
50	28	20,743	-53.1		272	9.9
40	28	22,183	-52.4		269	8.5
30	27	24,050	-50.8		269	9.7
25	26	25,240	-50.2		269	7.8
20	24	26,708	-49.3		266	7.0
15	22	28,596	-47.9		256	7.2
10	11	31,343	-45.0			
7						

Standard pressure surface (mb.)	* SHREVEPORT, LA. 1005 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	79	19.7	93	309	1.4
1000	30	122	20.1	89	308	1.2
950	30	572	20.1	76	230	2.1
900	30	1,034	17.7	75	245	4.5
850	30	1,522	15.0	71	276	5.8
800	30	2,034	12.4	58	287	5.6
750	30	2,572	9.8	52	304	7.6
700	30	3,145	6.6	47	307	8.4
650	30	3,750	3.0	45	302	9.3
600	30	4,395	- .6	41	294	10.9
550	30	5,083	- 4.1	36	290	13.2
500	30	5,832	- 8.8	37	290	14.4
450	30	6,641	-14.0	34	288	16.3
400	30	7,527	-20.4	37	288	20.2
350	30	8,501	-27.7	37	286	22.9
300	30	9,590	-36.0	32	285	26.0
250	30	10,831	-45.5		286	30.7
200	30	12,285	-55.1		287	36.3
175	30	13,129	-59.3		285	35.2
150	30	14,084	-63.6		289	31.3
125	30	15,193	-67.0		287	23.7
100	30	16,535	-67.6		291	15.3
80	30	17,885	-64.5		322	6.6
70	29	18,707	-61.7		6	3.7
60	28	19,668	-58.9		60	6.2
50	28	20,817	-56.4		90	8.0
40	28	22,241	-53.8		82	11.7
30	28	24,098	-51.1		88	15.9
25	27	25,280	-49.1		87	16.3
20	27	26,751	-46.5		88	16.1
15	27	28,671	-43.9		86	15.5
10	20	31,391	-39.9		72	8.5
7	10	33,805	-37.0		163	8.9

Standard pressure surface (mb.)	SPOKANE, WASH. 932 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	717	12.5	61	161	3.5
1000	30	121				
950	30	554				
900	30	1,014	15.9	52	216	4.1
850	30	1,498	13.9	49	236	5.1
800	30	2,006	10.5	52	236	6.6
750	30	2,538	7.2	52	240	8.2
700	30	3,106	4.2	50	234	10.3
650	30	3,700	.7	51	239	12.2
600	30	4,345	- 3.4	51	239	15.5
550	30	5,020	- 7.3	45	241	17.9
500	30	5,765	-12.0	42	243	19.0
450	30	6,555	-17.6	43	252	18.1
400	30	7,435	-23.8	46	251	19.0
350	30	8,396	-31.3	42	237	20.2
300	30	9,468	-40.1	39	244	22.0
250	30	10,686	-49.9		253	20.8
200	30	12,118	-56.5		259	25.3
175	30	12,964	-57.4		259	27.0
150	29	13,939	-58.5		262	24.3
125	29	15,082	-59.4		265	22.9
100	29	16,479	-58.6		266	18.3
80	29	17,885	-57.6		266	12.4
70	29	18,728	-57.0		281	8.7
60	29	19,704	-56.1		287	5.4
50	29	20,865	-55.4		324	6.0
40	28	22,291	-54.7		360	5.2
30	28	24,137	-53.5		4	8.4
25	28	25,313	-52.3		2	7.6
20	26	26,757	-50.5		343	7.8
15	21	28,623	-48.5		327	9.5
10	15	31,253	-46.1		294	8.7
7	6	33,695	-42.5			

Standard pressure surface (mb.)	SWAN ISLAND, W. I. 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	10	26.8	86	96	7.0
1000	30	105	26.3	86	96	9.1
950	30	559	23.0	85	106	14.4
900	30	1,029	20.4	77	113	15.2
850	30	1,522	17.8	71	115	16.1
800	30	2,039	14.9	66	116	15.5
750	30	2,584	12.1	61	117	15.0
700	30	3,159	8.8	60	118	14.2
650	30	3,770	5.6	52	119	14.8
600	30	4,421	1.8	48	123	13.2
550	30	5,111	- 2.4	48	123	12.2
500	30	5,870	- 6.6	46	120	12.2
450	30	6,683	-11.5	43	112	12.0
400	30	7,581	-17.3	40	105	10.9
350	30	8,568	-24.2	39	94	8.4
300	30	9,673	-32.6	37	71	6.8
250	30	10,930	-42.7		54	6.0
200	30	12,396	-54.8		23	6.6
175	30	13,236	-61.5		27	6.8
150	30	14,176	-68.3		42	8.0
125	30	15,253	-73.8		59	9.7
100	30	16,555	-73.0		72	13.2
80	30	17,872	-69.8		86	18.8
70	30	18,672	-67.0		91	20.8
60	30	19,612	-63.2		87	21.0
50	30	20,742	-59.9		86	24.3
40	30	22,150	-56.0		90	24.5
30	30	23,998	-52.0		91	24.9
25	28	25,188	-49.8		93	25.4
20	27	26,656	-47.1		93	27.4
15	19	28,573	-44.0		88	35.7
10	5	31,309	-38.4			
7						

Standard pressure surface (mb.)	TAMPA, FLA. 1014 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	8	23.6	92	126	1.6
1000	30	126	24.3	86	149	2.3
950	30	581	22.6	79	224	5.8
900	30	1,046	19.7	75	233	7.0
850	30	1,537	16.8	71	235	9.7
800	30	2,053	14.1	65	235	11.5
750	30	2,596	11.3	61	236	13.8
700	30	3,170	8.2	57	238	14.0
650	30	3,782	5.0	51	242	14.4
600	30	4,428	1.3	48	245	14.4
550	30	5,120	- 2.5	41	249	14.4
500	30	5,875	- 7.0	40	252	15.5
450	30	6,693	-12.2	36	250	14.8
400	30	7,585	-17.7	35	251	16.1
350	30	8,570	-24.6	31	249	18.1
300	30	9,674	-32.9	31	247	20.6
250	30	10,929	-42.5		250	27.6
200	30	12,398	-54.3		253	32.1
175	30	13,241	-60.7		255	30.5
150	30	14,185	-66.7		257	25.8
125	30	15,276	-70.3		265	16.7
100	30	16,599	-69.6		276	6.0
80	29	17,941	-65.2		61	2.5
70	29	18,760	-62.3		72	8.0
60	29	19,717	-59.7		84	14.8
50	29	20,864	-56.8		90	19.0
40	29	22,285	-54.3		91	21.4
30	27	24,136	-51.4		87	24.3
25	27	25,329	-49.2		85	24.1
20	23	26,802	-46.5		86	22.7
15	9	28,729	-43.2			
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

SEPTEMBER 1966

TOPEKA, KANS.
985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	269	13.7	90	58	.6
1000	30	137				
950	30	576	16.2	73	155	1.2
900	30	1,032	14.4	68	332	2.5
850	30	1,513	12.3	64	343	5.1
800	30	2,020	10.0	59	338	7.2
750	30	2,551	7.6	53	332	10.7
700	30	3,122	4.8	50	324	13.2
650	30	3,717	1.4	51	317	12.8
600	30	4,364	-2.4	43	306	15.5
550	30	5,043	-6.4	36	306	17.3
500	30	5,789	-11.3	33	304	18.5
450	30	6,581	-16.[illegible]	32	302	20.2
400	30	7,464	-23.2	29	301	22.7
350	30	8,428	-30.4	26	301	25.8
300	30	9,505	-38.8	24	302	29.1
250	30	10,732	-47.8		292	35.5
200	30	12,178	-55.1		294	37.5
175	30	13,026	-57.4		294	37.3
150	30	13,904	-60.0		292	31.1
125	29	15,132	-62.2		295	24.9
100	29	16,508	-62.4		307	16.7
80	29	17,888	-61.1		314	10.1
70	29	18,720	-59.6		327	6.4
60	29	19,688	-57.9		348	4.5
50	28	20,838	-55.6		22	2.7
40	28	22,269	-53.0		350	1.6
30	28	24,136	-50.1		343	2.3
25	27	25,325	-48.5		33	1.7
20	24	26,807	-46.3		62	2.5
15	16	28,737	-43.8		77	1.9
10	6	31,575	-39.5			
7						
5						

+ TRUK, CAROLINE IS.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	2	28.[illegible]	77	251	2.1
1000	30	97	27.8	75	236	2.1
950	30	550	23.9	75	231	3.5
900	30	1,023	20.9	70	245	2.9
850	30	1,517	18.3	64	254	2.1
800	30	2,035	15.5	63	69	.8
750	30	2,580	12.8	57	72	1.7
700	30	3,158	9.7	50	91	3.9
650	30	3,770	6.2	47	97	4.9
600	30	4,423	2.5	46	103	8.4
550	30	5,113	-1.4	46	94	9.5
500	30	5,878	-5.2	44	93	11.3
450	30	6,697	-9.9	35	97	10.9
400	30	7,600	-15.5	33	92	11.[illegible]
350	30	8,595	-22.0	30	86	13.0
300	30	9,711	-30.4	26	82	15.9
250	30	10,980	-40.8	27	77	20.2
200	30	12,459	-52.[illegible]		69	24.5
175	30	13,307	-59.9		64	26.2
150	30	14,252	-67.5		66	22.7
125	30	15,329	-75.3		67	21.6
100	30	16,613	-75.6		82	23.3
80	29	17,923	-69.6		84	22.3
70	28	18,726	-65.8		91	17.3
60	28	19,672	-61.8		82	10.7
50	28	20,810	-58.3		77	4.9
40	28	22,224	-55.0		74	3.9
30	22	24,069	-52.7		114	4.7
25	15	25,249	-50.4		119	4.7
20	7	26,719	-46.6			
15						
10						
7						
5						

* TUCSON, ARIZ.
924 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	789	20.9	71	142	7.8
1000	30	93				
950	30	540				
900	30	1,014	23.4	53	137	10.1
850	30	1,512	20.8	51	146	7.8
800	30	2,033	17.2	53	157	5.6
750	30	2,577	13.3	52	171	5.8
700	30	3,158	8.9	58	164	7.6
650	30	3,763	4.6	57	162	8.5
600	30	4,415	.2	51	170	7.4
550	30	5,098	-3.9	40	218	7.6
500	30	5,854	-8.3	32	241	10.1
450	30	6,660	-13.4	28	253	13.6
400	30	7,550	-19.9	29	258	18.3
350	30	8,526	-27.1	28	260	22.1
300	30	9,619	-35.4	28	261	28.4
250	30	10,864	-44.2		262	35.7
200	30	12,328	-53.7		261	42.0
175	30	13,176	-58.7		261	40.2
150	30	14,133	-63.5		261	34.0
125	30	15,239	-67.9		265	28.0
100	29	16,574	-69.0		269	12.4
80	29	17,916	-66.0		42	3.3
70	27	18,733	-63.2		79	7.8
60	27	19,686	-60.4		90	8.9
50	27	20,828	-57.9		84	10.9
40	26	22,249	-55.4		88	12.6
30	26	24,094	-52.6		84	15.7
25	26	25,276	-50.6		87	16.9
20	26	26,739	-48.1		90	16.5
15	24	28,652	-45.3		85	15.3
10	21	31,366	-42.1		79	14.0
7	9	33,817	-37.1			
5						

* VANDENBERG AFB, CALIF.
1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	100	12.8	94	326	1.2
1000	28	112			341	1.6
950	28	549	15.7	65	4	6.0
900	28	1,008	18.4	41	47	5.2
850	28	1,497	17.3	35	64	3.5
800	28	2,012	14.6	36	105	3.3
750	28	2,549	11.3	32	150	3.1
700	28	3,127	7.[illegible]	32	187	5.1
650	28	3,727	4.0	31	187	6.8
600	28	4,379	.2	29	204	5.6
550	28	5,060	-4.0	27	223	7.2
500	28	5,816	-9.2	25	236	6.[illegible]
450	28	6,611	-15.0	23	249	[illegible].7
400	28	7,503	-21.6	23	250	10.9
350	28	8,473	-29.0	25	254	13.[illegible]
300	28	9,556	-37.7	26	257	16.7
250	28	10,791	-46.3		259	26.6
200	28	12,247	-54.2		259	35.9
175	28	13,097	-57.3		259	36.9
150	28	14,064	-60.6		257	31.5
125	28	15,191	-63.6		258	24.5
100	27	16,553	-64.9		264	13.0
80	27	17,919	-63.5		294	2.1
70	27	18,740	-62.0		61	2.5
60	27	19,698	-59.9		84	5.6
50	27	20,841	-58.1		79	8.9
40	27	22,256	-55.0		77	8.2
30	27	24,105	-52.2		83	9.3
25	26	25,285	-50.5		81	9.7
20	26	26,746	-48.3		87	9.5
15	20	28,679	-45.5		87	10.3
10	17	31,417	-41.7		82	12.2
7	11	33,845	-38.2			
5						

VICTORIA TEXAS
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	33	22.2	90	19	1.9
1000	30	116	23.0	88	69	1.7
950	30	561	21.8	83	182	5.6
900	30	1,034	19.5	68	183	3.3
850	30	1,525	16.8	67	249	1.6
800	30	2,040	14.2	58	324	2.3
750	30	2,577	11.2	53	330	4.3
700	30	3,156	7.9	56	327	5.2
650	30	3,760	4.4	53	330	6.0
600	30	4,413	1.0	50	319	6.2
550	30	5,102	-2.8	45	304	6.8
500	30	5,858	-7.3	40	301	8.7
450	30	6,663	-12.6	34	299	9.5
400	30	7,562	-18.9	35	297	12.0
350	30	8,542	-25.9	33	297	14.2
300	30	9,640	-34.3	35	292	16.7
250	30	10,889	-43.7		292	21.8
200	30	12,353	-54.3		296	25.8
175	30	13,198	-59.5		290	26.6
150	30	14,151	-64.8		292	24.5
125	30	15,249	-69.5		294	20.0
100	30	16,571	-70.8		308	9.3
80	29	17,903	-66.7		30	6.4
70	29	18,717	-63.2		63	8.0
60	29	19,670	-60.7		83	11.7
50	29	20,810	-57.9		88	17.1
40	29	22,225	-55.2		89	19.8
30	29	24,073	-51.7		88	22.1
25	28	25,263	-49.2		86	23.7
20	28	26,735	-46.4		89	23.3
15	27	28,659	-43.6		87	21.8
10	24	31,408	-39.6		87	21.0
7	19	33,838	-37.1		95	18.5
5	6	36,127	-35.0			

* WAKE IS., PACIFIC AREA
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	28.0	83	89	8.0
1000	30	117	27.0	85	91	9.3
950	30	568	23.5	91	100	11.1
900	30	1,043	20.8	84	102	11.7
850	30	1,537	18.1	80	102	10.5
800	30	2,055	15.4	74	96	9.7
750	30	2,598	12.7	67	91	8.5
700	30	3,179	9.6	62	88	8.9
650	30	3,789	6.0	62	86	8.2
600	30	4,444	2.2	62	84	8.7
550	30	5,140	-1.9	58	85	9.9
500	30	5,896	-6.2	47	88	8.7
450	30	6,707	-11.1	41	86	9.5
400	30	7,609	-16.9	40	87	8.5
350	30	8,599	-23.6	37	77	7.8
300	30	9,706	-32.1	34	72	6.8
250	30	10,966	-42.3		51	6.4
200	30	12,436	-54.3		43	7.2
175	30	13,279	-60.9		33	9.1
150	28	14,223	-67.5		43	13.0
125	28	15,303	-73.7		67	16.1
100	24	16,597	-74.6		80	19.6
80	20	17,909	-70.3		84	22.1
70	20	18,706	-67.1		82	24.5
60	20	19,644	-63.4		85	26.4
50	20	20,772	-59.7		84	27.2
40	20	22,176	-56.6		87	29.7
30	20	24,014	-53.0		87	29.5
25	20	25,197	-50.0		89	30.1
20	20	26,660	-48.2		89	30.1
15	18	28,574	-44.1		81	31.1
10	18	31,318	-39.5		82	42.3
7	12	33,786	-34.7		87	40.8
5	5	36,150	-32.8			

* WALLOPS IS. VA. NASA
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	3	17.1	84	16	2.1
1000	29	126	18.7	72	[illegible]	3.1
950	29	564	17.2	64	325	4.5
900	29	1,027	14.7	62	292	6.0
850	29	1,508	11.9	60	268	9.1
800	29	2,014	8.9	62	266	11.3
750	29	2,544	6.2	59	264	13.0
700	29	3,110	3.7	51	262	18.5
650	29	3,707	.8	47	259	22.1
600	29	4,350	-2.3	47	257	25.3
550	29	5,027	-6.4	46	260	27.4
500	29	5,776	-10.9	38	260	30.7
450	29	6,573	-16.[illegible]	38	260	33.4
400	29	7,455	-22.4	35	260	34.8
350	29	8,422	-29.4	31	256	39.4
300	29	9,505	-37.5	32	255	48.4
250	29	10,740	-46.4		257	55.6
200	29	12,191	-55.4		261	59.2
175	29	13,036	-58.5		262	56.5
150	29	14,000	-60.9		264	48.8
125	29	15,128	-62.6		263	39.4
100	29	16,504	-62.0		266	28.6
80	29	17,890	-59.4		264	18.3
70	29	18,729	-57.6		262	13.6
60	29	19,705	-55.9		263	8.7
50	29	20,870	-53.9		257	5.4
40	29	22,308	-52.1		264	1.0
30	29	24,180	-49.6		112	3.7
25	27	25,383	-47.[illegible]		88	6.4
20	27	26,861	-46.1		86	7.[illegible]
15	24	28,788	-43.9		75	[illegible].9
10	17	31,520	-40.4		87	8.0
7	10	33,927	-36.6			
5						

WASHINGTON, D. C.
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	84	13.0	91	16	1.4
1000	30	129			21	2.1
950	30	567	15.3	68	327	4.7
900	30	1,022	12.7	67	318	5.8
850	30	1,500	10.1	65	300	8.4
800	30	2,003	7.7	67	283	10.7
750	30	2,531	5.1	58	279	13.6
700	30	3,093	2.6	55	271	16.3
650	30	3,687	-.1	51	271	20.2
600	30	4,327	-3.4	44	268	22.3
550	30	5,005	-7.1	38	264	26.0
500	30	5,748	-11.7	34	263	28.9
450	30	6,539	-17.2	32	260	29.5
400	30	7,421	-23.4	31	261	32.6
350	30	8,383	-30.6	32	260	37.3
300	30	9,460	-39.0	34	262	42.3
250	30	10,688	-47.4		263	50.9
200	30	12,136	-55.2		263	56.7
175	30	12,984	-57.1		264	54.0
150	30	13,955	-59.2		264	47.0
125	30	15,092	-61.1		268	38.3
100	30	16,476	-60.7		269	31.5
80	30	17,869	-59.1		270	18.3
70	30	18,708	-57.2		269	12.4
60	30	19,688	-55.4		268	7.2
50	30	20,855	-53.8		257	3.9
40	30	22,295	-52.1		262	2.7
30	30	24,169	-49.3		127	1.4
25	29	25,370	-47.9		94	2.3
20	24	26,834	-46.4		107	1.7
15	16	28,751	-44.6		114	5.1
10						
7						
5						

WINNEMUCCA, NEV.
870 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,310	[illegible].6	47	197	1.7
1000	30	129				
950	30	562				
900	30	1,023				
850	30	1,501	16.3	39	271	1.0
800	30	2,015	14.3	39	280	1.6
750	30	2,550	10.6	39	230	2.7
700	30	3,127	6.7	39	224	[illegible].0
650	30	3,727	2.9	37	215	8.0
600	30	4,374	-1.6	42	206	8.7
550	30	5,055	-6.3	42	213	9.7
500	30	5,801	-11.3	37	223	9.5
450	30	6,596	-17.2	35	232	10.7
400	30	7,473	-23.9	32	250	10.9
350	30	8,434	-31.1	31	251	14.6
300	29	9,507	-39.6	28	257	17.1
250	29	10,731	-48.3		256	18.3
200	29	12,176	-55.1		248	22.9
175	29	13,026	-56.7		247	24.1
150	29	13,998	-58.8		241	23.3
125	29	15,137	-61.0		246	17.9
100	28	16,518	-61.2		248	12.0
80	28	17,907	-60.1		240	4.7
70	27	18,741	-58.9		247	2.3
60	27	19,710	-57.6		48	1.7
50	26	20,863	-56.6		70	5.2
40	24	22,276	-55.0		44	5.2
30	21	24,126	-52.1		44	4.9
25	18	25,321	-50.3		23	4.9
20	15	26,783	-48.0		31	1.4
15	6	28,663	-45.6			
10						
7						
5						

WINSLOW, ARIZ.
853 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,492	14.4	72	170	3.1
1000	30	118				
950	30	562				
900	30	1,029				
850	30	1,517			173	2.5
800	30	2,033	16.8	49	231	5.6
750	30	2,580	13.6	46	241	6.8
700	30	3,158	9.2	50	223	6.8
650	30	3,764	4.2	58	212	8.5
600	30	4,414	-.7	57	215	8.7
550	30	5,096	-5.1	50	223	9.9
500	30	5,847	-9.6	36	239	12.2
450	30	6,647	-14.9	31	247	14.2
400	30	7,535	-21.2	29	251	17.7
350	30	8,507	-28.4	29	258	22.0
300	30	9,593	-36.8	32	256	27.8
250	30	10,831	-45.8		258	34.6
200	30	12,286	-54.5		260	44.1
175	30	13,134	-58.3		265	42.2
150	30	14,094	-62.4		268	32.8
125	29	15,209	-66.0		272	24.9
100	29	16,556	-66.9		277	11.1
80	29	17,910	-64.7		329	2.9
70	29	18,729	-62.7		61	5.2
60	29	19,683	-60.6		82	6.6
50	29	20,826	-57.8		79	7.8
40	29	22,241	-55.1		73	7.0
30	27	24,086	-51.7		86	7.6
25	26	25,272	-50.0		86	6.2
20	24	26,735	-47.9		99	6.0
15	18	28,627	-45.9		85	4.3
10	15	31,355	-43.3		303	.8
7	9	33,763	-40.2			
5						

YAKUTAT, ALASKA
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	12	6.8	97	106	5.1
1000	30	64			107	6.0
950	30	489	7.4	83	132	13.0
900	30	932	4.6	84	141	14.0
850	30	1,396	1.7	84	148	15.2
800	30	1,883	-1.1	83	155	15.3
750	30	2,397	-3.[illegible]	78	161	13.2
700	30	2,938	-7.1	73	171	13.2
650	30	3,512	-10.4	75	180	14.2
600	30	4,125	-14.2	69	187	15.5
550	30	4,777	-18.5	66	192	15.7
500	30	5,485	-23.2	62	200	17.1
450	29	6,242	-28.6	55	212	16.1
400	29	7,078	-34.4	51	217	17.7
350	29	7,999	-40.7	50	231	18.8
300	29	9,034	-46.6		240	27.4
250	29	10,232	-50.3		246	33.2
200	29	11,686	-50.7		244	28.0
175	29	12,556	-50.5		239	26.4
150	29	13,562	-50.5		241	22.0
125	29	14,750	-50.6		237	19.8
100	29	16,203	-50.7		232	17.9
80	28	17,656	-50.6		240	15.9
70	28	18,525	-51.1		235	13.0
60	27	19,527	-50.9		239	14.2
50	27	20,712	-51.2		242	13.0
40	25	22,158	-51.7		251	12.2
30	24	24,024	-51.5		255	13.4
25	20	25,216	-51.0		267	12.8
20	17	26,690	-49.8		268	15.2
15	9	28,608	-48.2			
10						
7						
5						

+ YAP, CAROLINE IS.
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	17	28.6	80	216	6.0
1000	30	91	27.8	78	217	7.4
950	30	538	23.[illegible]	76	227	11.5
900	30	1,016	21.2	68	235	10.9
850	30	1,511	18.4	63	245	8.9
800	30	2,029	15.6	61	253	7.4
750	30	2,572	12.6	57	251	6.0
700	30	3,151	9.6	57	259	3.5
650	30	3,760	6.2	54	245	2.7
600	30	4,416	2.6	53	208	2.5
550	30	5,109	-1.2	50	149	3.1
500	30	5,871	-5.5	46	121	3.9
450	30	6,682	-10.2	41	111	5.[illegible]
400	30	7,590	-15.7	38	105	12.0
350	30	8,584	-22.4	34	88	14.8
300	30	9,699	-30.5	32	75	18.5
250	30	10,968	-40.7	30	67	24.5
200	30	12,446	-53.4		64	32.8
175	30	13,291	-60.5		63	37.5
150	30	14,234	-68.1		63	42.0
125	30	15,308	-75.5		71	41.2
100	29	16,591	-75.3		87	30.7
80	29	17,900	-69.9		88	22.3
70	29	18,702	-66.0		87	20.8
60	29	19,644	-62.4		83	17.3
50	29	20,777	-59.5		86	15.2
40	29	22,185	-56.0		87	12.6
30	29	24,031	-52.1		94	10.9
25	29	25,218	-49.4		87	14.6
20	29	26,690	-46.4		89	17.9
15	28	28,608	-44.1		98	25.6
10	27	31,355	-40.3		95	38.9
7	18	33,800	-35.8		93	56.7
5	5	36,155	-33.9			

YUCCA FLAT, NEV.
881 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,196	11.9	43	237	.6
1000	30	114				
950	30	556				
900	30	1,018				
850	30	1,502	19.4	31	205	2.5
800	30	2,021	16.6	30	190	9.3
750	30	2,565	12.5	32	192	11.3
700	30	3,140	[illegible].0	39	192	11.5
650	30	3,743	3.5	37	180	12.2
600	30	4,391	-1.1	39	189	11.5
550	30	5,073	-5.7	35	192	9.1
500	30	5,820	-10.[illegible]	29	209	9.7
450	30	6,616	-16.1	R25	231	10.9
400	30	7,499	-22.6	R23	237	13.0
350	30	8,464	-30.2	R22	238	16.3
300	30	9,541	-38.8	R22	246	20.2
250	30	10,770	-47.0		254	23.5
200	30	12,223	-54.1		254	28.0
175	30	13,075	-56.8		257	28.2
150	30	14,043	-60.1		252	27.2
125	30	15,172	-63.3		255	22.7
100	30	16,535	-65.1		254	12.6
80	30	17,904	-62.5		246	4.3
70	30	18,729	-60.9		81	1.4
60	30	19,692	-59.4		57	4.3
50	30	20,839	-57.4		71	8.9
40	29	22,261	-54.8		73	7.0
30	27	24,113	-51.7		72	4.7
25	27	25,300	-50.0		68	5.6
20	27	26,764	-47.9		81	2.1
15	12	28,680	-46.1		92	5.2
10						
7						
5						

YUMA, ARIZ.
994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	21	131	24.7	49	77	1.4
1000	21	80				
950	21	532	26.7	45	131	1.7
900	21	1,009	23.8	44	165	5.1
850	21	1,506	20.6	44	168	8.9
800	21	2,027	16.9	46	168	12.4
750	21	2,565	12.8	51	167	14.4
700	21	3,148	[illegible].5	48	168	15.2
650	21	3,747	5.0	40	173	14.8
600	21	4,405	1.0	36	184	13.4
550	21	5,090	-3.2	36	204	12.6
500	20	5,846	-7.9	32	215	13.0
450	20	6,650	-13.1	28	226	14.6
400	20	7,542	-20.1	30	232	19.4
350	20	8,516	-27.9	30	235	23.1
300	19	9,614	-35.9	28	245	33.4
250	18	10,861	-44.7		243	40.4
200	18	12,322	-54.0		245	48.4
175	17	13,171	-58.7		247	47.8
150	16	14,132	-63.9		249	38.9
125	12	15,247	-67.4		248	31.5
100	7	16,596	-66.2			
80						
70						
60						
50						
40						
30						
25						
20						
15						
10						
7						
5						

Reference notes are on page 459

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. SEPTEMBER 1966

Date	Sun's zenith distance								
	A. M.				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
ALBUQUERQUE, N. MEX.									
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Sep.									
2-----	0.77	0.88	0.98	1.15	1.39	----	----	----	----
3-----	.82	.93	1.06	1.24	1.43	----	----	----	----
4-----	----	----	----	1.18	----	----	----	----	----
5-----	.83	.92	1.04	1.21	1.39	1.24	----	----	----
6-----	.80	.94	1.04	1.20	----	----	----	----	----
7-----	----	----	----	----	1.37	1.19	0.99	0.86	0.74
8-----	.84	.95	1.06	1.21	1.39	----	----	----	----
9-----	.78	.89	1.01	1.17	1.37	1.09	.90	----	----
10----	.86	.95	1.07	1.23	1.38	----	----	----	----
13----	.88	1.00	1.11	1.25	----	----	----	----	----
16----	----	----	----	----	1.45	1.32	1.18	1.08	.99
17----	.95	1.07	1.18	1.34	1.46	1.32	1.16	1.05	.95
18----	.91	1.00	1.14	1.28	1.44	1.31	1.18	1.05	.94
19----	----	----	----	----	1.35	1.25	----	----	----
20----	.66	.78	.92	1.08	1.31	----	----	----	----
21----	.73	.83	.97	1.14	1.36	----	----	----	----
22----	.84	.96	1.07	1.20	1.34	1.13	.90	.74	----
23----	.74	.85	.98	1.14	1.32	1.13	----	----	----
24----	.76	.84	1.00	1.09	1.29	1.13	----	----	----
25----	.70	.80	.93	1.09	1.28	----	----	----	----
26----	.77	.87	1.00	1.16	1.32	----	----	----	----
28----	.68	.76	1.02	1.20	1.36	1.26	1.09	.98	.86
29----	.93	1.01	1.15	----	----	----	----	----	----
30----	.67	.83	----	----	----	1.21	----	----	----
Aver- ages	0.80	0.90	1.04	1.19	1.37	1.22	1.06	0.96	0.90
OMAHA, NEBR.									
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Sep.									
4-----	----	----	HS0.92	HS1.10	HM1.34	----	HS1.04	HS0.97	HS0.82
5-----	HS0.78	HS0.85	HS1.00	HS1.18	HS1.31	HS1.21	HS1.06	HS .89	HS .82
6-----	HS .85	HS .95	HS1.07	HS1.22	----	----	HS1.04	HS .92	HS .81
7-----	HS .85	HS .93	HS1.04	HS1.15	HS1.28	HM1.09	HM .92	HM .80	----
9-----	----	----	----	----	HM1.18	HI .92	HI .81	----	----
10----	----	----	----	----	HM1.10	----	----	----	----
11----	----	----	----	----	----	----	HI .74	HI .57	HI .47
15----	----	----	----	----	----	HS1.20	HS1.09	.94	HS .86
20----	----	----	----	HS1.10	HM1.26	HM1.06	HM1.01	HM .83	HM .70
22----	HS .86	HS .94	HS1.06	HS1.21	HS1.32	HS1.22	HS1.07	HS .96	HS .70
23----	HS .85	HS .94	HS1.07	HS1.24	HS1.39	HS1.25	HS1.08	HS .97	HS .85
Aver- ages	0.84	0.92	1.03	1.17	1.26	1.14	0.99	0.87	0.75
GUAM, M. I.									
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Sep.									
1-19--	No observations due to cloudiness								
20-30-	Instruments inoperative								

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon

HS Slight haze
HM Moderate haze
HI Intense haze

Date	Sun's zenith distance								
	A. M.				*	P M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
MADISON, WIS.									
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Sep.									
8-----	M 0.61	M 0.71	S 0.84	S 1.06	S 1.26	S 1.09	S 0.89	----	----
10----	M .57	M .66	M .78	M .97	S 1.12	S .95	----	----	----
11----	----	I .61	I .73	I .85	M .88	----	----	----	----
16----	M .85	M .94	S 1.05	S 1.20	S 1.29	----	----	----	----
22----	M .66	----	----	----	----	----	----	----	----
23----	S .91	----	----	----	----	----	----	----	----
Aver- ages	0.72	0.73	0.85	1.02	1.14	1.02	0.89	----	----
BLUE HILL OBS., MASS.									
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Sep.									
2-----	0.77	0.88	0.99	1.17	1.28	----	----	----	----
6-----	----	----	----	----	1.33	1.08	0.91	0.78	0.69
7-----	.72	.83	.96	1.13	1.33	----	----	----	----
8-----	.67	.77	.91	1.08	1.32	1.16	.99	.87	.79
10----	----	----	.96	1.16	1.29	1.08	.88	.75	.62
11----	.45	.58	.77	1.04	1.40	1.25	1.07	.96	.89
12----	.90	.99	1.11	1.25	1.35	1.13	.96	.82	.72
16----	.94	1.04	1.13	1.29	1.40	1.25	1.11	.99	.89
17----	.82	.91	1.05	1.21	1.34	1.12	.93	.74	.64
18----	.65	.77	.89	1.11	----	----	----	----	----
19----	.52	.62	.79	----	----	----	----	----	----
23----	.87	.99	1.10	1.24	1.35	1.16	.99	.87	.79
24----	.87	.95	1.08	1.22	1.35	1.23	1.05	.91	.82
25----	----	----	----	----	----	1.28	1.06	.94	.82
26----	.94	1.04	1.13	1.28	1.42	1.20	.98	.86	.76
Aver- ages	0.76	0.86	0.99	1.18	1.35	1.18	0.99	0.86	0.77
TUCSON, ARIZ.									
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Sep.									
3-----	0.73	0.85	0.95	----	----	----	----	----	----
4-----	----	----	----	----	----	----	----	----	0.52
5-----		Pyrheliometer malfunction							
6-----	----	.73	----	----	----	----	----	0.85	.77
7-----	.69	.73	----	----	----	----	----	.82	.71
8-----	----	----	----	----	----	----	----	.91	.82
9-----	.82	.91	----	----	----	----	----	----	----
10----	.84	.93	1.03	1.18	----	----	----	----	----
16----	.78	.88	.99	----	----	----	----	----	.77
17----	.69	.81	----	----	----	----	----	----	.54
18----	.54	.65	.79	----	----	----	----	----	----
19----	----	----	----	----	----	----	----	----	.84
20----	.79	.89	----	----	----	----	----	----	----
21----	.74	.85	.97	----	----	----	----	----	.68
22----	.60	----	----	----	----	----	----	.92	.81
23----	.31	.37	.47	----	----	----	----	----	.59
26----	.73	----	----	----	----	----	----	----	.66
29----	.01	.01	.01	.02	----	----	----	.01	.01
30----	.01	.01	----	----	----	----	----	----	----
Aver- ages	0.59	0.66	0.74	0.60	----	----	----	0.70	0.64

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No 2, page 63, of this publication

RAWINSONDE REFERENCE NOTES:

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon.
The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available.

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.
These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
+ Observations for these stations are scheduled at 0000 G.C.T.
R More than half of the observations are from statistical values. Equipped with lithium chloride hygristor.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

SEPTEMBER 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	574	591	678	638	668	467	604	646	646	603	486	586	512	188	186	---	---	577	603	547	---	575	570	558	523	538	309	---	537	474		534
AMES IOWA	404	370	287	562	470	548	565	544	533	529	510	467	397	175	599	454	576	574	510	---	---	---	---	---	---	---	---	---	---	---		---
ANNETTE ALASKA	317	189	30	103	440	367	325	42	199	400	168	227	329	140	65	104	220	65	149	44	---	227	226	128	69	25	201	267	82	151		183
APALACHICOLA FLORIDA	408	538	540	530	583	286	357	550	359	199	265	483	354	464	507	466	485	13	244	453	517	501	524	472	420	511	287	147	491	473		414
ARGONNE NAT. LAB.	361	404	374	488	466	487	478	481	465	403	415	339	337	143	300	462	330	258	119	244	141	443	433	314	270	294	284	284	313	225		345
ASTORIA OREGON	---	316	498	525	445	358	425	436	378	80	433	372	434	181	205	218	60	428	447	439	418	200	331	141	210	342	391	375	397	397		341
ATLANTA GEORGIA	453	529	491	370	450	588	538	478	286	503	524	327	146	437	305	284	61	114	182	486	400	344	501	550	538	479	343	144	499	472		394
BARROW ALASKA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	130*	103		---
BETHEL ALASKA	---	292	295	191	79	227	359	400	292	284	107	211	146	344	162	219	176	127	282	81	220	126	269	190	80	79	247	149	102	117		202
BISMARCK N.DAK.	496	353	477	478	513	510	477	473	298	276	429	424	396	480	304	318	416	449	440	406	442	372	410	96	353	102	---	250	76	270		372
BLUE HILL MASS.	469	541	238	40	469	509	491	558	330	535	540	539	458	157	120	539	491	451	270	283	163	266	422	422	327	451	343	354	154	439		379
BOISE IDAHO	570	564	559	544	534	509	436	443	453	527	517	438	478	467	355	474	485	175	426	460	453	438	448	368	381	237	412	444	432	425		448
BOSTON MASSACHUSETTS	475	522	198	29	436	456	488	535	318	508	531	504	448	135	156	528	415	405	170	325	161	262	437	401	345	439	---	344	---	---		369
BROWNSVILLE TEXAS	672	630	472	614	647	652	518	299	273	503	349	483	498	512	617	636	450	320	592	602	615	605	599	608	529	584	587	575	577	576		540
CANTON ISLAND P.I.	655	642	661	652	620	640	645	656	656	648	666	623	669	651	635	639	628	667	677	646	664*	686	645	688	---	676	696	671	679	681		657*
CAPE HATTERAS N.C.	421	517	478	495	354	519	529	544	562	490	466	448	372	379	520	---	485	504	260	302	395	425	496	509	493	478	439	258	371	493		448
CARIBOU MAINE	440	48	538	361	265	309	330	516	508	432	451	522	477	285	73	477	471	220	487	468	456	45	108	171	171	241	440	319	314	50		333
CHARLESTON S.C.	618	556	544	567	532	507	556	590	619	552	184	259	405	480	501	246	326	155	75	292	524	505	551	552	515	513	488	129	403	539		443
CLEVELAND OHIO	319	457	305	306	495	457	521	450	523	437	434	428	389	301	425	478	406	422	233	75	198	241	348	389	116	361	---	357	144	136		350
COLUMBIA MISSOURI	487	400	325	496	524	462	530	490	443	447	432	384	424	232	523	314	414	172	48	378	455	473	470	450	73	105	236	335	396	189		370
DAVIS CALIFORNIA	364	357	350	349	347	347	348	350	338	342	351	342	284	330	329	321	298	252	292	290	303	312	309	307	310	279	300	295	295	288		522
DODGE CITY KANSAS	325	506	546	572	571	572	475	476	547	540	530	520	481	434	330	186	336	328	480	538	523	544	529	511	366	402	206	487	501	357		457
E. LANSING MICHIGAN	223	456	400	374	429	473	520	521	542	519	429	465	413	181	517	552	374	418	385	93	83	379	450	354	403	394	284	---	---	---		394
EL CENTRO CALIF. NPF	503	502	502	508	500	493	480	475	460*	460*	492	466*	466*	404	398	442	417*	417*	406	445	440	427	434	418	437	446	367	239	251	398		436*
EL PASO TEXAS	611	653	631	615	502	530	401	664	673	661	491	595	595	587	319	609	607	611	499	584	606	608	598	587	581	573	511	481	490	306		559
ELY NEVADA	375	521	604	598	560	444	563	576	422	336	568	579	576	502	559	541	536	264	251	507	475	470	480	494	499	200	480	486	489	481		481
EPPLEY NEWPORT R.I.	406	483	217	53	499	472	517	473	124	515	504	528	508	203	167	500	491	462	398	84	89	260	442	414	366	447	240	194	84	401		351
FAIRBANKS ALASKA	334	232	235	374	333	332	222	284	308	355	166	204	234	161	239	216	280	132	199	162	153	214	253	209	117	172	206	161	167	183		228
FLAMING GORGE UTAH	293	295	535	541	373	335	527	307	417	373	298	359	443	263	278	454	482	481	413	457	452	450	443	236	376	204	378	435	404	402		390
FORT WORTH TEXAS	378	606	479	489	622	588	426	402*	134	110	237	470	538	521	106	149	217	384	580	566	578	542	579	567	550	535	148	539	521	81		421*
FRESNO CALIFORNIA	561	550	553	552	546	543	560	548	493	535	545	548	556	553	535	516	503	151	478	404	489	465	475	477	479	446	472	456	318	434		491
GAINESVILLE FLORIDA	542	505	493	563	498	288	398	455	465	462	505	440	465	518	508	605	540	145	421	110	285	530	519	503	384	401	133	93	430	492		423
GLASGOW MONTANA	489	473	502	529	533	521	498	308	479	423	483	244	421	514	299	249	466	460	433	378	453	443	408	231	207	219	374	340	175	301		395
GRAND JUNCTION COLO.	359	473	633	636	554	544	570	610	607	433	277	503	557	565	577	534	563	560	377	525	542	535	532	494	488	493	444	506	509	494		516
GREAT FALLS MONTANA	505	436	471	477	472	447	310	362	439	431	336	115	210	375	259	310	338	404	306	361	395	388	316	284	273	201	276	352	74	397		344
GREENSBORO N.C.	470	489	451	259	377	499	516	553	546	456	478	386	123	127	360	439	437	327	50	132	237	444	487	504	479	157	311	120	363	464		368
INDIANAPOLIS INDIANA	455	463	486	507	453	445	---	557	491	395	424	470	501	322	554	522	523	428	46	51	155	416	526	410	37	402	58	416	435	43		379
ITHACA NEW YORK	437	379	85	148	316	343	248	370	472	455	421	446	277	74	78	457	414	407	355	160	29	39	253	165	325	310	235	166	156	122		271
LAKE CHARLES LA.	327	373	535	331	404	502	495	363	202	373	318	520	548	512	431	---	316	254	558	541	534	553	499	486	464	439	343	331	491	455		431
LAKELAND FLORIDA	640	544	558	641	541	528	416	446	474	446	368	360	488	433	435	435	516	541	509	456	505	---	415	488	235	402	371	192	243	532		454
LANDER WYOMING	105	395	567	577	563	475	501	472	540	365	396	337	436	114	357	526	521	523	505	496	487	486	429	139	346	219	340	381	447	470		417
LARAMIE WYOMING	444	499	593	592	589	463	409	478	599	444	436	410	512	574	418	550	512	591	595	540	598	594	597	443	369	504	511	593	567	587		520
LAS VEGAS NEVADA	648	647	637	632	600	635	613	628	491	433	611	637	646	590	589	570	549	258	306	521	537	484	502	523	555	471	229	402	357	491		526
LITTLE ROCK ARKANSAS	538	537	526	324	596	588	488	516	---	---	---	---	---	---	---	---	---	---	---	134	546	---	490	530	485	447	455	308	463	92		---
LOS ANGELES, CALIF.	392	311	575	407	431	362	416	596	531	462	337	539	570	589	545	511	520	300	282	459	538	505	500	438	400	431	458	400	80	405		443
MADISON WISCONSIN	481	218	279	552	401	561	501	529	521	500	478	473	433	145	543	502	321	406	314	397	434	471	480	106	474	295	467	192	139	312		398
MANHATTAN KANSAS	435	288	495	506	509	541	513	416	495	478	419	436	252	142	481	124	180	252	401	466	452	483	457	407	116	73	162	309	408	200		363
MEDFORD OREGON	573	575	569	569	572	447	359	517	492	531	353	448	404	412	485	497	408	139	459	286	472	403	477	479	408	418	472	466	443	452		453
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---
MIDLAND TEXAS	---	---	601	591	598	483	167	---	326	---	---	507	587	545	195	---	487	366	369	251	533	547	550	544	529	462	503	520	426	219		454
NASHVILLE TENNESSEE	536	504	485	422	554	210	557	488	447	415	177	247	119	462	55	518	368	134	154	259	225	528	540	541	459	99	417	71	504	242		358
NEW YORK N.Y.U	368	424	278	54	456	477	436	234	235	544	440	212	368	56	329	541	469	438	365	27	14	129	502	323	313	495	95	111	56	445		308
NORTH OMAHA NEBRASKA	363	404	451	611	603	605	590	453	507	483	542	540	332	305	583	---	132	312	507	529	---	533	531	297	---	133	---	171	137	312		422
OAK RIDGE TENNESSEE	514	---	424	327	417	226	546	538	509	463	343	247	93	303	176	556	315	66	87	337	288	308	533	531	447	106	366	141	492	412		349
OKLAHOMA CITY OKLA.	282	476	371	489	511	498	471	250	277	239	135	185	383	437	72	88	106	384	312	444	458	489	472	484	439	381	52	420	433	80		337

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

SEPTEMBER 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	547	537	542	537	511	519	510	500	477	494	447	286	214	197	455	478	471	455	472	460	462	455	450	441	449	442	161	263	195	367		427
PORTLAND MAINE	546	481	251	49	468	397	491	524	458	459	534	517	456	195	180	526	486	453	163	486	306	123	400	433	420	375	348	367	59	358		377
PROSSER WASHINGTON	563	560	552	---	522	500	436	522	515	507	---	476	245	314	396	328	425	---	471	464	445	426	453	---	---	346	---	373	400	404		444
RAPID CITY S.DAK.	423	344	485	493	492	372	473	460	396	440	438	350	39	452	426	137	281	441	435	406	419	403	400	296	40	241	351	271	162	207		352
RENO NEVADA	550	423	614	651	507	421	532	544	486	535	542	513	308	519	482	507	421	79	265	414	476	473	468	463	470	343	460	454	443	441		460
RICHLAND 25 NW WASH.	504	479	509	503	494	458	379	485	464	472	200	442	301	302	368	289	353	251	442	434	411	400	421	182	326	333	386	375	392	393		392
RIVERSIDE CALIFORNIA	526	486	404	571	509	463	434	559	497	556	500	576	592	597	551	531	499	309	341	523	516	498	485	503	501	410	442	439	20	461		477
RUSTON LOUISIANA	331	328	479	325	438	520	489	413	223	81	284	454	406	463	117	290	277	407	216	458	436	---	468	467	376	412	318	114	41	194		339
SAINT CLOUD MINN.	241	512	372	535	325	531	553	520	503	448	263	476	209	504	530	463	455	467	482	292	387	378	470	79	460	344	217	166	350	214		392
SALT LAKE CITY	288	315	607	599	567	455	584	459	520	420	263	570	505	136	314	535	547	492	383	501	510	505	438	353	440	305	469	493	489	493		452
SAN ANTONIO TEXAS	521	549	570	550	431	489	365	338	197	292	384	465	491	560	487	377	182	454	509	525	570	565	502	519	542	529	510	478	518	387		462
SANTA MARIA CALIF.	502	512	497	512	416	250	553	552	491	455	492	510	551	548	534	508	504	369	295	261	504	501	469	356	437	408	460	430	50	194		437
SAULT STE MARIE MICH	435	136	493	341	313	532	534	414	456	206	168	313	342	412	502	470	436	348	403	495	150	446	335	307	364	257	252	222	92	311		349
SEATTLE TACOMA WASH.	515	260	534	537	523	357	412	482	440	173	196	456	373	73	267	218	122	368	447	450	421	---	384	179	242	325	350	393	328	399		353
SPOKANE WASHINGTON	552	544	546	547	541	388	448	505	490	496	364	88	476	411	374	253	446	311	473	451	446	416	438	286	183	197	388	414	430	411		410
STATE COLLEGE PENN.	540	509	370	173	472	422	323	542	563	442	476	366	152	41	146	552	479	487	414	36	46	78	318	415	149	373	81	95	134	235		314
STERLING VIRGINA	499	391	393	218	449	466	456	424	584	450	552	366	179	67	283	575	484	409	210	---	74	207	379	532	106	157	42	40	145	422		330
SWAN ISLAND W.I.	641	346	427	657	115	591	679	672	671	643	671	617	323	607	427	391	463	315	672	641	649	642	672	677	602	647	606	638	661	682		568
TAMPA FLORIDA	---	---	---	---	---	---	345	322	479	338	234	446	553	463	520	547	489	537	523	478	301	474	409	483	159	468	309	153	236	540		409
TUCSON ARIZONA	559	429	580	531	534	603	586	595	584	468	459	188	199	299	292	552	546	503	507	529	526	541	520	511	458	489	381	297	122	475		462
WAKE ISLAND,PACIFIC	359	261	376	557	517	499	439	499	---	235*	206	460*	429	525	---	---	418	409*	490	509	589	---	444	335	284	464	504	427	480	268		422*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values in parentheses are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

SEPTEMBER 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	214	81	307	309	292	276	304	239	296	220	266	260	107	248	233	227	255	261	256	267	255	239	*									

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. **The value represents the total incoming minus the total outgoing radiation of all wave lengths.**

* Recorder inoperative September 23-30

These data are of an experimental nature and are published as received from the Huntley Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

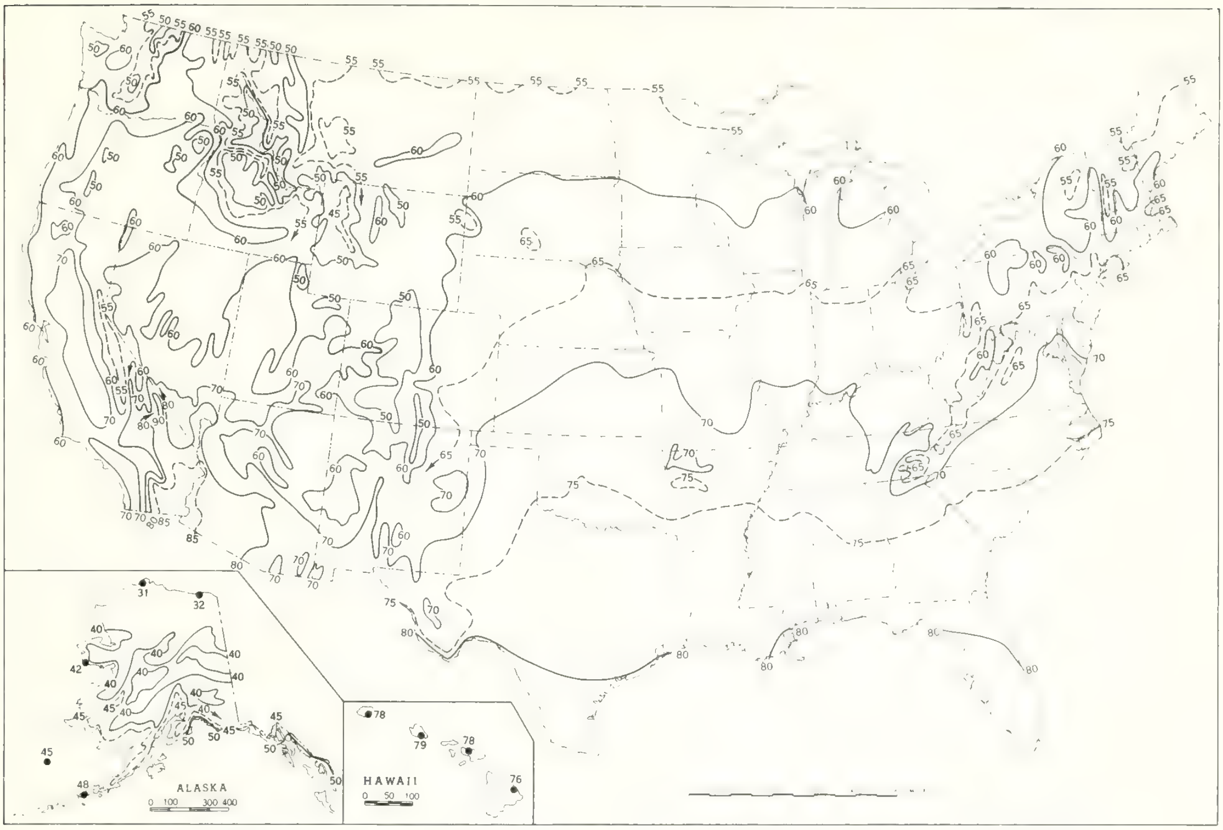
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

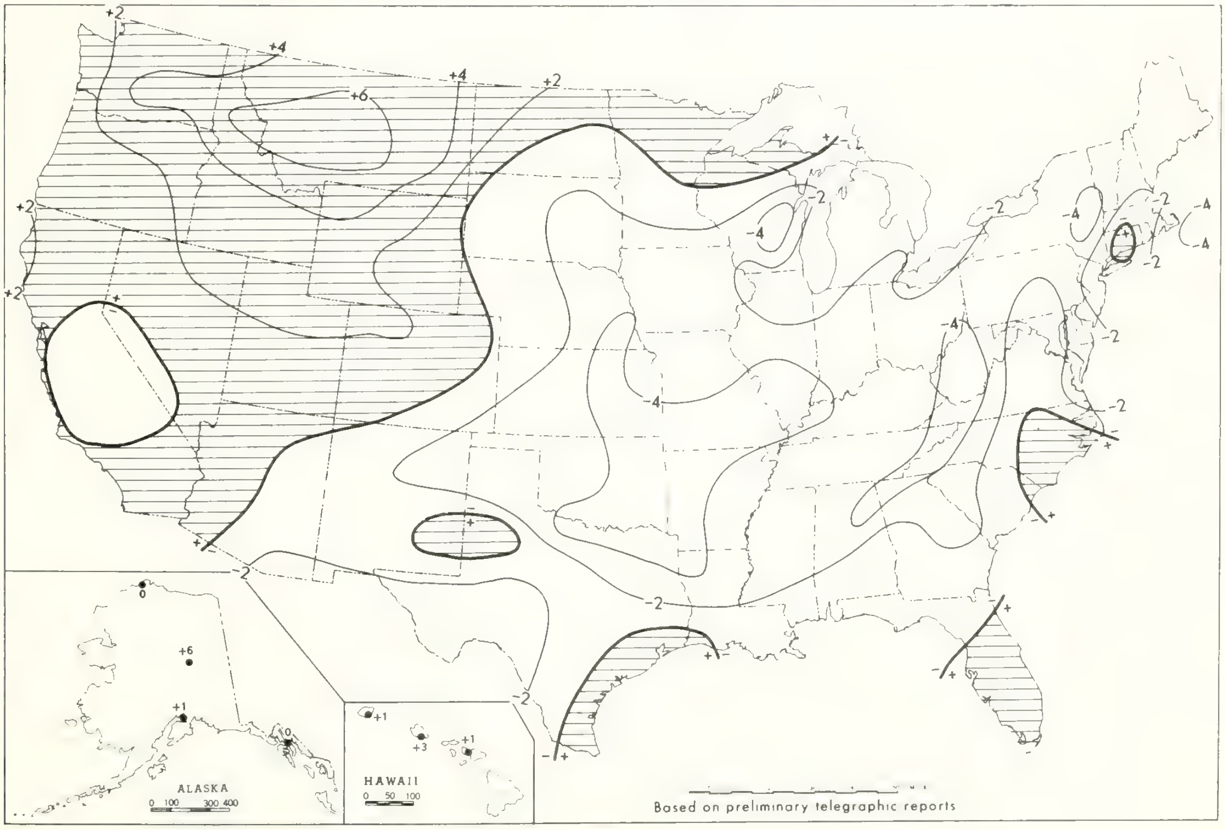
Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Mex.	02229	00231	00237	00232	00239	00236	00239	00235	00232	00238	06248	00223	05223	05245	00253	00245	00249	00257	00242	00222	00227	00229	00235	00235	00254	00240	06241	00234	05235	00248		238
Bismarck, N. Dak.	00313	04302	00313	00323	00317	00308	00316	00312	02312	00295	00292	00304	00318	00299	05291	06319	00317	00312	00293	00289	00284	00285	00300	04295	00311	05326	00316	00317	05352	00347		309
Caribou, Maine	00338	-----	00327	05341	05344	00350	00363	00321	00320	00321	06377	00352	00338	03325	05340	00349	00348	00332	00353	00355	00329	05364	-----	05388	05381	05373	00363	03366	05343	-----		348
Fairbanks, Alaska	06339	05338	05328	03325	00327	05315	04310	06301	06277	03280	04280	04293	04342	05301	00324	05332	05309	05300	05353	05375	05385	00339	00338	00304	05322	-----	00357	05364	05328	00326		325
Green Bay, Wis.	00330	06354	04367	00352	00387	00380	00357	00348	00334	00332	00320	00330	00333	00341	00341	00340	00344	05367	00354	00351	04339	00336	00327	02341	00355	00357	00343	00360	05372	00410		350
Huancayo, Peru	00277	00268	-----	-----	-----	-----	00276	00270	00270	00268	00265	00268	00267	00269	00273	00276	00272	00272	00275	00276	00274	00261	00262	00262	00264	00263	00261	00261	00259	00258		268
Mauna Loa, Hawaii	00285	00279	-----	-----	00271	00277	00280	00280	00283	06271	-----	02274	00279	00279	00280	00284	-----	-----	00286	00283	00287	06257	06252	05264	-----	05277	05280	05274	00276	00271		276
Nashville, Tenn.	00314	00318	00310	00338	00309	04319	00323	00335	00326	05301	05308	03296	05344	00305	-----	00308	05319	05337	05326	05352	05353	00310	00308	00319	00307	-----	00307	05337	00309	00311		319
Sterling, Va.	00318	00330	00319	05333	00316	00329	00342	00351	00327	00311	00326	00318	04324	-----	00305	00319	00300	00308	04306	-----	-----	00325	00309	00313	05317	05321	-----	-----	-----	00302		320
Tallahassee, Fla.	00300	00306	00316	00303	00301	04315	00302	00291	00295	04293	02309	05293	00299	00301	02310	02299	-----	-----	00283	00287	00308	00329	00295	00295	00285	00286	00287	05286	00289	00283		298

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), September.

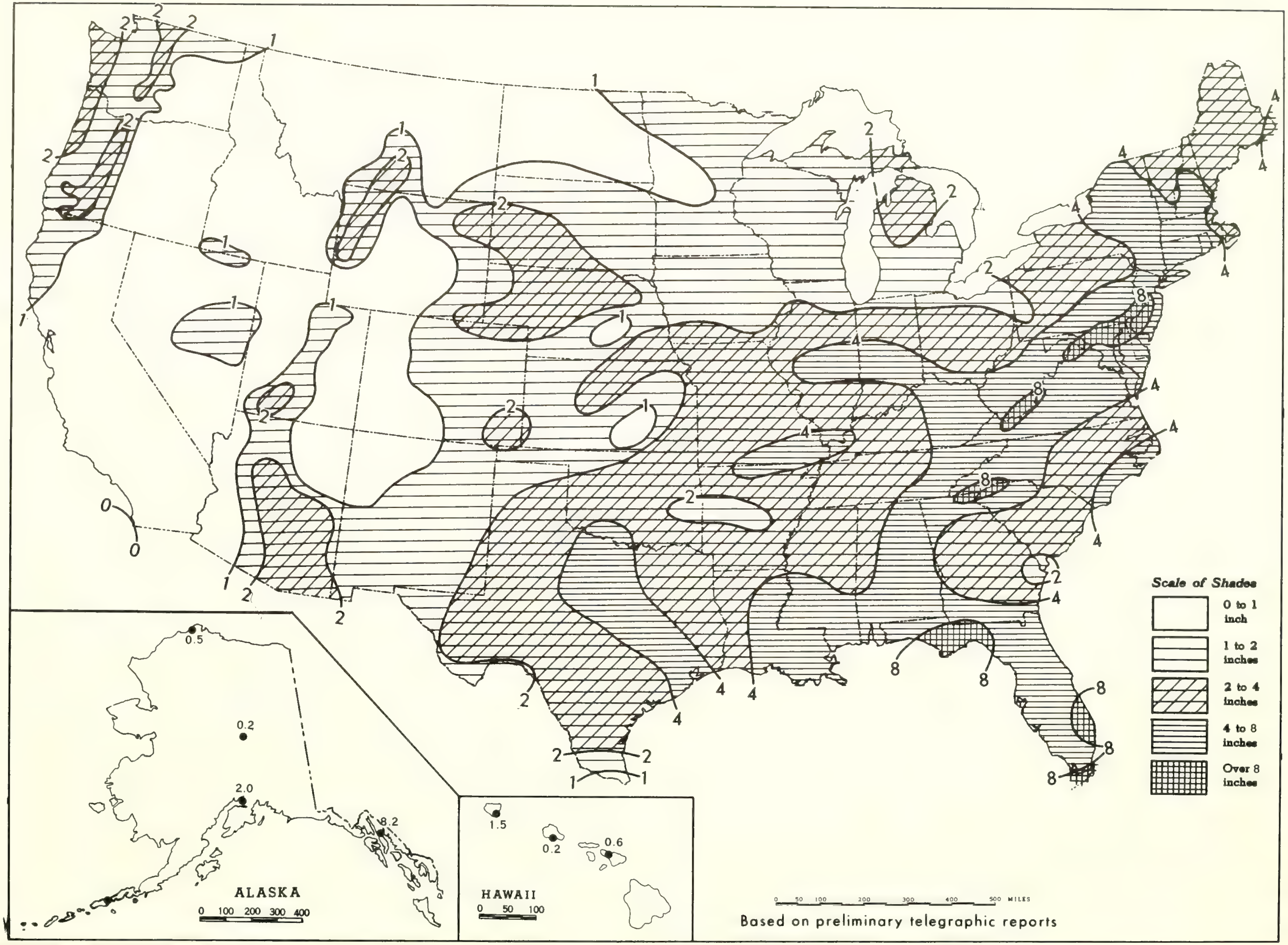


B. Temperature Departure from 30 - Year Mean (°F 1931-60), September 1966.



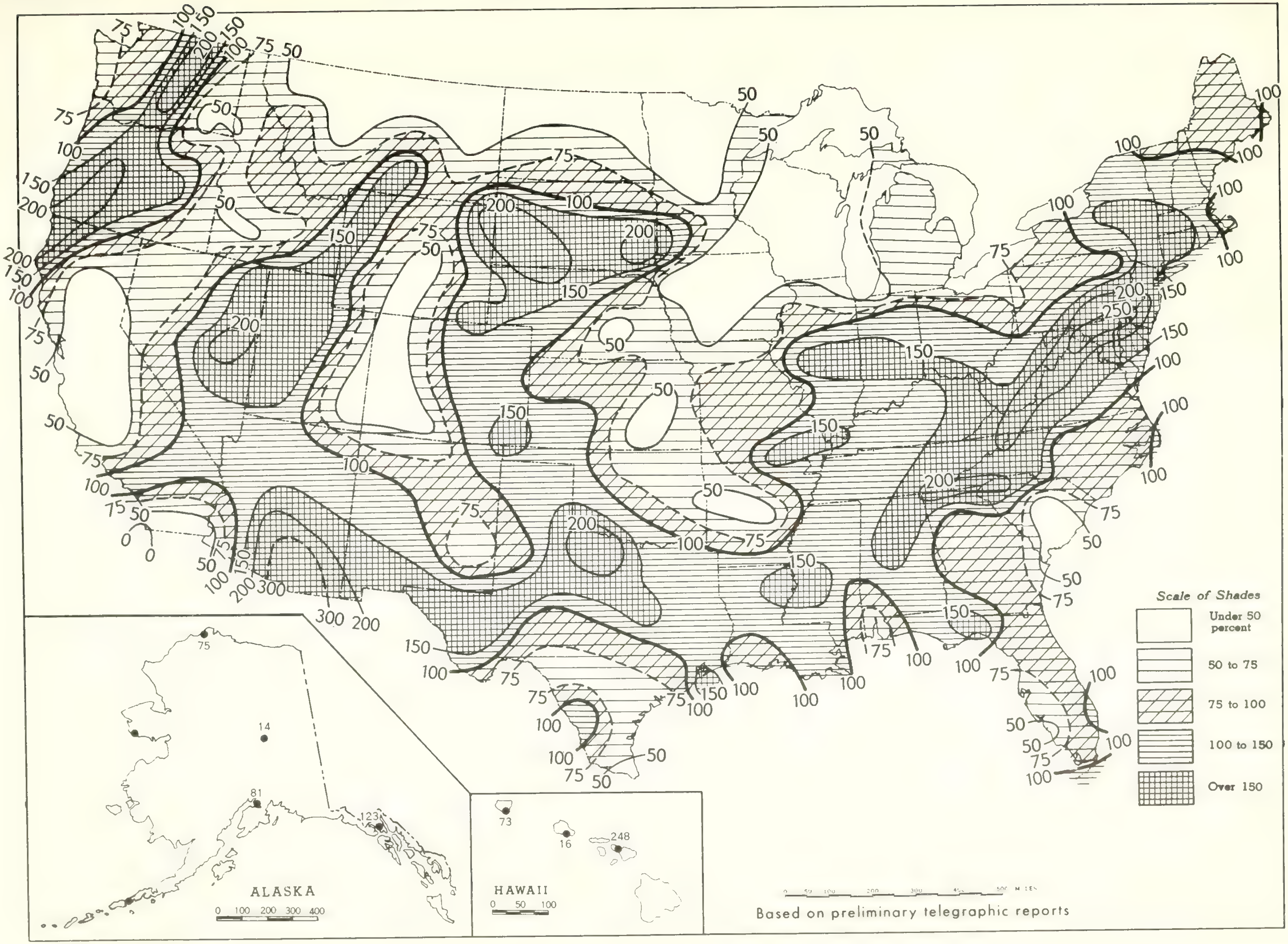
Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), September 1966.



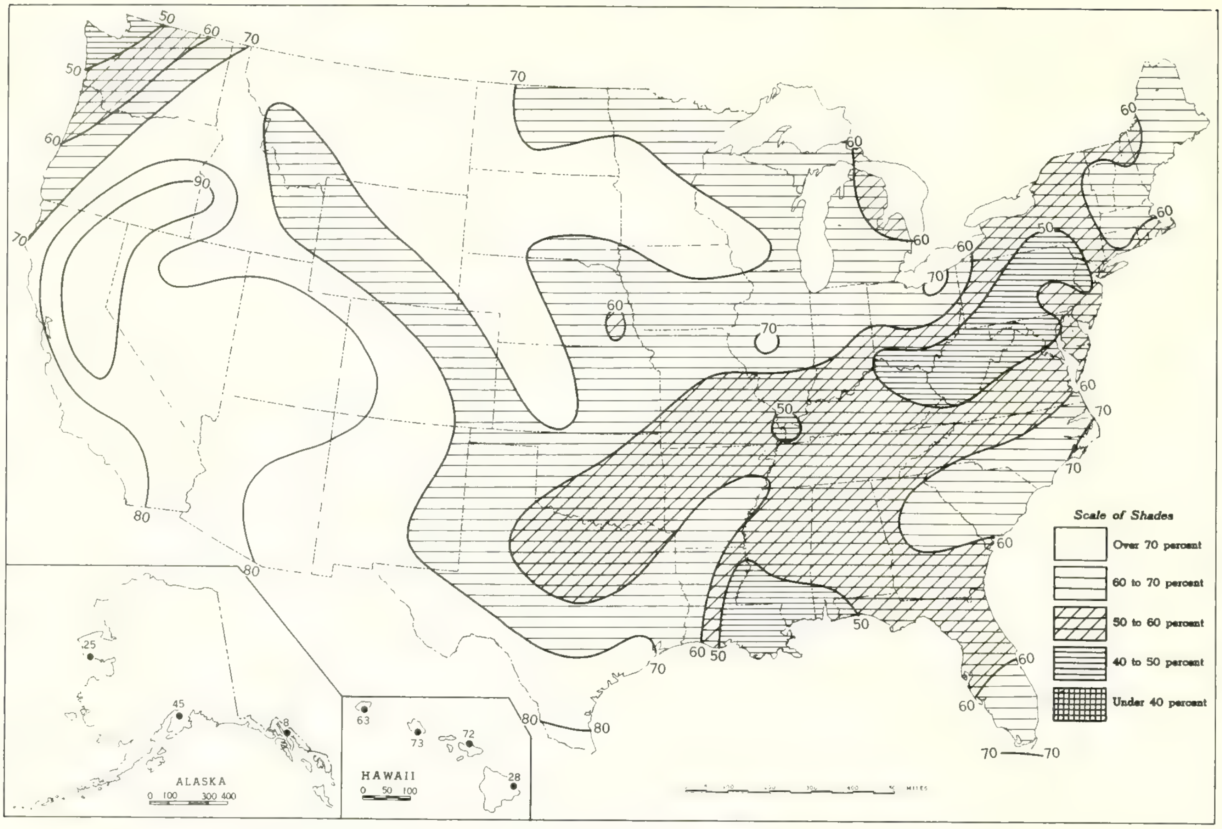
Based on preliminary telegraphic reports

Chart III. Percentage of Normal Precipitation, September 1966.

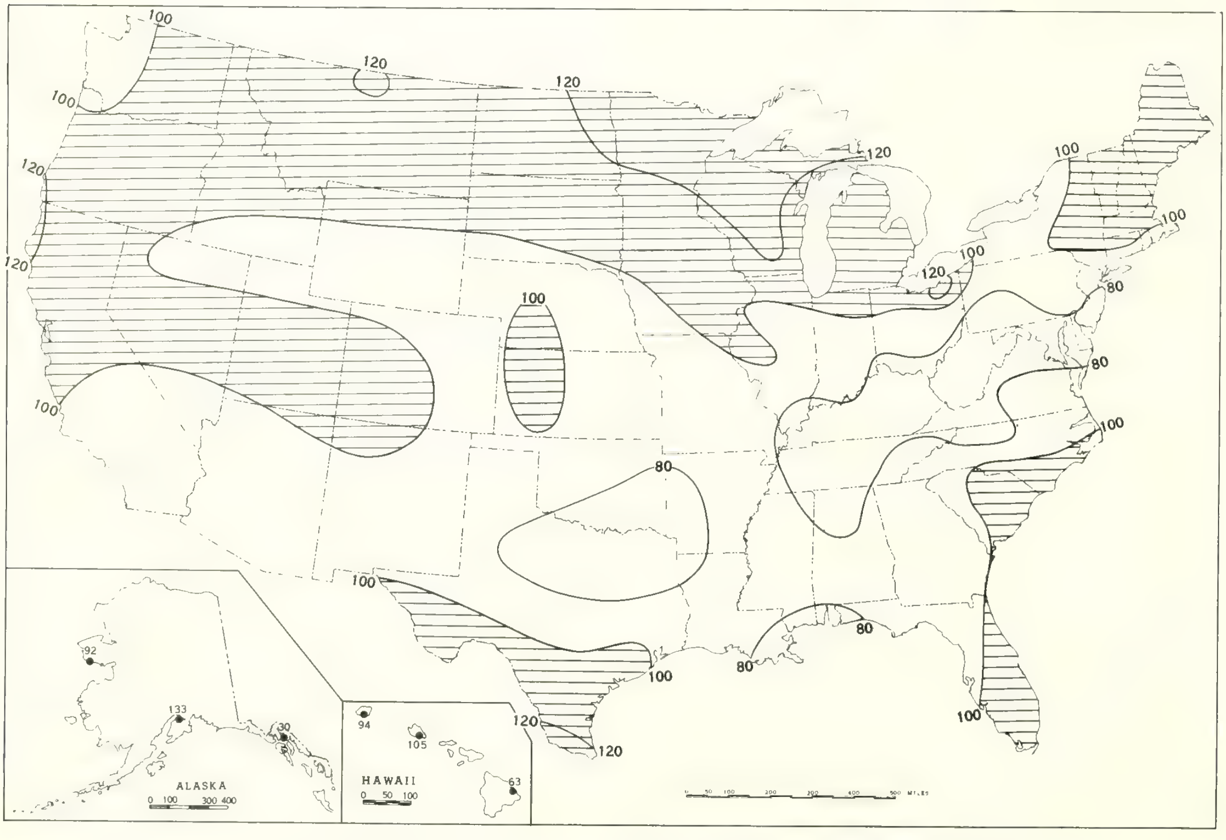


Based on preliminary telegraphic reports

Chart VI. A. Percentage of Possible Sunshine, September 1966.

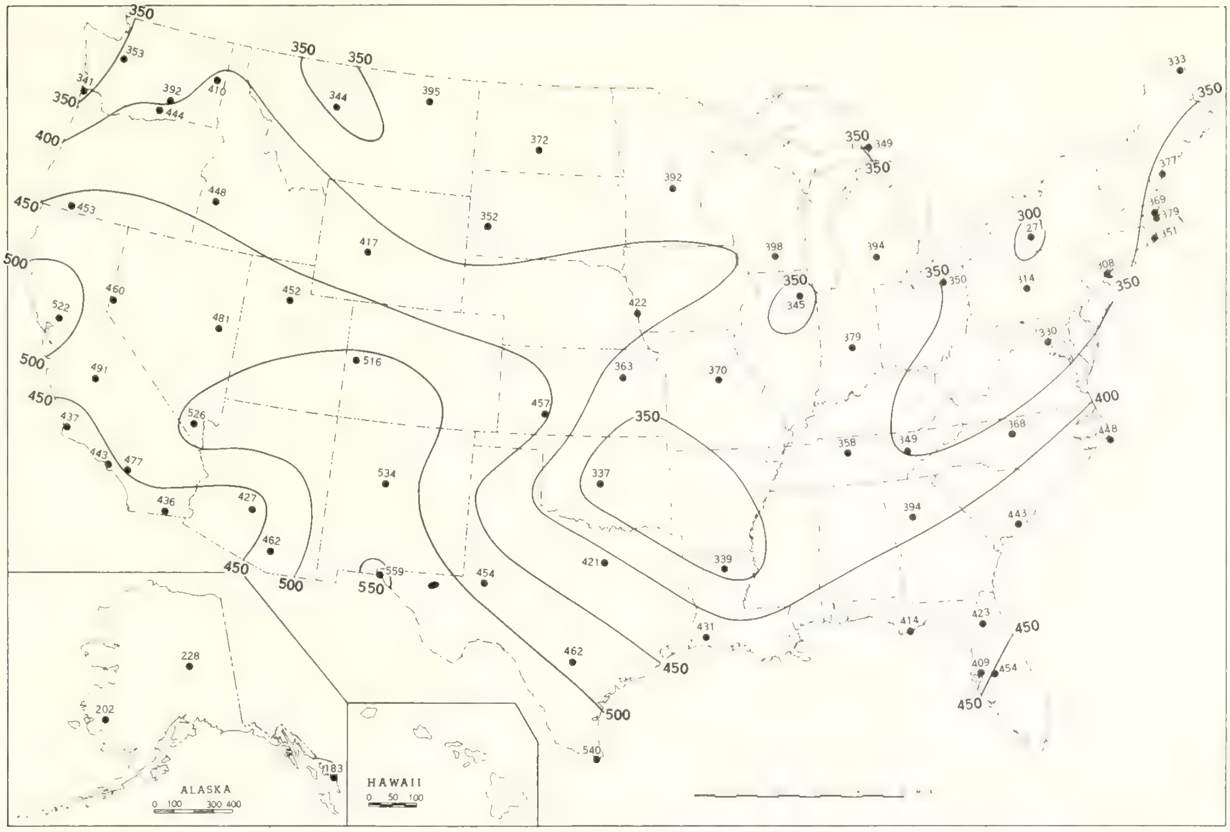


B. Percentage of Mean Monthly Sunshine, September 1966.

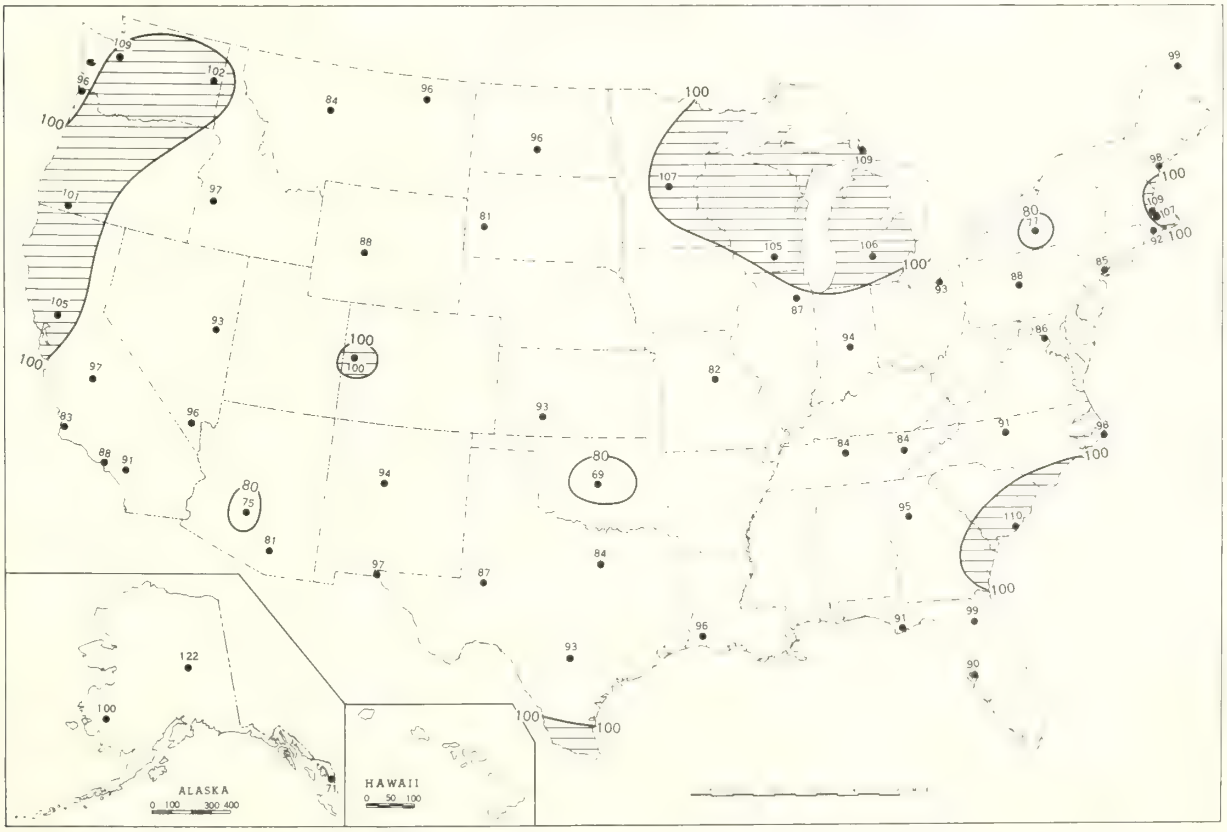


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, September 1966.

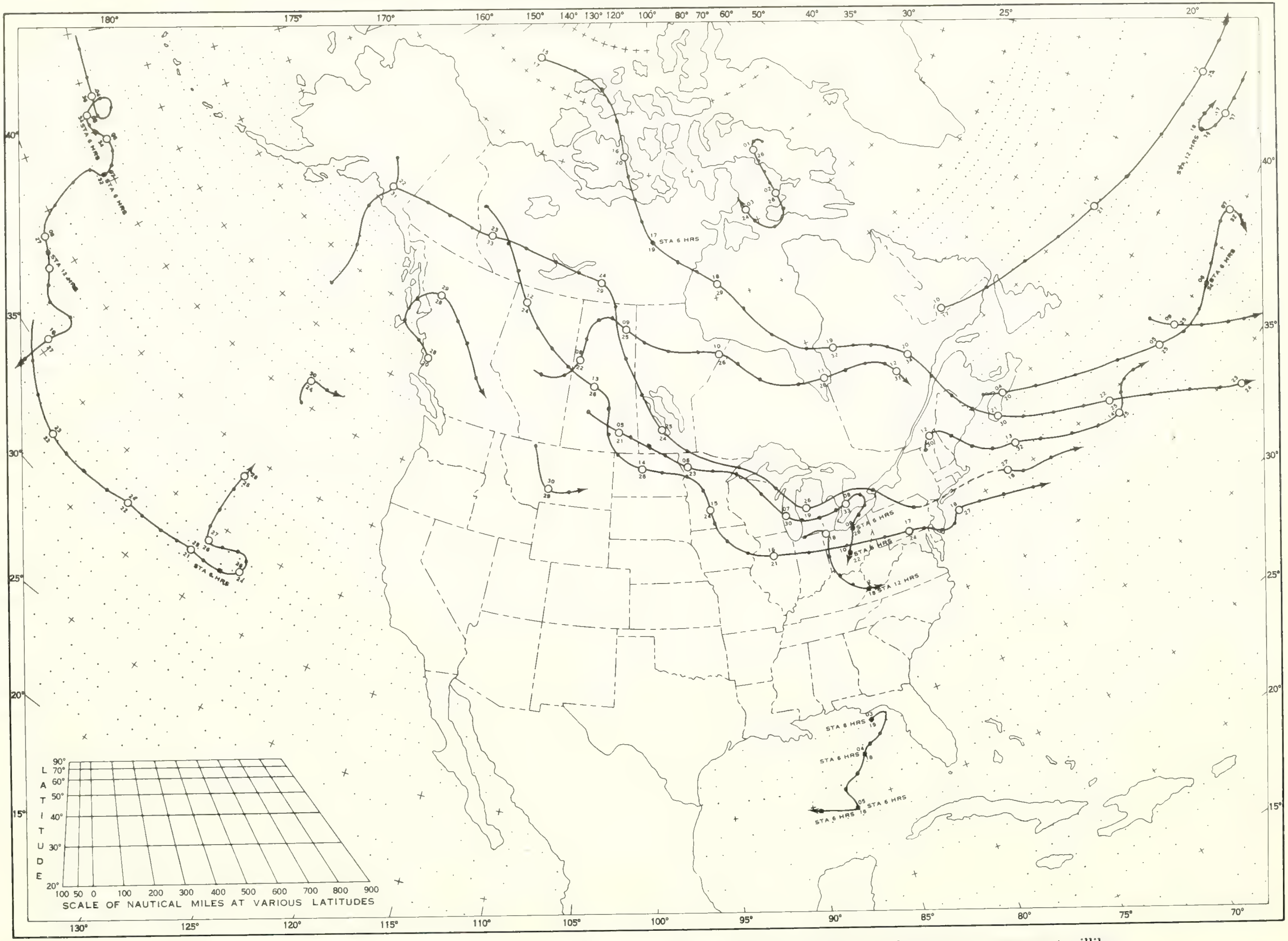


B. Percentage of Mean Daily Solar Radiation, September 1966.



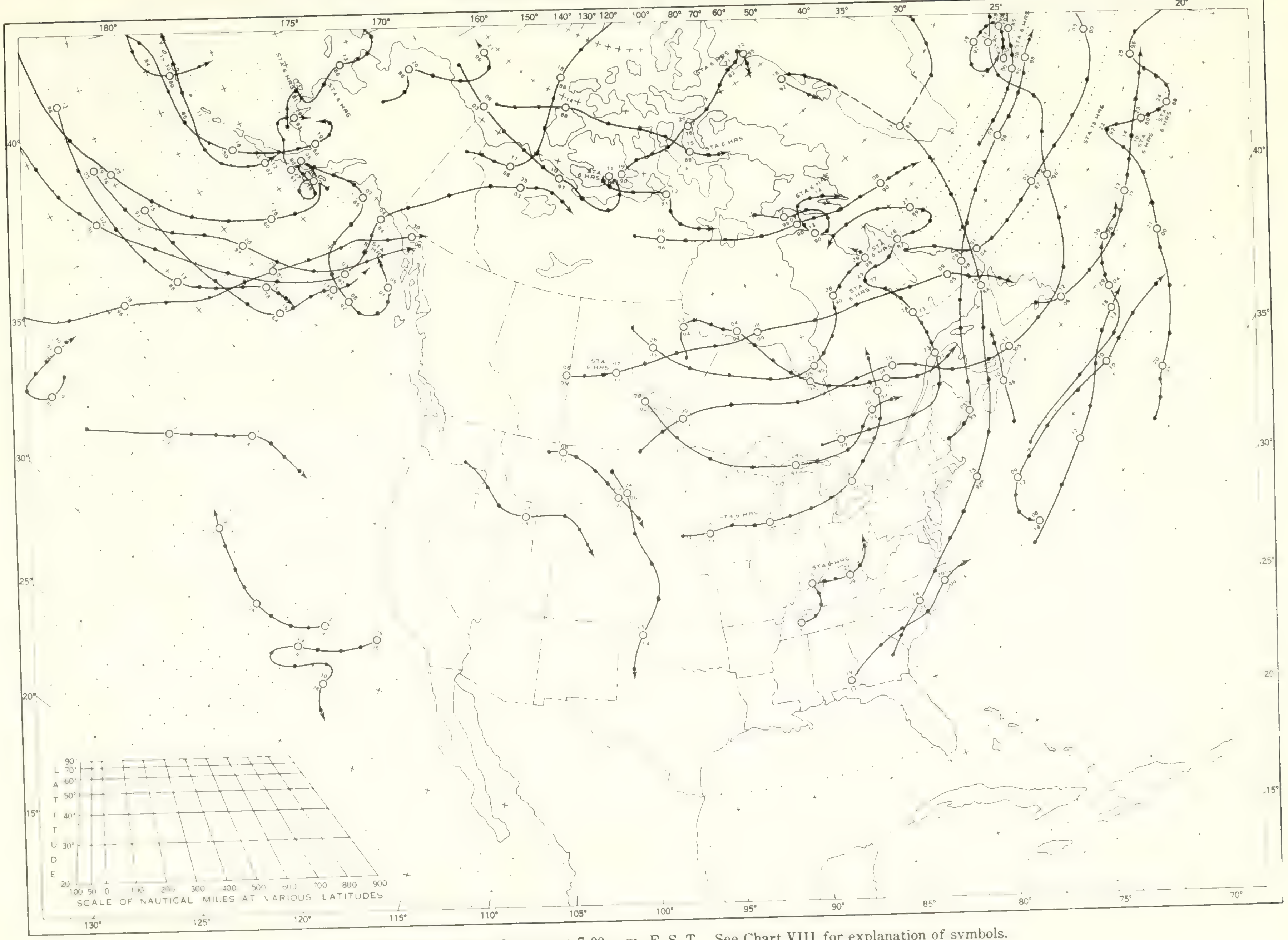
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, September 1966.



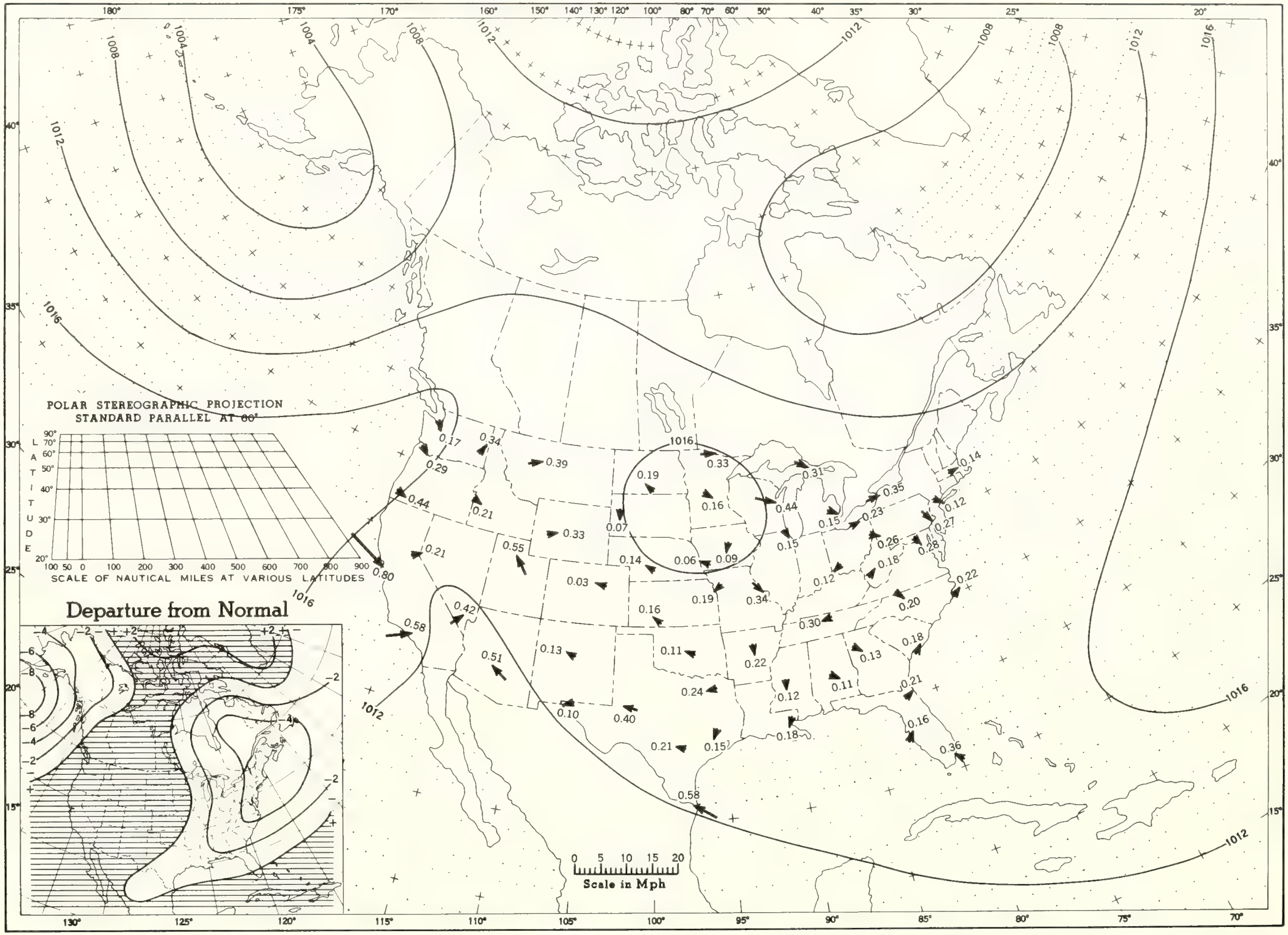
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, September 1966.



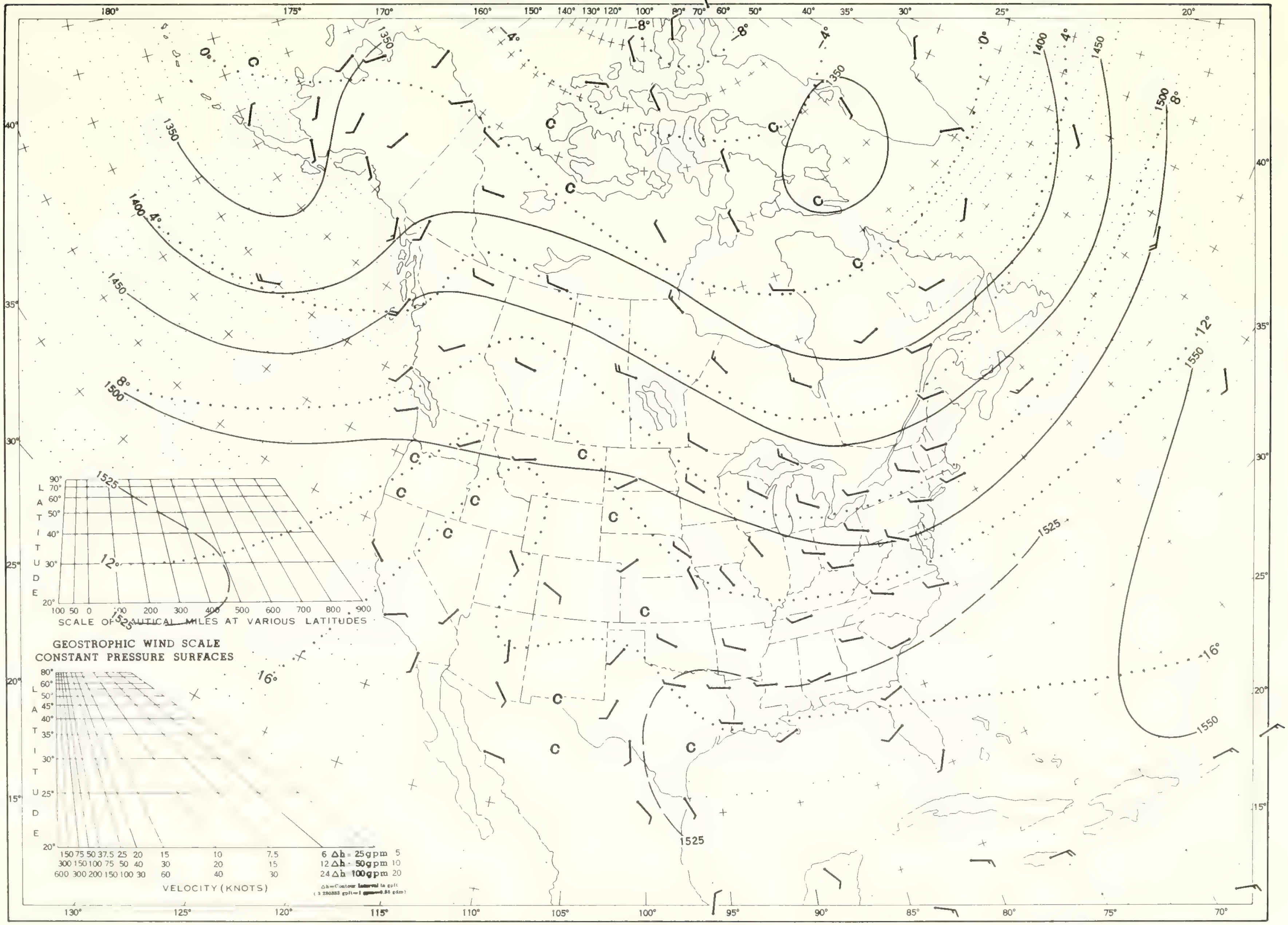
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, September 1966. Inset: Departure of Average Pressure (mb) from Normal, September 1966.



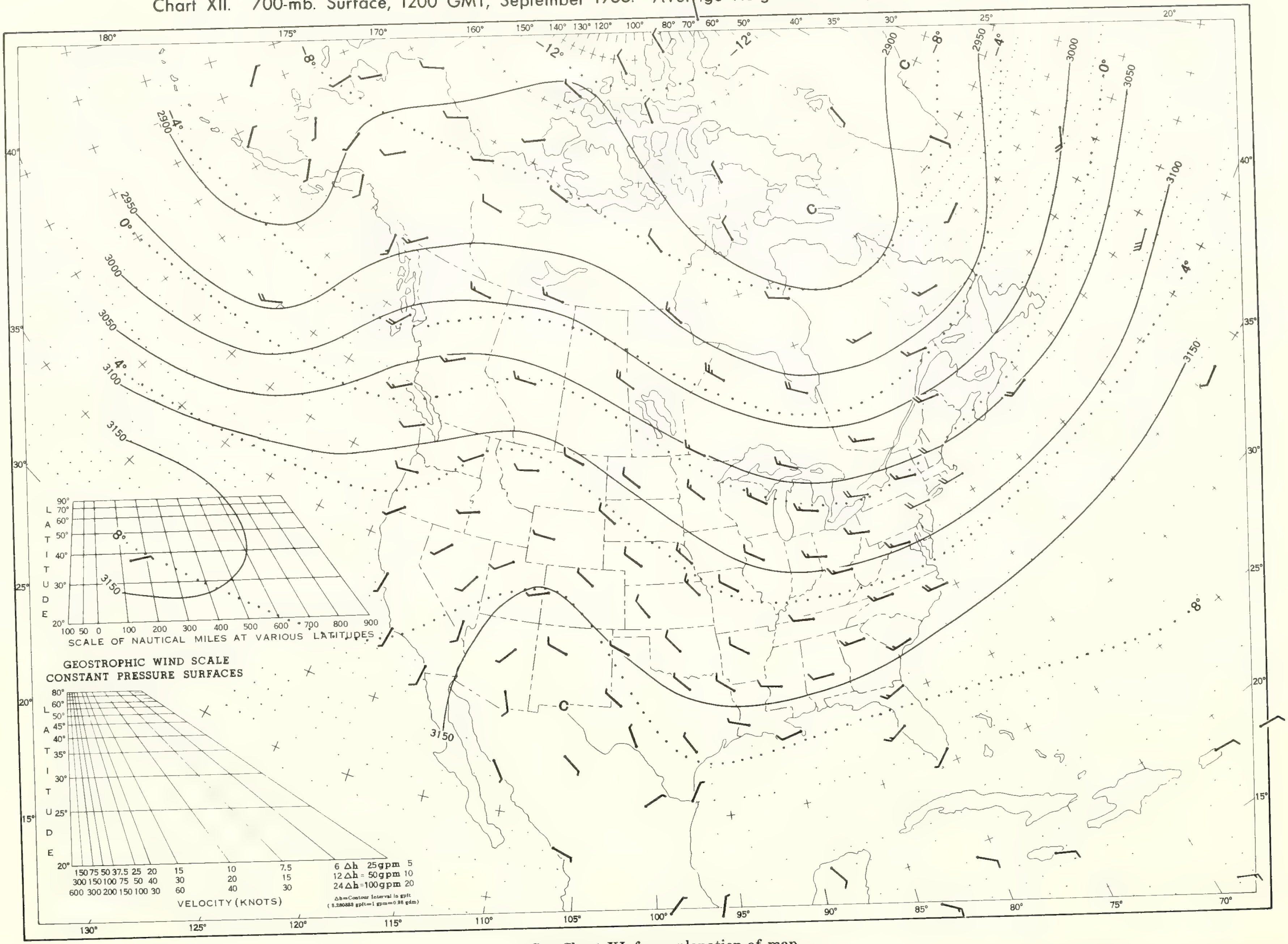
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, September 1966. Average Height and Temperature, and Resultant Winds.



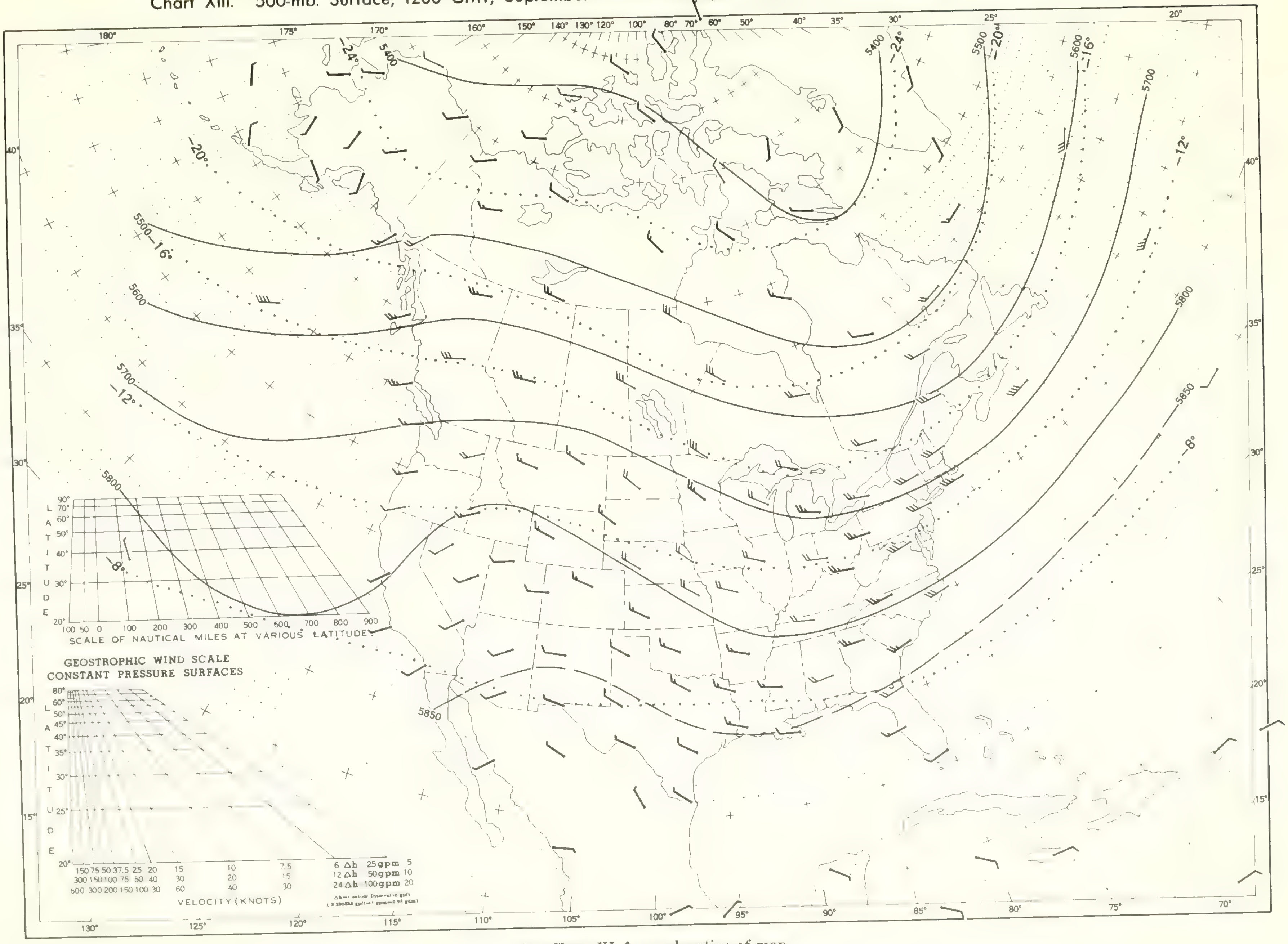
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, September 1966. Average Height and Temperature, and Resultant Winds.



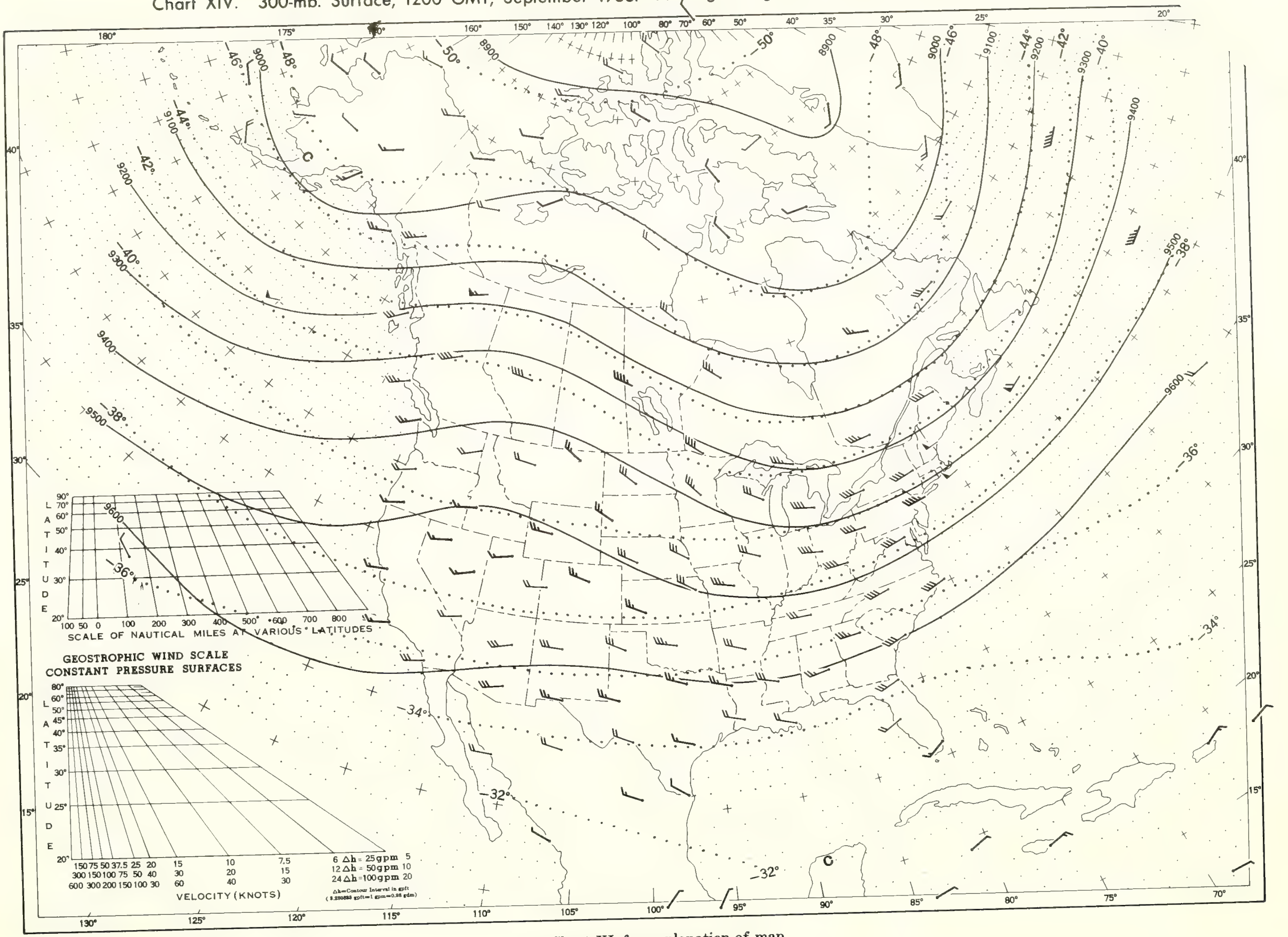
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, September 1966. Average Height and Temperature, and Resultant Winds.



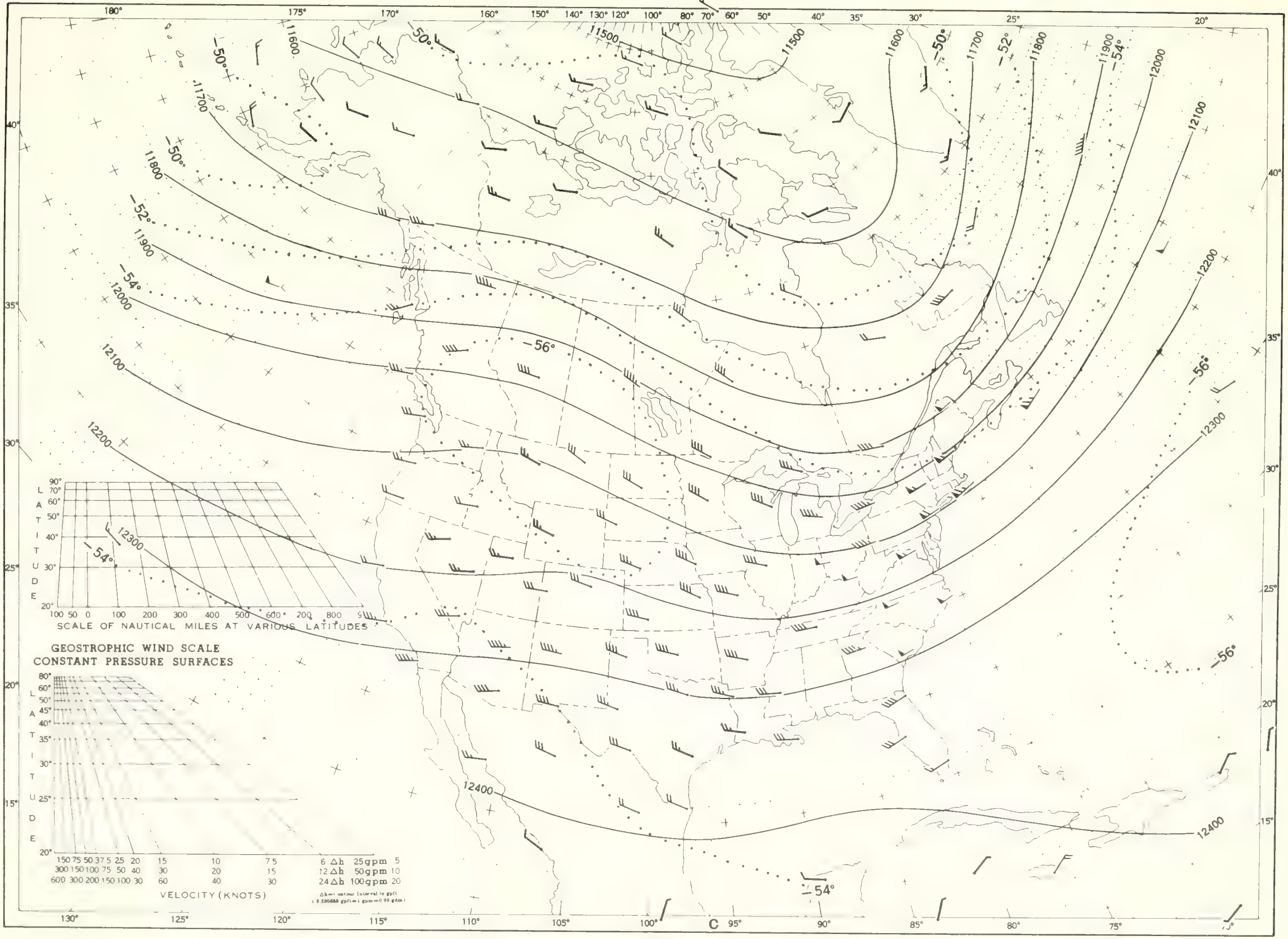
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, September 1966. Average Height and Temperature, and Resultant Winds.



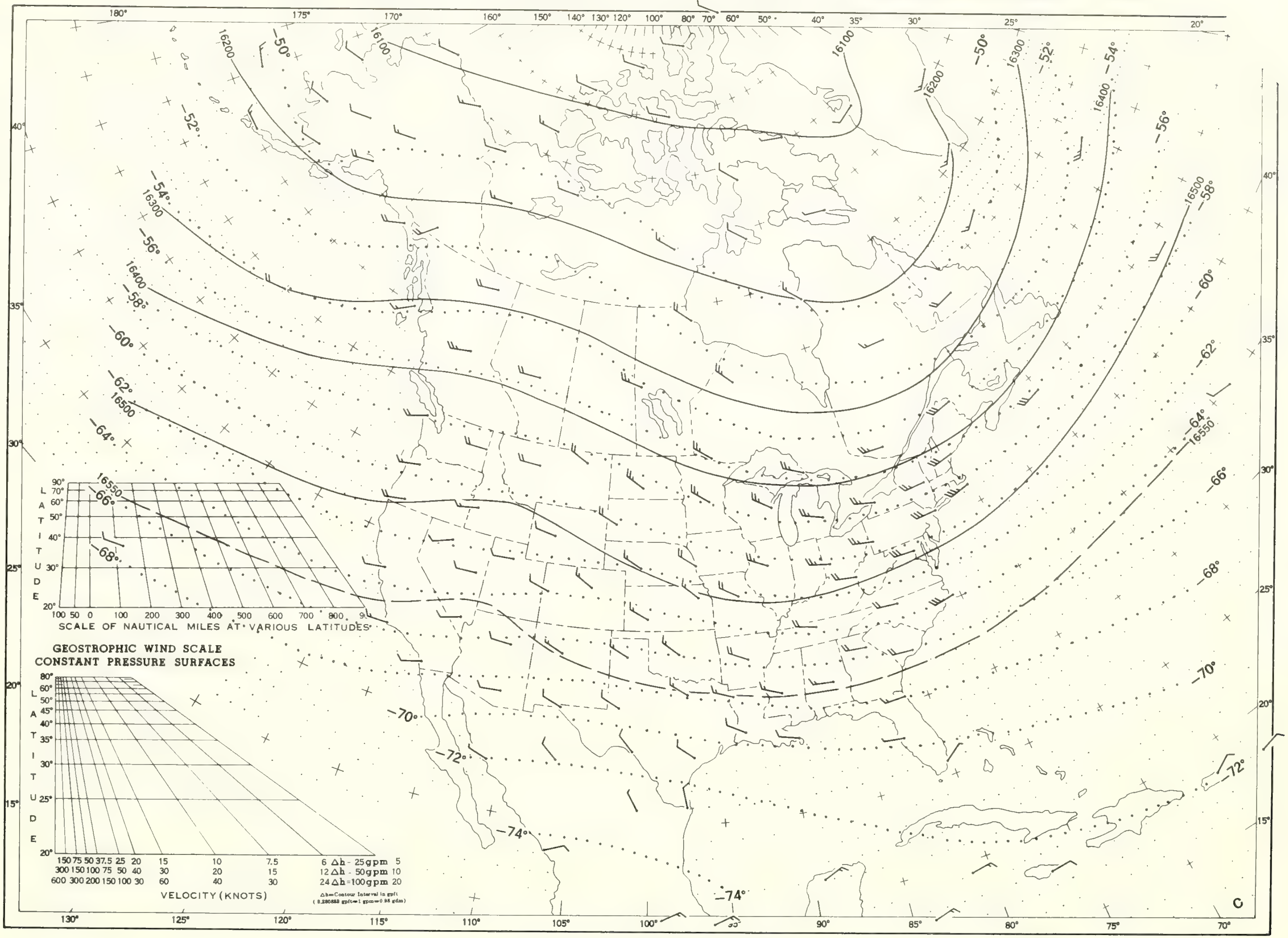
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, September 1966. Average Height and Temperature, and Resultant Winds.



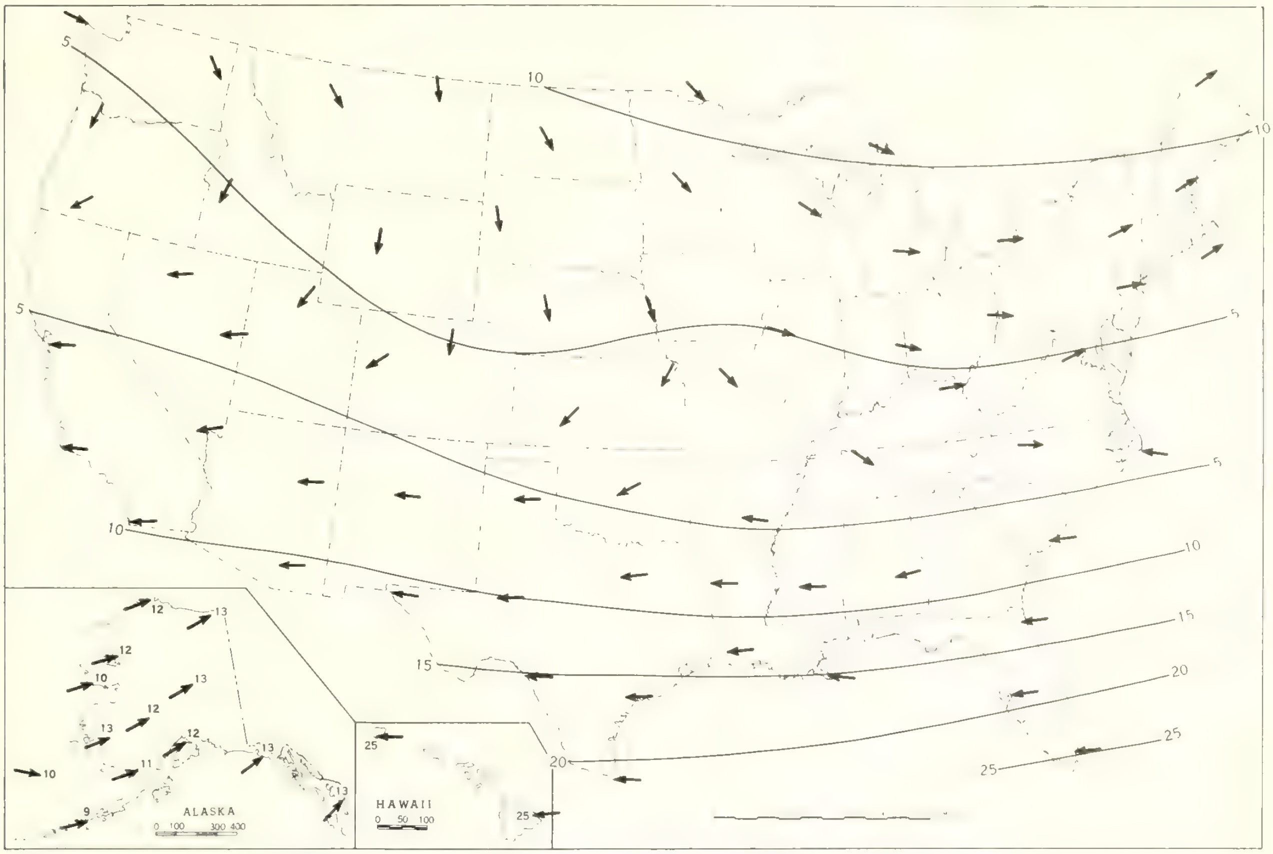
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, September 1966. Average Height and Temperature, and Resultant Winds.

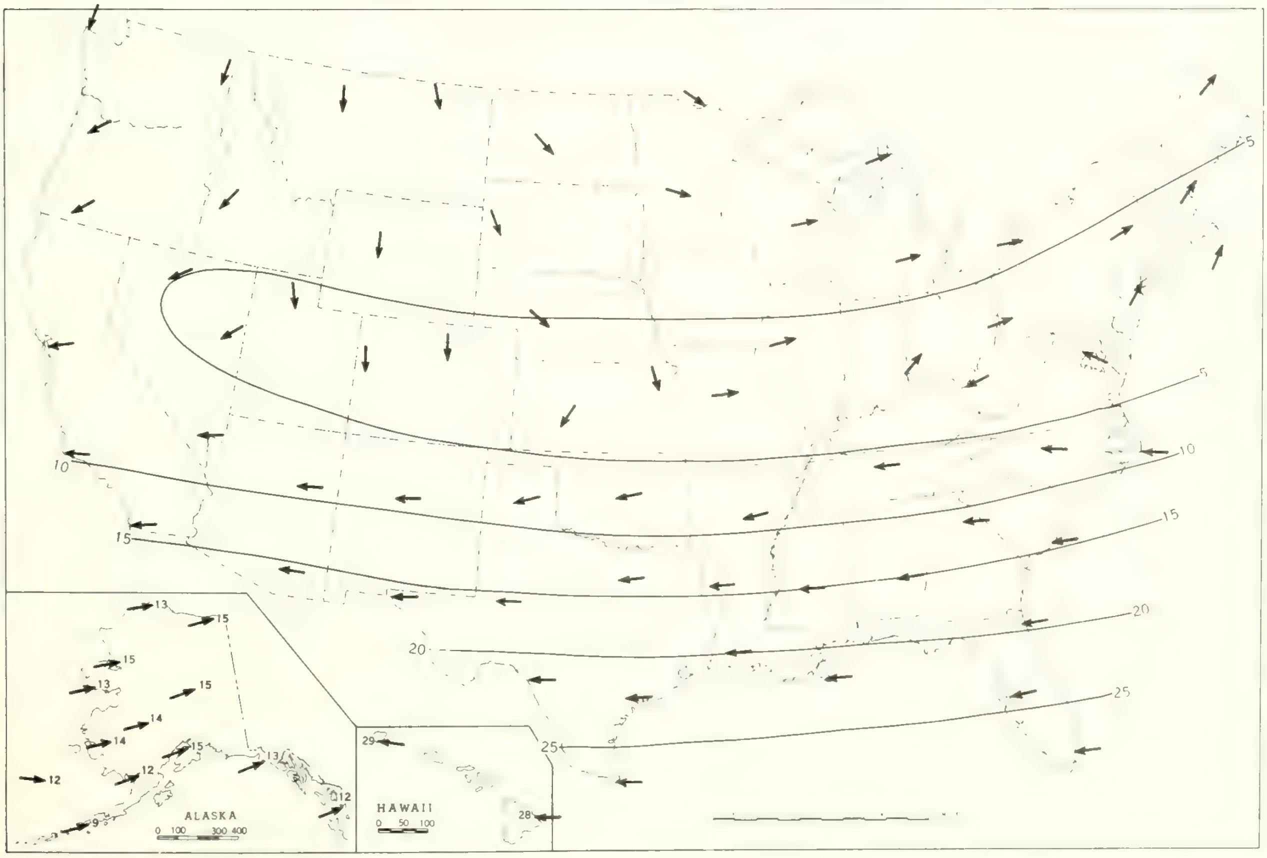


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, September 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, September 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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OCTOBER 1966
Volume 17 No. 10

ASHEVILLE: 1967

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 10 OCTOBER 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Weather generally cool and dry.
2. Heavy precipitation eastern Alabama to Connecticut.
3. Stormy north-central areas 12-16th.
4. Heavy snowstorm upper Rockies.
5. Tornado disaster at Belmond, Iowa, 14th.
6. Hurricane Inez crossed Florida Keys on 4th.
7. Early freezes in much of South.

TEMPERATURE.--Frequent cold air intrusions produced a rather cold and stormy October in 1966. Numerous stations across the Nation reported the coldest October in several years. Roswell, N. Mex., had its coldest October since 1932; Providence R. I., since 1940; Pocatello, Idaho, since 1949; Memphis, Tenn., and Jackson, Miss., 1952; and Amarillo, Tex., and several stations in South Dakota since 1959. Many stations also reported their record lowest temperatures for so early in the season. Among these were Medford, Oreg., and Boise, Idaho, with 26° and 21°, respectively, on the 14th; Concordia, Kans., 24° on the 16th; San Antonio, Tex., 34° on the 20th; and Providence, R. I., 24° and Concord, N. H., 14° on the 31st. The 14° at Concord was also the lowest ever recorded there in October during a 95-year record.

Frosts and freezes were unusually early although no extensive damage was reported. Freezing in the vicinity of Pocatello, Idaho, during the period 13-16th caused considerable damage to unharvested potatoes, while a freeze in western Colorado on the 15th killed garden crops and unharvested commercial tomatoes in the Colorado River Valley. At Topeka, Kans., the first freeze on the 10th was 13 days earlier than usual and the first hard freeze (24° or below) on the 16th was 13 weeks ahead of the average date.

Even though the month was generally cold, there were a few scattered areas where temperatures averaged above normal. The two main areas included most of California, the south Atlantic coast, and the Florida Peninsula. The highest average departure from normal was 2° in southern California. Warm weather in northwest California maintained a high fire hazard, although no serious fires were reported. At Fresno, Calif., 91° was a record high for October 25, and at Red Bluff, Calif., 92° was a high for the 31st. Denver, Colo., recorded 25° and 22° for the 14th and 15th, respectively, records for both dates back to 1871. In the Southeast, Wilmington, N. C., recorded a late season high of 90° on the 17th for a 96-year record. At Milwaukee, Wis., after a reading of 31° on the 2d - the lowest for the date since 1886 - temperatures rose to 82° on the 8th, equaling the record for the date set in 1905.

The first week was mild along the Canadian border and in Florida. The second week was cold nearly everywhere, with temperatures averaging above normal only along the Gulf, in the Ohio Valley, and in the Atlantic Coastal States except Delaware, New Jersey, and New England. The next week was the coldest period of the month, with temperatures averaging slightly above normal only along the south Atlantic and central and southern California coasts. Temperatures dropped below freezing in nearly all interior areas. This was the second consecutive cold week in the western half of the 48 States. The last week was much warmer than normal in most areas west of the Mississippi but abnormally cold weather persisted in most of the East.

Temperatures in the 48 states ranged from 104° at Centerville, Calif., and Rio Grande City, Tex., on the 1st, to -6° at Farson, Wyo., on the 14th. Subzero minima also were recorded in California, Colorado, Nevada, and New Hampshire, and freezing or below in all the 48 States, except Florida.

PRECIPITATION.--The precipitation pattern was spotty, with heavy monthly totals between the Great Lakes and northern Rockies, and in another area extending from the central Gulf coast northeastward to Connecticut. In both areas monthly amounts ranged up to more than twice the normal. Precipitation was less than half the normal in parts of the Florida Peninsula, in much of a large area extending from Ohio southwestward to New Mexico and northwest Texas, and in the Great Basin and Pacific States.

During the first week moderate to heavy rains fell in the lower Rockies, Texas, the extreme upper Mississippi Valley, in much of an area extending from Michigan to Alabama and Georgia, and in southern Florida. The rains in the latter area were associated with hurricane Inez, and those elsewhere with frontal activity.

Precipitation the second week was moderate to heavy in the northern Rockies, portions of the upper Great Plains, from the Mississippi eastward to the Appalachians, and in the New York-New England area. Weekly totals of 2 to 4 inches or more were common in the upper Mississippi Valley and along the Louisiana-Texas coast. Most of this precipitation was associated with a major storm that moved across the upper Great Plains and the Great Lakes on the 14th and 15th.

During the third week moderate to heavy precipitation fell along the north Pacific coast, in North Dakota, the lower Mississippi Valley, the South, the Appalachian region, and the Atlantic Coastal States. Over 2 inches fell in a belt extending from the southern Appalachians northeastward to the Atlantic coast from Virginia to Connecticut. The rains in the East were associated with a frontal system that moved across the area early in the week.

The last week passed without precipitation in most areas. Moderate to heavy showers were limited mostly to the lower Appalachian region early in the week.

The heavy rains in the East were of great benefit in the Northeast Drought area. At the end of the month extreme drought was limited to sections in eastern Pennsylvania. Dry weather in the southwestern Great Plains limited growth of small grains in some sections.

SNOWFALL.--Snowfall was unusually heavy for October in the Northwest. Nearly a foot accumulated in the higher mountains of Wyoming during the first few days of the month. Unusually heavy snow fell over the central Rockies and adjacent Great Plains areas and upper Great Lakes about midmonth. During this storm accumulations up to 18 inches were reported in the central Rockies. On the 13th Lander, Wyo., measured 19.4 inches, a record 24-hour amount there for October. An inch fell at Rapid City, S. Dak., and up to a foot in the nearby Black Hills. Duluth, Minn., measured 7.9 inches during this storm, the heaviest snowfall on record there for so early in the season. Another storm in the Pacific Northwest during the third week produced up to 30 inches of new snow in the Cascade Mountains.

DESTRUCTIVE STORMS.--During the passage of a vigorous low pressure system across the upper Mid-continent region during midmonth, numerous severe local storms, including a few tornadoes, were reported. On the 14th Iowa's worst late-season tornado virtually destroyed Belmond, with a loss of 6 lives and with 172 injuries reported. The midmonth snowstorm caused considerable damage to trees and shrubbery in the vicinity of Denver, Colo., and to utility lines in a 5-county area in the northwest corner of Kansas. Damage in eastern Nebraska during this same storm was associated with winds up to 73 m.p.h.

Hurricane Inez crossed the Florida Keys on October 4 with measured wind speeds up to 130 m.p.h. In southern Florida 3 persons lost their lives and 11 were injured. Damage was estimated at about $5 million.

CONDENSED CLIMATOLOGICAL SUMMARY

OCTOBER 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Dothan FAA AP	92	5	Russellville 2	28	28+	Autaugaville 3N	8.94	Coffee Springs 2NW	0.86
Alaska	Data Delayed									
Arizona	3 Stations	98	29+	Greer	9	14	Tonto Creek Fish Htchy	3.03	16 Stations	.00
Arkansas	Booneville	95	9	Gilbert	23	20	Monticello	8.28	Parks	.20
California	Centerville PH	104	1	Bodie	-1	14	Gasquet Ranger Station	3.55	289 Stations	.00
Colorado	Eversoll Ranch	90	2	Antero Reservoir	-10	15	Marvine	3.37	3 Stations	.00
Connecticut	Hartford WBAP	80	9	Coventry	13	31	Waterbury Radio WBRY	5.83	Baltic	2.02
Delaware	5 Stations	80	10+	Selbyville	23	31	Dover	5.87	Selbyville	2.74
Florida	Kissimmee No 2	97	2	DeFuniak Springs	37	29+	Miami 12SSW	15.69	Caryville	.37
Georgia	Folkston 9SW	91	5	Blairsville Exp Sta	28	29	Helen 1ESE	9.27	Abbeville	1.04
Hawaii	Data Delayed									
Idaho	Brownlee Dam	84	7	Warren	1	14	Headquarters	4.13	3 Stations	.00
Illinois	East St Louis Pks Col	85	10	Marengo	19	30	Aledo	4.99	Mattoon	.48
Indiana	2 Stations	83	12	Lagrange Sewage Plant	17	30	Valparaiso Waterworks	3.26	Fowler	.72
Iowa	do	87	14+	Fayette	17	25	Cresco	5.13	Des Moines WB City	.28
Kansas	Aetna 2S	96	13	Goodland WBAP	16	15	Columbus 6NNW	2.47	Syracuse 2W	.11
Kentucky	Cumberland	89	10	Falmouth 5WNW	18	30	Glasgow WKAY	5.56	Covington WBAP	.57
Louisiana	Natchitoches	93	9	4 Stations	32	27+	Bunkie	8.22	Franklinton 3SW	.98
Maine	Bridgton 1NNW	81	9	St Francis	11	31	Van Buren 2	5.14	Upper Dam	2.42
Maryland	2 Stations	82	10+	2 Stations	18	31+	Denton 1WNW	6.29	Crisfield Somers Cove	1.60
Massachusetts	Fitchburg 2S	82	10	Hyannis 2NNE	9	31	Chester 2	5.58	South Wellfleet	1.43
Michigan	2 Stations	82	8	Champion Van Riper Pk	10	30	Grand Marais 1SSE	5.58	Saint Johns	.43
Minnesota	Artichoke Lake	87	7	Wannaska 8SE	10	29	Theilman	6.30	High Landing	T
Mississippi	3 Stations	90	16+	Houston 2NE	28	28+	Vancleave	7.45	Meridian	1.05
Missouri	2 Stations	90	10+	Edgerton	20	16	Maryville 2E	5.22	Edgerton	.35
Montana	3 Stations	85	6+	Deer Lodge 3W	3	14	Hungry Horse Dam	3.35	Alder	.03
Nebraska	2 Stations	93	14+	Harrison	11	16	Fort Robinson	3.06	Merriman	.02
Nevada	Sunrise Manor Las Vegas	95	10+	Charleston	-2	14	Boulder City	.95	30 Stations	.00
New Hampshire	3 Stations	81	10+	Mount Washington	-2	30	Mount Washington	5.47	Hanover	2.14
New Jersey	Hammonton 2NNE	82	10	3 Stations	18	31	Millville FAA AP	6.51	Atlantic City	2.81
New Mexico	Yeso 2S	92	8	Gavilan	6	15	Bateman Ranch	1.10	36 Stations	.00
New York	Poughkeepsie	82	9	7 Stations	14	31+	Bedford Hills	7.51	Avon	.28
North Carolina	Maysville 6SW	92	6	Hayesville 4NE	21	30	Highlands 2S	9.51	Edenton	.32
North Dakota	2 Stations	88	20+	Wildrose	8	15	Hankinson RR Station	2.59	Eckman 2SE	.09
Ohio	Ironton	84	14	Jackson 2NW	16	30	Chardon	2.62	Toledo Blade	.53
Oklahoma	Buffalo	97	13	Kenton	20	19	Idabel	2.72	Kenton	.08
Oregon	Medford Experiment Sta	92	1	Fremont	1	14	Valsetz	10.23	4 Stations	T
Pennsylvania	Newell	84	16+	2 Stations	15	31+	Phil Drexel Inst Tech	5.71	McKeesport	.34
Puerto Rico	2 Stations	95	14+	do	59	30+	Lares	24.55	Truman Fld FAA AP No 2	1.51
Rhode Island	Greenville	78	9	Kingston	16	31	Greenville	3.37	Block Island WBAP	2.40
South Carolina	Tilghman Forest Nursery	91	14	Summerville 2WNW	30	30	Salem	8.08	Walterboro	.06
South Dakota	Hot Springs	89	8	Deerfield 4NW	3	15	Deadwood	3.81	Philip	.25
Tennessee	Waverly	89	13	Mountain City No 2	24	31+	Athens 2SE	6.41	Dyersburg FAA AP	1.05
Texas	Rio Grande City 3W	104	1	3 Stations	23	19+	McAllen FAA AP	10.60	14 Stations	.00
Utah	Saint George	92	10	Woodruff	5	15	Pleasant Creek PH	3.21	4 Stations	.00
Vermont	Northfield	80	9	Mount Mansfield	8	30	Mount Mansfield	5.80	Saint Albans Bay	1.06
Virginia	3 Stations	85	12+	Partlow 3WNW	19	31	Buena Vista	5.40	Suffolk Lake Kilby	.61
Washington	Pleasant View	89	6	Mount Spokane Summit	8	16	Clearwater	15.31	Methow 2W	.16
West Virginia	Charleston WBAP	86	15	Bayard	14	31	Richwood	4.79	Horner	.70
Wisconsin	West Allis	88	8	Laona 4SSW	11	30	Alma Dam 4	6.02	Chilton	.21
Wyoming	Torrington Exp Farm	83	6	Farson	-6	14	Lusk	2.71	Cody 12SE	T

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

CLIMATOLOGICAL DATA

ENGLISH UNITS

OCTOBER 1966

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	995.9	1018.5	72	46	58.8	- 6.9	80	12+	35	20	0	0	51	77	3.13	0.18	1.50	6	2	0.0	0	1.4	3	26	W	18	16	5	10	4.3	71
HUNTSVILLE	600	995.6	1018.6	73	47	59.9	- 3.3	84	4	34	20	0	0	48	69	3.36	0.64	2.34	7	1	0.0	0	1.6	3	22	36	10	17	9	5	3.5	
MOBILE	211	1009.1	1017.1	78	58	68.0	- 1.9	86	15+	44	20	0	0	58	75	4.44	1.41	1.80	11	2	0.0	0	4.3	4	27	20	9	10	8	13	5.3	
MONTGOMERY	194	1010.5	1017.8	75	54	64.3	- 2.3	84	8	42	20	0	0	56	78	6.08	3.80	3.75	6	3	0.0	0	2.0	3	25	S	15	10	8	13	5.8	54
ALASKA												B																				
ANCHORAGE PRK STRIP	85			39	29	33.8	- 1.2	60	1	7	25	0	16			0.70	- 1.17	0.32	7		0.3	T										
ANCHORAGE	114	996.3	1001.0	37	27	32.3		58	1	2	25	0	18	22	67	0.86		0.33	10	0	1.9	1	1.3	1	40	3	31	4	7	20	7.7	34
ANNETTE	110	1007.1	1011.1	51	40	45.7	- 1.0	60	2+	31	26	0	3	40	82	17.90	1.02	2.58	24	0	1.9	1	6.2	16	40	15	18+	3	5	23	8.5	
BARROW	22	1012.9	1013.6	21	16	18.5	1.9	32	1	-15	28	0	31	16	90	0.49	- 0.01	0.13	12	0	7.6	6	8.9	9	32	10	12	2	2	27	9.0	
BARTER ISLAND	39	1010.8	1012.6	23	14	18.5	1.3	34	9	-20	27	0	31	14	79	0.88	0.04	0.34	12	0	12.9	9	8.3	11	45	10	13	2	2	27	8.9	
BETHEL	125	999.0	1004.5	32	20	26.2	- 5.2	49	1	0	30+	0	26	22	83	1.90	0.36	0.52	20	0	2.1	1	2.2	34	29	36	31+	7	9	15	6.6	
COLD BAY	96	1003.7	1007.8	39	29	33.9	- 6.2	50	11+	12	31	0	17	29	82	2.96	- 1.63	0.45	26	0	10.7	7	10.0	29	44	33	19	2	5	24	8.3	
FAIRBANKS	436	988.2	1005.4	32	17	24.3	- 1.9	61	2	- 9	28	0	26	16	73	0.29	- 0.56	0.09	7	0	5.5	3	2.2	1	17	6	5	1	7	23	8.5	
JUNEAU	12	1005.8	1006.8	44	33	38.6	- 3.0	55	1	23	26+	0	14	36	90	6.97	- 1.36	1.07	22	0	4.3	1	9.6	11	45	12	15	1	4	26	9.1	26
KING SALMON	43	1001.4	1003.2	33	22	27.2	- 8.5	51	1	- 1	26	0	24	23	83	2.88	0.73	0.76	14	0	5.3	2	2.0	29	48	15	1	5	9	17	7.1	
KOTZEBUE	10	1007.5	1008.1	26	18	22.0	- 2.7	49	2	- 6	27	0	26	16	77	0.48	- 0.11	0.16	11	0	3.7	3	8.8	7	35	10	12	14	3	14	5.4	
MC GRATH	349	991.9	1005.0	30	18	23.8	- 3.0	55	1	-12	27	0	27	17	74	0.64	- 0.68	0.19	11	0	15.4	8	2.4	35	23	10	5	3	2	26	8.5	
NOME	13	1004.7	1005.5	32	20	25.6	- 4.1	46	2+	-10	28	0	23	20	79	2.30	0.59	0.78	11	0	6.5	6	5.5	4	29	9	11	8	5	18	6.6	21
ST. PAUL ISLAND	22	1007.1	1008.2	38	32	35.0	- 2.2	47	2	20	24	0	17	28	77	2.37	- 0.78	0.63	26	0	8.3	4	10.0	32	44	32	1	0	7	24	8.5	
SHEMYA	122	1012.2	1015.9	46	36	40.6	0.9	51	3+	30	26	0	4	37	81	1.90	- 0.86	0.28	22	0	T	0	4.0	30	51	19	9	0	5	26	8.7	
YAKUTAT	28	1001.4	1002.6	42	30	35.7	- 6.2	50	8+	6	24	0	15	34	92	17.15	- 2.44	3.06	29	2	36.0	26	5.2	10	35	13	31+	2	2	27	9.0	
ARIZONA																																
FLAGSTAFF	6993	790.0	1018.5	63	31	46.9	- 0.1	72	10	19	15	0	21	28	57	0.99	- 0.53	0.45	5	5	T	T	0.6	11	23	5	23	13	11	7	4.1	
PHOENIX	1117	974.3	1012.7	88	54	70.9	0.2	94	9	43	18+	13	0	44	45	0.25	- 0.21	0.24	3	1	0.0	0	1.9	11	29Y	NW	14+	23	3	5	2.6	86
TUCSON	2584	925.8	1012.9	83	53	68.1	- 1.9	91	10	43	17	1	0	37	39	0.32	- 0.32	0.32	2	1	0.0	0	4.0	15	27	SE	26	22	3	6	2.5	87
WINSLOW	4895	853.7	1017.8	73	39	56.0	- 1.4	84	1	25	15	0	9	32	48	0.97	0.31	0.46	5	2	0.0	0	3.0	22	40	23	13	20	6	5	3.2	
YUMA	194	1005.4	1012.6	89	60	74.2	- 0.3	97	9	48	16	17	0	41	36	0.03	- 0.35	0.03	1	2	0.0	0	2.5	36	34	N	14	22	5	4	2.4	86
ARKANSAS																																
FORT SMITH	447	1001.4	1017.9	76	42	59.2	- 4.6	93	9	27	20	1	2	42	60	0.40	- 3.05	0.25	4	0	0.0	0	1.2	4	30	N	31+	20	4	7	3.2	76
LITTLE ROCK	257	1009.1	1018.8	72	46	59.2	- 3.9	88	9	35	20	0	0	47	69	1.95	- 0.93	0.65	8	3	0.0	0	0.4	28	25	N	31	18	5	8	3.5	75
TEXARKANA	372	1005.1	1018.3	74	51	62.5	- 3.6	88	14+	38	20	0	0	51	69	2.55	- 0.43	2.13	3	2	0.0	0	2.1	14				19	5	7	3.3	
CALIFORNIA																																
BAKERSFIELD	494	999.0	1016.4	80	54	67.1	0.3	92	25	45	22	2	0	41	42	T	- 0.32	T	0	0	0.0	0	1.7	36	21	14	14	20	7	4	2.4	
BISHOP	4108			79	38	58.4	1.0	87	9+	22	14	0	6			0.00	- 0.43	0.00	0		0.0	0						22	7	2	2.1	
BLUE CANYON	5280			67	48	57.4	3.6	78	9	30	13	0	1			0.00	- 3.41	0.00	0		0.0	0			20	6	13	22	6	3	2.3	
EUREKA U	43			59	48	53.2	- 1.2	74	31	39	14	0	0			1.02	- 2.17	0.70	3		0.0	0			26	NW	13	7	10	14	6.3	50
FRESNO	328	1004.4	1016.1	81	49	64.8	0.2	92	10	36	16+	3	0	44	53	0.00	- 0.43	0.00	0	0	0.0	0	1.9	30	21	NW	20	25	3	3	1.5	92
LONG BEACH	34	1013.9	1015.1	82	57	69.2	2.7	97	24	50	31+	5	0	53	66	0.01	- 0.16	0.01	1	1	0.0	0	2.7	28	23	9	14	14	11	6	4.1	
LOS ANGELES	97	1011.2	1014.7	78	61	69.5	4.6	93	24	55	23+	3	0	53	64	0.04	- 0.35	0.04	1	1	0.0	0	4.1	26	24Y	N	16	14	10	7	4.2	
LOS ANGELES U	270			81	61	71.2	3.8	95	19	52	16	6	0			0.06	- 0.35	0.06	1		0.0	0			18	W	16	16	10	5	3.7	66
MT SHASTA R	3544			68	37	52.5	0.6	82	1	23	14	0	7			T	- 2.44	T	0		0.0	0										
OAKLAND	6	1016.9	1017.3	70	54	62.1	1.0	87	31	47	29+	0	0	49	68	T	- 0.78	T	0	0	0.0	0	4.7	29	21	33	13+	17	8	6	3.4	
RED BLUFF	341	1004.1	1016.7	83	53	67.9	2.2	94	9+	44	18	5	0	37	37	T	- 1.37	T	0	0	0.0	0	3.1	34	28	NW	12	20	7	4	2.8	91
SACRAMENTO	17	1015.6	1016.4	79	49	64.1	0.6	91	10	40	22	1	0	43	55	0.00	- 0.77	0.00	0	0	0.0	0	1.9	24	34	N	13	23	7	1	2.2	95
SANDBERG R	4517			69	52	60.2	1.5	79	9	36	14	0	0			T	- 0.49	T	0		0.0	0			41	35	15	19	6	6	3.3	
SAN DIEGO	13	1013.5	1014.5	76	60	67.6	1.5	89	25	52	15	0	0	54	67	0.80	0.31	0.78	2	1	0.0	0	3.6	31	20	NW	17+	15	8	8	4.1	73
SAN FRANCISCO	8	1016.9	1017.5	71	50	60.4	- 0.1	87	9	42	15	0	0	47	67	T	- 0.74	T	0	0	0.0	0	6.4	29	31	N	13+	17	10	4	3.3	
SAN FRANCISCO U	52			70	55	62.6	1.2	85	9	50	28	0	0			0.01	- 0.88	0.01	1		0.0	0			24	W	20					75
SANTA CATALINA	1568			74	60	67.0	1.7	91	30	53	29+	1	0			0.04	- 0.90	0.03	3	1	0.0	0						19	5	7	2.6	
SANTA MARIA	236			75	48	61.4	1.0	96	30	37	15	3	0			0.02	- 0.58	0.01	2		0.0	0						18	3	10	3.9	
STOCKTON	22	1015.9	1017.0	80	50	65.3	1.3	94	10	39	14	2	0	45	54	0.00	- 0.63	0.00	0	0	0.0	0	4.0	31	26	35	13	25	4	2	1.7	
COLORADO																																
ALAMOSA	7536	773.8		63	25	43.8	- 0.6	71	10	11	15	0	27			0.49	- 0.11	0.47	3		4.8	5						21	7	3	2.8	
COLORADO SPRINGS	6145	812.7	1017.6	63	35	48.9	- 1.4	76	11+	23	19+	0	12	24	45	0.36	- 0.33	0.29	4	0	3.4	2	2.4	2	40	33	14	18	8	5	3.4	
DENVER	5283	837.5	1015.6	68	36	52.2	0.8	81	26	22	15	0	8	26	43	0.96	- 0.05	0.80	3	0	8.3	7	1.8	19	33	NW	14+	15	10	6	4.0	73

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
GRAND JUNCTION	4855	854.7	1016.9	70	43	56.5	1.5	80	2	34	18+	0	0	31	41	1.23	0.49	0.43	5	1	1.9	1	1.9	11	38	NW	2	14	11	6	4.3	77
PUEBLO	4684	857.1	1016.6	69	34	51.5	- 3.3	84	2	18	19	0	14	27	45	0.21	- 0.78	0.14	4	0	0.1	T	1.1	34	47	N	18+	17	10	4	3.1	86
CONNECTICUT																																
BRIDGEPORT	7	1015.9	1016.6	64	46	54.9	- 0.5	77	9	29	31	0	2	42	63	3.74	0.36	2.39	4	0	0.0	0	5.0	28	35	30	5	13	9	9	5.1	
HARTFORD	169	1009.8	1016.3	64	40	51.9	- 1.1	80	9	24	31	0	4	40	69	4.23	1.05	2.47	5	0	0.0	0	3.3	29	33	NW	20	10	10	11	5.7	61
NEW HAVEN	6			62	42	52.0	- 2.0	72	9	24	31	0	2			3.71	0.26	2.31	5		0.0	0			28	NW	20	12	9	10	5.3	71
DELAWARE																																
WILMINGTON	78	1014.9	1017.9	65	42	53.6	- 3.0	7[illegible]	4	29	31	0	2	43	69	5.17	2.26	3.88	5	0	0.0	0	3.5	29	30	31	29	17	6	8	4.2	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1015.9	1018.1	68	46	57.0	- 2.0	79	10+	35	31	0	0	44	66	4.72	1.65	3.46	7	0	0.0	0	2.5	29	33	NW	29	14	8	9	4.4	66
FLORIDA																																
APALACHICOLA U	13			78	64	71.1	- 0.1	86	1	49	20	0	0			1.00	- 1.44	0.54	4	2	0.0	0			24	N	1	9	10	12	5.9	44
DAYTONA BEACH	31	1014.6	1016.1	82	66	74.2	0.8	91	1	52	30+	1	0	64	74	4.60	- 1.01	1.95	9	2	0.0	0	3.9	5	23	26	25	9	9	13	6.1	
FORT MYERS	15	1014.2	1014.5	86	70	78.1	2.0	92	8	58	30	5	0	69	78	2.14	- 1.95	0.68	12	5	0.0	0	5.0	5	35	5	4	8	14	9	5.6	
JACKSONVILLE	20	1015.6	1016.6	80	62	71.0	0.0	90	5+	47	30+	2	0	63	80	1.38	- 3.78	1.13	8	1	0.0	0	3.6	3	28	NE	6	7	8	16	6.5	57
KEY WEST	4	1012.2	1013.0	84	75	79.4	0.4	88	1	70	31	0	0	71	77	7.12	1.30	4.07	15	1	0.0	0	6.5	7	84	SE	5	8	11	12	6.3	60
LAKELAND U	214			83	67	75.3	0.8	90	1	51	20	1	0			1.42	- 1.51	0.50	9		0.0	0						10	10	11	5.6	62
MIAMI	7	1012.9	1013.2	84	72	77.9	0.1	88	25	65	28	0	0	71	81	10.88	2.67	5.72	15	4	0.0	0	4.3	7	41	5	4	2	12	17	7.2	
ORLANDO	108	1011.2	1015.5	84	67	75.8	1.8	91	1	51	20	2	0			1.98	- 1.98	1.45	5	1	0.0	0	3.8	4	29	18	1	8	11	12	6.0	
PENSACOLA	112	1013.2	1017.1	78	59	68.3	- 2.1	88	5	45	20	0	0	59	77	3.58	0.60	1.55	10		0.0	0	4.7	3	27	S	9					54
TALLAHASSEE	55	1014.6	1016.7	81	59	70.0	0.4	92	1	42	30+	1	0	60	77	2.89	0.46	1.69	7	2	0.0	0	3.3	3	21	34	19	6	13	12	6.2	
TAMPA	19	1014.6	1015.0	85	66	75.3	0.6	93	6	47	30+	6	0	65	76	1.22	- 1.56	0.86	5	3	0.0	0	4.2	5	20	6	4	9	10	12	5.8	67
WEST PALM BEACH	15	1013.5	1014.1	84	71	77.5	- 0.7	89	19+	62	31+	0	0	69	76	8.90	0.94	2.43	13	5	0.0	0	5.2	7	35	5	3	8	3	20	7.0	
GEORGIA																																
ATHENS	802	988.8	1017.9	72	48	60.0	- 3.0	83	10	37	20	0	0	50	75	3.54	0.68	1.44	9	1	0.0	0	1.6	2	17	30	19+	15	4	12	4.6	
ATLANTA	1010	981.4	1018.2	69	49	59.4	- 3.0	80	10	40	20	0	0	48	71	7.53	5.09	2.41	9	3	0.0	0	2.4	3	26	NW	1	14	3	14	5.1	61
AUGUSTA	145	1012.2	1017.6	77	49	62.8	- 2.4	88	10	37	21	0	0	52	76	1.83	- 0.18	1.48	5	1	0.0	0	1.9	35	21	29	19	12	7	12	5.1	
COLUMBUS	385			77	55	65.5	0.1	87	10	42	20	0	0	56	77	4.70	2.93	1.64	7		0.0	0	2.3	4	18	7	6+	10	7	14	6.1	
MACON	354	1005.1	1018.1	76	51	63.9	- 2.3	87	10	38	21	0	0	53	74	6.61	4.60	4.63	8	1	0.0	0	3.0	2	24	NE	9	10	6	15	5.6	60
ROME	637			72	43	57.6	- 3.6	80	14+	33	29+	0	0			6.39	3.46	3.60	9		0.0	0										
SAVANNAH	46	1015.6	1017.4	79	56	67.3	0.1	88	1	40	28	0	0	57	75	1.19	- 1.39	0.58	5	1	0.0	0	2.7	4	22	SW	1	11	9	11	5.2	56
HAWAII																																
HILO	27	1014.2	1015.5	84	70	77.0	1.9	88	4+	67	8	0	0	70	81	15.69	4.89	5.41	23	1	0.0	0	1.4	22	15	E	24+	3	9	19	7.7	24
HONOLULU	7	1014.2	1014.8	88	73	80.9	2.7	92	5	66	8	10	0	67	66	2.95	1.11	1.94	12	1	0.0	0	8.7	7	27	NE	20+	5	14	12	6.6	50
KAHULUI	48	1012.5	1014.8	86	70	78.0	0.7	89	10+	64	8	0	0	65	67	1.08	0.21	0.32	10	0	0.0	0	9.5	6	29	NE	19	5	12	14	6.7	67
LIHUE	103	1010.8	1016.0	82	72	77.0	0.1	87	3+	64	1	0	0	70	82	11.41	7.38	7.85	17	1	0.0	0	8.0	6	26	E	16	5	10	16	7.1	51
IDAHO																																
BOISE	2838	919.4	1020.4	64	35	49.4	- 2.2	78	6	21	14	0	13	30	54	0.29	- 0.55	0.15	5	0	0.1	T	0.9	15	34	NW	20	11	11	9	4.8	84
IDAHO FALLS 42NW R	4790			60	19	39.4	- 4.7	75	7+	4	15	0	30			0.01	- 0.40	0.01	1													
IDAHO FALLS 46W R	4932			60	22	41.0	- 3.9	74	1	8	15	0	30			0.23	- 0.43	0.23	1		0.0	0	4.5	25	37	WSW	20					
LEWISTON	1413			63	41	51.9	- 0.1	80	5	30	14	0	2			0.97	- 0.24	0.26	9		0.0	0						8	8	15	6.4	
POCATELLO	4454	865.9	1020.2	61	28	44.6	- 4.5	76	1	16	15	0	24	24	50	0.40	- 0.49	0.30	4	1	1.1	T	5.4	22	54	SW	20	12	10	9	4.9	73
ILLINOIS																																
CAIRO U	314			67	47	57.3	- 4.6	84	9	38	20	0	0			1.85	- 1.03	0.69	8		0.0	0			26	SW	15+	17	6	8	3.7	71
CHICAGO O HARE	658	991.2	1015.8	65	38	51.4	- 1.7	83	9	22	30	0	9	36	59	2.16	- 0.59	1.42	6	1	T	T	5.7	23	30	26	10+	13	12	6	4.5	
CHICAGO MIDWAY	607	993.2		64	43	53.3	- 1.8	82	9	30	30	0	1	36	56	2.17	- 0.61	1.14	8	0	0.0	0	6.9	23	33	W	10	14	9	8	4.4	73
MOLINE	582	993.9	1015.7	65	40	52.5	- 2.3	79	9+	24	25	0	8	38	62	4.38	1.92	2.14	6	2	0.0	0	5.4	23	40	NW	10	13	11	7	4.2	70
PEORIA	652	992.6	1016.8	63	39	51.3	- 4.0	80	9	27	30+	0	6	37	61	1.80	- 0.73	1.04	5	3	0.0	0	5.2	22	40	W	10	13	11	7	4.4	72
ROCKFORD	724	988.2	1015.2	64	39	51.4	- 1.1	80	9+	24	30	0	8	38	64	2.51	- 0.19	1.13	5	1	0.0	0	6.1	24	29	29	10	15	9	7	4.1	
SPRINGFIELD	588	994.9	1017.2	64	40	52.3	- 4.4	81	9	27	25	0	6	39	64	2.37	- 0.54	1.66	6	3	0.0	0	5.5	22	33	W	15	14	8	9	4.5	73

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1004.4	1018.7	67	41	54.1	- 5.0	83	12	29	27	0	4	42	67	1.65	- 0.92	1.17	6	1	0.0	0	2.0	23	26	S	13+	15	4	12	4.5	66
FORT WAYNE	791	986.8	1017.3	59	37	47.8	- 5.2	73	14	25	30	0	9	35	64	1.38	- 1.48	0.54	6	2	0.0	0	5.5	24	33	W	11	14	7	10	4.6	72
INDIANAPOLIS	792	988.5	1017.9	63	41	51.9	- 3.5	75	12	29	30	0	1	38	61	1.60	- 1.02	0.90	4	1	0.0	0	3.5	23	38	NW	9	15	5	11	4.5	64
SOUTH BEND	773	988.2	1016.2	61	42	51.7	- 1.7	76	8	25	30	0	4	38	62	1.32	- 1.85	0.61	9	2	T	T	6.3	24	26	29	11	11	11	9	4.9	
IOWA																																
BURLINGTON	692			65	41	52.9	- 2.5	80	14	29	25	0	4	37	59	3.41	0.71		4	3	0.0		4.5	25	31	30	10	13	10	8	4.3	
DES MOINES	938	980.7	1015.5	66	40	52.9	- 1.3	84	7	28	30+	0	5	36	57	0.29	- 1.77	0.25	3	2	T	0	4.1	23	34	NW	15	15	8	8	4.1	72
DUBUQUE	1056	975.6		63	38	50.2	- 0.5	80	8+	26	30+	0	10			1.47	- 1.27	0.67	5		0.0	0						15	7	9	4.3	
SIOUX CITY	1095	974.6	1014.8	67	38	52.2	- 1.8	85	7	28	16	0	9	39	65	1.03	- 0.39	1.02	3	1	4.0	4	2.0	24	36	NW	15	15	6	10	4.5	72
WATERLOO	868	982.4	1014.5	64	38	50.9	- 0.8	84	7	21	25	0	13	36	61	3.21	1.09	1.61	4	2	0.0	0	4.4	23	33	28	22	14	6	11	4.4	
KANSAS																																
CONCORDIA	1470	962.4	1015.2	71	42	56.5	- 1.2	88	12	24	16	0	3	36	52	0.40	- 1.28	0.37	2	1	0.0	0	5.8	21	34	NW	21	20	7	4	3.2	83
DODGE CITY	2582	925.5	1016.1	72	42	56.9	- 1.4	90	13	28	15	1	4	34	49	0.32	- 1.10	0.26	2	0	0.0	0	3.9	23	49	NW	14	18	7	6	3.8	82
GOODLAND	3650	889.3	1016.5	67	35	50.7	- 2.4	87	2	16	15	0	10	32	57	1.23	0.47	1.07	3	2	8.4	6	5.2	27	37	32	14	19	7	5	3.4	
TOPEKA	876	984.4	1016.4	71	40	55.4	- 2.8	88	14	24	16	0	7	40	61	0.42	- 1.92	0.34	3	1	0.0	0	4.2	23	34	SW	14	16	8	7	3.9	81
WICHITA	1321	968.8	1016.6	72	44	58.0	- 1.9	90	13	27	16	1	2	39	53	0.47	- 1.93	0.36	3	1	0.0	0	4.4	21	43	NW	14	19	6	6	3.3	78
KENTUCKY																																
COVINGTON	869	986.8	1018.6	63	40	51.0	- 5.1	77	13	25	30	0	6	38	65	0.57	- 1.69	0.40	5	2	0.0	0	3.3	24	25	28	15	14	5	12	5.0	
LEXINGTON	966	983.4	1019.0	65	44	54.2	- 3.9	79	13	31	30	0	1	39	61	1.44	- 0.84	0.95	7	3	0.0	0	2.6	19	25	18	15	15	3	13	4.6	
LOUISVILLE	477	1000.7	1018.4	66	43	54.6	- 3.3	79	13+	31	26	0	1	42	64	1.04	- 1.21	0.73	5	1	0.0	0	1.6	23	27	S	15	15	6	10	4.5	67
LOUISIANA																																
ALEXANDRIA	92	1013.5	1017.9	75	50	62.6	- 4.5	89	9	36	27	0	0	54	78	2.33	- 1.20	0.84	7	0	0.0	0	2.6	3	22	33	19	13	11	7	4.2	
BATON ROUGE	64	1014.9	1017.6	78	55	66.4	- 2.7	87	14+	42	21+	0	0	55	71	2.43	- 0.02	1.05	6	0	0.0	0	3.1	3	22	32	19	10	8	13	5.2	
LAKE CHARLES	9	1016.6	1017.6	80	57	68.4	- 2.1	90	9	44	20	1	0	58	75	2.96	- 0.10	1.40	6	1	0.0	0	3.8	5	23	32	15	13	6	12	4.5	
NEW ORLEANS	3	1015.9	1016.9	79	59	68.9	- 1.5	89	9	46	30+	0	0	59	73	3.15	0.31	2.41	8	1	0.0	0	4.6	3	23	34	1	15	3	13	4.9	
SHREVEPORT	254	1008.8	1018.0	77	51	64.0	- 4.3	90	9+	38	20	2	0	52	69	1.62	- 1.19	0.76	4	1	0.0	0	1.7	9	35	31	14	15	10	6	3.5	72
MAINE																																
CARIBOU	624	989.2		51	35	42.7	- 0.3	66	9	18	31	0	11			3.47	0.11	2.05	10		0.4	T						1	8	22	8.2	
PORTLAND	47	1012.5	1014.7	59	35	47.1	- 1.5	77	8	18	31	0	10	39	74	3.61	0.41	2.37	8	0	0.0	0	4.0	26	29	NW	29	11	11	9	5.3	64
MARYLAND																																
BALTIMORE	148	1012.5	1018.2	65	42	53.4	- 3.6	78	9+	25	31	0	3	41	67	4.80	1.62	3.47	6	0	0.0	0	2.9	29	35	W	5	18	5	8	4.0	69
MASSACHUSETTS																																
BLUE HILL OBS R	629			62	42	51.9	- 0.8	78	9	26	31	0	2			3.36	- 0.39	1.68	5		0.0	0			46	WNW	29					67
BOSTON	15	1014.9	1015.9	63	46	54.5	- 0.5	78	9	32	31	0	1	39	61	2.62	- 0.52	1.40	5	0	0.0	0	6.7	26	35	W	20	11	9	11	5.1	69
NANTUCKET	43	1015.9	1016.2	60	43	51.3	- 3.0	68	10	22	31	0	4	44	78	3.51	- 0.19	1.18	7	0	0.0	0	4.9	26	42	SE	19	11	9	11	5.4	68
PITTSFIELD	1170			58	35	46.6	- 1.5	76	9	18	31	0	12			3.39	0.14	1.44	7		T	0										
WORCESTER	986	979.0	1016.2	59	39	49.0	- 1.5	75	9	24	31	0	3	35	63	4.13	0.66	1.91	6	0	0.0	0	6.9	27	40	29	20	13	9	9	5.0	
MICHIGAN																																
ALPENA	689	987.5	1012.9	57	35	46.4	0.1	77	8+	16	30	0	15	33	63	2.12	- 0.30	1.18	14	4	T	T	5.4	24	30	SW	22	10	7	14	6.1	50
DETROIT	623	992.9	1015.8	61	43	52.2	- 1.6	78	8	26	30	0	2	36	56					2	0.0		6.4	25	31	29	11					
DETROIT M WAYNE CO	633	991.2	1015.6	62	40	51.0	- 3.0	77	8	25	30	0	5	38	65	1.15	- 1.42	0.48	9	2	0.0	0	6.3	24	32	SW	15+	11	14	6	4.7	67
DETROIT WILLOW RUN	711	987.8	1016.2	60	37	48.4	- 5.5	76	9	22	30	0	8	35	62	0.99	- 1.54	0.50	6	2	0.0	0	8.2	24	32	24	15	10	15	6	4.6	
FLINT	770	987.1	1015.3	58	38	47.7	- 2.3	77	8	19	30	0	10	35	64	0.88	- 1.49	0.43	8	1	0.0	0	8.0	24	29	25	22	8	10	13	5.7	
GRAND RAPIDS	784	985.8	1015.1	62	40	51.2	0.1	82	8	20	30	0	6	39	65	2.33	- 0.28	0.91	8	2	0.0	0	6.6	24	40	W	11	8	15	8	5.5	61
HOUGHTON LAKE	1149	971.9	1014.2	55	36	45.6		71	7	16	30	0	10	37	72	1.79		0.69	14	5	T	0	6.5	24	26	23	15	8	7	16	6.4	
LANSING	841	983.1	1015.0	61	37	49.0	- 2.3	79	8	15	30	0	14	36	63	0.88	- 1.62	0.52	5	1	0.0	0	7.5	24	45	W	10	8	14	9	5.6	58
MARQUETTE U	677			54	39	46.6	- 1.4	81	7	24	30	0	4			3.18	0.85	2.10	14		1.1	1			38	SW	22	5	8	18	7.3	42
MUSKEGON	627	991.9	1015.0	59	42	50.1	- 2.4	71	8	24	30	0	9	38	63	2.17	- 0.38	1.26	9	4	T	T	6.4	24	32	31	11+	8	12	11	5.8	
SAULT STE MARIE	721	985.1	1011.7	52	36	44.2	- 2.1	70	9	26	18	0	12	37	78	4.92	2.10	1.28	20	2	1.2	T	3.1	25	37	NW	11	3	7	21	8.0	37
MINNESOTA																																
DULUTH	1428	960.0	1012.2	53	34	43.2	- 1.4	79	7	21	17	0	16	32	68	3.56	1.39	1.94	9	3	8.1	■	3.9	25	46	W	22	6	8	17	6.8	48

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	968.2	1011.8	51	32	41.4	- 1.0	78	7	22	29+	0	21	33	74	1.57	- 0.17	0.97	8	0	T	T	2.5	28	28	30	9	5	8	18	7.5	
MINNEAPOLIS	834	982.4	1013.2	59	36	47.5	- 1.4	84	8	23	24	0	11	36	66	3.53	1.94	2.95	5	2	0.2	T	3.2	26	39	NE	14	12	4	15	5.8	60
ROCHESTER	1297	965.8	1013.9	59	37	47.9	- 2.0	80	8+	26	25+	0	11	35	65	3.86	2.16	2.81	8	4	0.2	T	6.1	24	32	33	31+	14	3	14	5.1	
ST CLOUD	1034	974.3	1012.5	58	34	45.7	- 1.6	80	8+	21	24	0	12		65	1.41	- 0.23	0.82	4		1.4	1						10	7	14	6.1	
MISSISSIPPI																																
JACKSON	310	1006.1	1018.1	76	47	61.1	- 5.9	88	8	34	20	0	0	51	75	1.63	- 0.41	0.80	8	0	0.0	0	2.0	6	20	S	13	19	6	6	3.5	74
MERIDIAN	290	1007.1	1018.3	76	47	61.2	- 4.4	87	9	34	21	0	0	51	74	1.05	- 1.17	0.60	6	1	0.0	0	1.8	1	18	33	1	15	9	7	4.3	
VICKSBURG U	234			73	53	62.8	- 4.7	86	8	41	26	0	0			1.98	- 0.06	1.97	7		0.0	0			18	NW	19	20	3	8	3.6	72
MISSOURI																																
COLUMBIA	778	988.5	1016.9	68	43	55.6	- 3.1	85	9	31	23	0	2	38	56	2.05	- 1.07	1.15	6	4	0.0	0	3.9	22	30	N	13+	17	5	9	3.9	76
KANSAS CITY	742	989.5	1016.3	72	47	59.7	- 0.5	88	14	31	16	0	1	41	53	0.45	- 2.41	0.39	3	0	0.0	0	4.2	21	33	S	21+	15	9	7	4.1	73
SAINT JOSEPH	811			74	41	57.6	0.2	87	14+	26	16	0	7	38	59	1.16	- 1.02	0.50	4	2	0.0	0	3.4	21	30	18	21	18	8	5	3.5	
ST LOUIS	535	997.6	1018.1	67	42	54.2	- 4.2	85	9	32	30+	0	4	41	65	2.18	- 0.68	0.76	7	3	0.0	0	3.4	22	37	SW	15+	14	9	8	4.5	73
SPRINGFIELD	1268	972.6	1018.0	69	41	55.3	- 4.4	87	14	28	16	0	2	40	62	1.26	- 2.50	0.74	5	1	0.0	0	2.8	20	34	SE	14	19	5	7	3.2	74
MONTANA																																
BILLINGS	3567	892.0	1016.2	62	39	50.4	0.9	79	7	25	29	0	8	29	47	0.50	- 0.59	0.42	3	0	T	0	7.6	26	44	SW	20	9	10	12	5.6	61
GLASGOW	2284			59	33	45.9	0.5	80	6	18	31	0	12			0.68	0.04	0.53	4		1.6	T						8	9	14	6.2	
GREAT FALLS	3662	888.6	1016.8	58	37	47.4	- 0.1	79	6	24	31+	0	13	28	52	1.32	0.59	0.68	5	0	3.4	1	9.5	24	41	NW	8	5	9	17	7.0	57
HAVRE	2582			58	33	45.6	- 0.2	80	6	20	29	0	17			0.83	0.04	0.39	6		T	0			38	W	20	8	4	19	7.1	54
HELENA	3828	882.5	1018.9	60	32	46.4	0.8	79	6	21	29	0	16	28	53	0.75	0.09	0.40	4	0	T	T	5.4	28	41	W	21	6	12	13	6.1	59
KALISPELL	2965	913.3	1019.4	55	28	41.2	- 2.7	70	6	18	18	0	26	32	74	0.88	- 0.36	0.50	9	0	T	T	1.9	21	29	21	20	3	10	18	7.2	
MILES CITY	2629	922.1	1015.5	62	34	48.0	- 1.0	81	7	20	31	0	13	31	55	0.34	- 0.53		3	0	T		5.5	28								
MISSOULA	3190	907.6	1020.9	57	31	44.0	0.0	73	6	20	19+	0	19	31	68	0.81	- 0.18	0.50	8	0	0.2	T	2.0	30	31	NW	20	8	4	19	6.7	49
NEBRASKA																																
GRAND ISLAND	1841	948.9	1015.3	71	37	53.8	0.4	91	13	27	19	1	9	36	57	0.65	- 0.31	0.57	2	2	0.5	1	4.4	25	41	34	14	18	7	6	3.5	
LINCOLN U	1150			69	42	55.6	- 1.1	87	7	29	16	0	3			0.45	- 1.13	0.26	4		0.0	0			34	NW	31+	17	8	6	3.7	77
NORFOLK	1544			66	37	51.7	- 1.2	87	7	27	16	0	12			1.07	- 0.11	1.05	3		1.6	1						14	10	7	4.2	
NORTH PLATTE	2775	917.4	1015.4	70	31	50.5	- 0.5	86	8+	20	19	0	19	32	57	0.31	- 0.60	0.27	3	2	1.4	1	4.0	31	45	N	14	20	5	6	3.4	83
OMAHA	977	979.7	1015.2	69	39	53.9	- 1.8	85	7	29	24+	0	8	39	62	0.64	- 1.09	0.40	4	3	T	T	2.6	22	62	NW	15	15	8	8	4.2	77
SCOTTSBLUFF	3957	880.1	1016.7	66	31	48.7	- 1.7	83	6	20	15	0	21	30	56	0.81	0.12	0.46	5	1	T	T	6.0	29	44	29	21	17	8	6	3.8	
VALENTINE	2587			66	33	49.4	0.1	84	8	23	19+	0	18			1.01	0.13	0.90	4		T	T			50	NW	21	15	10	6	4.3	74
NEVADA																																
ELKO	5050	848.0	1020.3	68	24	45.9	- 1.0	81	1	11	16+	0	27	20	42	0.02	- 0.73	0.01	2	0	0.1	T	1.3	29	29	25	21	18	7	6	3.4	
ELY	6253	812.1	1019.2	64	28	45.7	- 0.2	75	1	13	14	0	24	21	44	0.10	- 0.63	0.09	2	3	T	T	3.1	21	29	NW	13	16	7	8	4.0	86
LAS VEGAS	2162	939.4	1015.5	81	52	66.5	- 0.1	89	10+	40	17	0	0	30	30	0.09	- 0.11	0.08	2	1	0.0	0	2.3	25	42	SW	10	20	4	7	3.3	86
RENO	4404	869.3	1019.6	71	28	49.6	0.4	83	1	19	19+	0	26	27	49	T	- 0.51	T	0	0	0.0	0	0.3	27	44	SW	20	20	7	4	2.8	95
WINNEMUCCA	4299	871.3	1020.2	69	25	46.9	- 0.8	81	1	11	14	0	27	20	37	0.01	- 0.80	0.01	1	0	T	T	1.0	29	38	SW	20	16	9	6	3.7	76
NEW HAMPSHIRE																																
CONCORD	342	1002.7	1015.7	62	34	48.0	- 0.7	81	9	14	31	0	14	38	74	3.31	0.65	1.66	6	0	0.0	0	2.8	28	38	NW	20	11	10	10	5.4	62
MT WASHINGTON OBS	6262			36	21	28.5	- 2.4	49	9	- 2	30	0	28			5.47	- 0.72	2.11	14	0	13.3	3			121Y	W	20	5	7	19	7.1	43
NEW JERSEY																																
ATLANTIC CITY	64	1015.6	1018.0	65	41	52.7	- 4.5	78	10	27	31	0	3	44	73	3.73	0.53	2.04	6	0	0.0	0	3.0	28	29	32	20	16	6	9	4.5	61
ATLANTIC CITY U	11			64	49	56.4	- 2.3	73	29+	36	31	0	0			2.81	- 0.58	1.43	7						39	NW	20					
NEWARK	7	1016.3	1017.4	65	46	55.5	- 2.1	79	9	31	31	0	1	42	63	3.78	0.67	2.65	7	0	0.0	0	4.1	26	32	32	29+	13	8	10	4.8	
TRENTON U	56			65	45	55.0	- 1.8	78	9	32	31	0	1			4.78	1.94	3.46	5		0.0	0			31	N	29	13	11	7	4.5	65
NEW MEXICO																																
ALBUQUERQUE	5311	840.2	1016.4	71	42	56.8	- 1.2	79	11	33	15	0	0	26	35	0.54	- 0.21	0.54	1	2	0.0	0	0.6	26	45	W	11	21	4	6	2.8	85
CLAYTON	4969			69	37	53.1	- 2.2	83	2	24	19	0	9			0.69	- 0.31	0.39	3		1.7	1						20	7	4	3.0	
RATON	6379			68	32	49.7	- 1.4	78	11+	20	15	0	17			0.75	- 0.29	0.72	4		4.0	2						20	6	5	3.1	
ROSWELL	3617	893.7		77	37	56.8	- 2.2	91	13	24	20	1	14	30	41	T	- 1.07	T	0	0	0.0	0	0.9	15	31	W	18	21	6	4	2.5	81
SILVER CITY	5373			73	42	57.3	- 2.4	80	11	32	15	0	1			0.04	- 0.77	0.02	2		0.0	0						21	6	4	2.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

OCTOBER 1966

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	°F.	°F.	°F.	°F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1005.8	1016.6	61	37	48.5	- 2.3	76	9	22	31	0	10	38	72	2.22	- 0.55	1.03	6	0	0.0	0	5.0	25	35	NW	20	9	10	12	5.6	60
BINGHAMTON	1590	957.3	1016.8	56	38	46.9	- 2.9	72	9	25	31+	0	4	36	69	1.40	- 1.69	0.60	10	0	T	T	5.2	24	28	NW	29+	8	8	15	6.4	49
BUFFALO	705	989.8	1015.8	58	40	48.8	- 2.0	76	15	25	30	0	6	39	71	0.93	- 2.07	0.47	10	4	0.0	0	8.1	24	40	SW	7	9	7	15	6.2	55
NEW YORK U	132	1013.5	1016.6	65	48	56.2	- 2.1	79	9	34	30	0	0	42	63	4.64	1.50	3.15	7	0	0.0	0	3.3	28	32	NW	29	16	9	6	4.0	63
J.F. KENNEDY	13	1016.6	1017.2	64	47	55.2	- 2.4	74	16	30	31	0	1	44	68	4.92	1.71	3.21	7	0	0.0	0	4.0	27	30	30	20	14	7	10	4.6	
NEW YORK LA GUARDIA	11	1015.6	1017.4	64	50	56.6	- 2.0	78	9	37	30	0	0	43	62	3.73	0.36	2.39	7	0	0.0	0	4.3	27	38	NW	20	12	9	10	4.9	
ROCHESTER	547	996.3	1016.7	61	39	50.1	- 1.7	78	15+	27	30	0	6	37	63	0.68	- 1.90	0.31	10	4	0.0	0	6.7	24	36	SW	10	10	7	14	5.9	54
SYRACUSE	410	1001.0	1015.9	60	39	49.5	- 2.3	75	9	25	31+	0	8	38	68	0.90	- 2.28	0.23	11	1	0.0	0	4.6	25	36	W	10	8	8	15	6.0	48
NORTH CAROLINA																																
ASHEVILLE	2140	942.4	1018.8	65	38	51.7	- 4.1	77	4	27	21	0	8	45	84	5.37	2.24	2.25	11	1	0.0	0	2.7	36	26	35	20+	15	6	10	4.5	63
CAPE HATTERAS R	7	1016.9	1017.1	72	58	64.8	- 0.6	84	1	39	31	0	0	57	75	5.04	0.80	1.36	11	1	0.0	0	5.9	36	40	SW	1	9	10	12	5.4	69
CHARLOTTE	736	990.5	1018.0	70	46	58.0	- 4.5	83	16	35	31	0	0	48	74	2.29	- 0.67	0.85	9	0	0.0	0	1.7	36	19	SW	1	13	8	10	4.6	64
GREENSBORO	897	986.8	1018.6	70	45	57.7	- 1.6	84	10	34	21	0	0	48	74	3.25	0.54	1.77	8	0	0.0	0	1.3	33	23	SW	1	12	9	10	4.7	62
RALEIGH	434	1002.0	1018.1	71	46	58.6	- 1.9	84	10	35	21	0	0	48	71	2.01	- 0.70	0.78	6	0	0.0	0	1.7	2	40	34	1	12	11	8	4.7	62
WILMINGTON	28	1016.3	1017.7	79	55	66.8	1.4	90	17	43	31+	1	0	55	69	1.10	- 1.91	0.60	5	1	0.0	0	2.8	2	29	SW	1	13	11	7	4.5	65
NORTH DAKOTA																																
BISMARCK	1647	953.9	1014.0	61	31	46.1	- 0.6	86	7	18	29+	0	18	31	62	0.59	- 0.26	0.31	4	0	0.4	T	4.4	31	42	NW	9	12	8	11	5.3	62
FARGO	896	979.7	1013.0	57	31	44.0	- 2.5	85	7	17	29	0	19	32	68	1.40	0.29	0.71	5	2	1.2	T	3.2	29	48	W	22	9	8	14	5.8	58
WILLISTON	1899			59	32	45.7	0.1	81	7	17	15	0	15			0.36	- 0.37	0.25	5		2.0	1			50	NW	30	13	7	11	5.4	61
OHIO																																
AKRON	1208	972.9	1017.6	61	40	50.5	- 2.4	77	14+	31	27	0	1	38	66	0.98	- 1.50	0.50	8	1	T	0	5.1	23	27	17	15	11	10	10	5.3	
CINCINNATI OBS	761			64	43	53.3	- 4.6	79	13	29	30	0	1			0.63	- 1.61	0.40	7		0.0	0			18	SW	15+					60
CLEVELAND	777	987.8	1017.2	61	40	50.3	- 2.5	78	9	26	27	0	4	38	66	1.18	- 1.24	0.44	7	1	0.0	0	6.6	22	36	S	15	10	7	14	5.6	64
COLUMBUS	812	988.2	1018.4	62	39	50.7	- 3.5	79	13	26	30	0	6	39	66	0.79	- 1.32	0.43	7	1	T	0	3.0	23	30	SW	22+	13	6	12	5.0	62
DAYTON	1002	981.7	1018.2	62	41	51.3	- 4.3	77	13	28	30	0	2	39	66	1.28	- 0.95	0.67	8	2	0.0	0	4.4	23	26	SW	22+	13	6	12	4.9	59
MANSFIELD	1295			59	40	49.3	- 3.1	75	13	27	30	0	3			1.23	- 1.04	0.70	5	1	0.0	0	7.2	24				14	5	12	5.0	
TOLEDO	676	991.5	1017.1	62	39	50.4	- 1.7	77	14	23	30	0	9	35	60	0.97	- 1.42	0.50	5	1	0.0	0	6.2	24	32	W	10	14	10	7	4.4	67
YOUNGSTOWN	1178	974.3	1017.5	59	39	49.0	- 2.9	77	15	27	26	0	6	37	67	1.40	- 1.31	0.48	8	1	T	T	5.3	23	27	26	11	9	6	16	6.0	
OKLAHOMA																																
OKLAHOMA CITY	1280	970.9	1017.2	74	48	60.9	- 2.0	89	13	36	23+	0	0	42	54	0.37	- 2.14	0.37	1	0	0.0	0	2.1	18	37	NW	14	19	5	7	3.6	79
TULSA	650	993.2	1017.5	74	45	59.5	- 3.3	91	9	32	23+	1	2	42	58	1.39	- 1.92	0.62	6	1	0.0	0	3.3	19	43	SW	14	18	7	6	3.5	78
OREGON																																
ASTORIA	8	1019.0	1019.8	60	43	51.7	- 1.2	78	4	33	13	0	0	47	85	5.83	- 1.95	1.92	16	1	0.0	0	2.2	20	29	19	21	5	6	20	7.4	
BURNS U	4151	876.7	1020.9	64	31	47.1	- 1.3	81	1	16	14	0	21	28	53	0.33	- 0.53	0.28	4		1.4	1	3.0	31				12	10	9	4.5	
EUGENE	359	1006.8	1020.4	64	43	53.5	0.3	84	4	30	14	0	2	46	79	1.93	- 1.90	0.70	10	1	0.0	0	1.7	23	23	18	21	6	7	18	6.8	
MEACHAM	4050	879.8	1020.4	54	35	44.6	- 1.7	71	6+	23	14	0	13			2.83	- 0.01	1.46	11		13.0	5	1.1	22				6	8	17	6.6	
MEDFORD	1298	972.6	1020.7	69	38	53.5	0.5	86	4	26	14	0	7	40	70	0.76	- 1.18	0.28	5	0	0.0	0	0.6	29	18	26	20	16	7	8	4.3	
PENDLETON	1482	965.8	1019.8	66	42	54.0	0.3	84	1	31	14	0	1	37	58	0.75	- 0.43	0.36	10	0	T	0	3.6	24	28	27	20	10	7	14	5.8	
PORTLAND	21	1019.0	1020.2	63	44	53.7	- 0.5	81	4	34	18	0	0	47	82	3.06	- 0.55	0.74	12	0	0.0	0	1.5	23	34	SW	20	7	5	19	7.2	38
SALEM	196	1012.9	1020.2	65	41	52.6	- 1.5	83	4	28	18+	0	5	47	85	2.06	- 1.85	0.67	13	0	0.0	0	2.2	19	25	16	22+	8	4	19	6.5	
SEXTON SUMMIT R	3836	886.9	1019.0	62	43	52.2	1.5	77	4	28	21+	0	5			0.93	- 2.48	0.36	9		2.4	2						15	9	7	4.0	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	83.6	- 0.1	90	29+	76	2	7	0			0.08	- 1.02	0.06	2		0.0	0						16	11	4	4.3	
ENIWETOK	13	1008.1	1009.0	89	78	83.9	0.9	92	17+	72	5	18	0	76	78	9.31	0.22	2.18	24		0.0	0	5.8	10								
TAGUAC GUAM R	361			87	72	79.1	- 0.2	89	29+	68	10	0	0			6.96	- 6.14	1.74	23		0.0	0										53
JOHNSTON	7	1011.5	1012.2	84	77	80.5	- 0.4	86	29+	72	4+	0	0	74	80	8.28	5.01	2.32	23	3	0.0	0	11.1	10	39	E	26	1	12	18	7.5	38
KOROR R	94	1005.4	1009.2	88	76	82.1	0.9	91	2	72	8	8	0	76	85	16.66	3.57	5.51	26	4	0.0	0	2.5	28	29	SW	26	0	0	31	10.0	58
KWAJALEIN	8	1008.5	1009.2	88	78	82.6	0.7	90	28+	73	5	2	0	76	79	7.80	- 3.08	1.36	23	3	0.0	0	5.2	11	37	15	5	1	5	25	8.7	
MAJURO	10	1009.1	1009.5	87	77	81.9	1.4	88	30+	71	25	0	0	75	78	13.53	- 1.64	3.12	24	3	0.0	0	3.6	10	29	E	7	2	6	23	8.4	59
MARCUS ISLAND	20			85	76	80.2	- 1.6	89	10	71	27+	0	0			12.24	8.66	4.87	14	1	0.0	0	8.5	9	113	W	14	9	8	14	6.1	
PAGO PAGO	12	1011.5	1011.5	86	74	80.0		90	18	69	11+	1	0	74	85	18.63		4.44	23	2	0.0	0	7.5	11	25	E	26	2	14	15	7.3	36
PONAPE R	123	1003.4	1008.8	88	73	80.5	0.8	92	2	71	25	10	0	75	88	16.61	0.64	3.91	27	5	0.0	0	2.6	17	28	SW	31	1	8	22	8.4	49
TRUK MOEN ISLAND	5	1008.5	1008.9	87	75	81.4	0.8	91	5	74	23+	2	0	76	83	8.88	- 4.57	2.16	23	1	0.0	0	0.8	29	35	N	29	1	2	28	9.3	81
WAKE	11	1011.2	1011.4	86	77	81.7	0.1	88	2+	74	10	0	0	71	73	2.53	- 2.74	0.71	14	0	0.0	0	11.1	6	35	4	30	3	9	19	7.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	°F.	°F.	°F.	F.	F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1006.4	1008.4	89	75	82.2	0.6	91	25	72	8	9	0	76	84	7.11	- 6.08	2.16	24	0	0.0	0	0.4	17	19	SW	26	0	0	31	9.8	59
PENNSYLVANIA																																
ALLENTOWN	387	1003.7	1017.8	62	38	49.8	- 4.0	74	9+	23	31	0	6	38	67	2.77	- 0.20	1.27	5	0	0.0	0	3.9	27	28	32	11	12	11	8	4.5	
ERIE	731	989.5	1016.6	60	43	51.3	- 1.3	76	15	31	26	0	2	39	65	1.73	- 1.57	0.51	10	3	0.0	0	6.8	23	25	22	22+	10	6	15	5.7	
HARRISBURG	338	1005.1	1018.0	66	44	54.7	- 1.0	80	4	31	31	0	1	43	67	2.12	- 0.85	1.21	8	0	0.0	0	3.1	28	31	NW	29+	12	8	11	4.9	62
PHILADELPHIA	5	1016.6	1017.8	65	41	53.1	- 2.6	76	9+	26	31	0	3	43	71	5.12	2.34	3.78	6	0	0.0	0	3.2	29	30	NW	20	14	9	8	4.5	65
PITTSBURGH	1137	973.6	1017.9	62	40	50.8	- 2.3	79	15	25	30	0	4	35	59	1.38	- 1.14	0.96	8	1	0.0	0	4.1	25	28	32	10	10	7	14	5.8	55
READING U	266			64	44	54.3	- 2.9	77	9	29	31	0	1			2.59	- 0.25	1.33	7		0.0	0			38	NW	29	15	6	10	4.6	59
SCRANTON	930	983.4	1017.9	61	40	50.2	- 0.8	74	9	27	31+	0	3	40	71	2.04	- 1.46	1.20	9	0	T	0	3.2	25	26	W	29	10	10	11	5.2	66
WILLIAMSPORT	524	998.6	1017.9	60	36	47.6	- 5.5	73	9	23	31	0	10	40	81	1.43	- 1.89	0.90	8	0	0.0	0	2.3	27	21	31	29+	9	9	13	5.7	
RHODE ISLAND																																
BLOCK ISLAND	110			59	46	52.8	- 2.4	66	10	32	31	0	1			2.40	- 0.62	1.93	7		0.0	0						10	12	9	5.3	
PROVIDENCE	51	1013.9	1016.3	63	40	51.4	- 1.8	76	8	24	31	0	3	39	67	2.60	- 0.50	1.68	5	0	0.0	0	4.7	26	35	29	20	12	9	10	5.1	66
SOUTH CAROLINA																																
CHARLESTON	40	1015.6	1017.1	79	56	67.4	1.2	88	5	42	29+	0	0	57	74	1.70	- 1.14	1.64	2	1	0.0	0	3.3	2	38Y	SW	19	12	12	7	4.8	62
CHARLESTON U	9			76	61	68.4	0.3	86	5	47	20	0	0			0.26	- 2.48	0.21	3		0.0	0			29	N	1					
COLUMBIA	217	1009.5	1017.7	76	49	62.8	- 1.9	88	5	38	31+	0	0	51	72	2.47	0.09	1.39	6	1	0.0	0	2.2	1	24	25	1	14	10	7	4.4	69
GNVLE-SPARTANBURG	957	984.1	1018.6	71	47	58.7	- 3.7	84	16	39	31+	0	0	50	76	3.78	0.42	1.82	10	1	0.0	0	2.4	2	24	NW	20	14	6	11	4.7	62
SOUTH DAKOTA																																
ABERDEEN	1296	966.5	1013.8	62	31	46.7	- 1.5	88	7	20	24	0	17	31	61	1.86	0.67	1.66	4	2	T	T	2.5	30	35	1	14	9	9	13	5.5	
HURON	1282	966.8	1013.9	61	34	47.5	- 1.3	81	7	22	29	0	15	35	68	3.12	1.97	2.83	3	2	T	T	2.6	28	47	N	14	9	10	12	5.5	67
RAPID CITY	3162	904.2	1015.6	63	34	48.6	- 1.4	80	7+	23	15	0	15	29	52	1.50	0.71	0.95	5	0	2.1	1	7.9	31	50	NW	21	14	9	8	4.5	68
SIOUX FALLS	1418	962.4	1014.2	63	34	48.3	- 2.0	83	8	22	24	0	15	35	64	1.43	0.18	1.20	4	1	0.4	T	3.3	27	38	36	14	15	4	12	5.2	
TENNESSEE																																
BRISTOL	1507	964.4	1018.8	68	42	55.0	- 3.0	78	15+	32	31	0	1	46	75	3.50	1.35	1.88	8	0	0.0	0	0.9	31	18	30	10	16	7	8	4.1	
CHATTANOOGA	665	993.6	1018.4	70	44	56.8	- 5.3	78	14	35	29	0	0	49	80	4.77	1.75	2.54	8	3	0.0	0	0.7	35	18	S	15+	16	6	9	4.2	65
KNOXVILLE	980	983.1	1018.3	69	46	57.5	- 3.4	81	14	37	31+	0	0	48	75	4.80	2.19	2.30	7	3	0.0	0	1.3	36	22	SW	31+	15	7	9	4.4	65
MEMPHIS	258	1008.8	1019.0	70	46	58.1	- 5.0	84	9	36	28+	0	0	46	69	1.92	- 0.80	0.66	9	1	0.0	0	0.5	8	26	S	15	19	4	8	3.6	78
NASHVILLE	590	996.6	1018.5	69	45	57.0	- 4.5	80	12	33	27	0	0	44	67	2.50	0.18	1.30	6	1	0.0	0	1.9	8	29	S	15	18	4	9	3.9	71
OAK RIDGE	905			68	43	55.5	- 4.4	79	14	35	29+	0	0			3.85	1.18	1.75	7		0.0	0			20Y		26	16	5	10	4.3	
TEXAS																																
ABILENE	1762	956.0	1017.2	77	52	64.1	- 2.1	92	13	36	23	2	0	46	56	2.09	- 0.76	1.96	4	1	0.0	0	2.6	19	36	NE	31	20	6	5	3.3	78
AMARILLO	3604	892.7	1015.6	72	43	57.7	- 2.8	87	13+	30	19+	0	2	33	45	0.29	- 1.47	0.29	1	1	T	0	4.6	23	42	NW	14	19	4	8	3.2	81
AUSTIN	597	995.3	1017.2	81	56	68.6	- 2.1	92	13	39	20	3	0	51	59	0.60	- 2.23	0.38	5	2	0.0	0	1.9	3	25	N	15+	14	11	6	3.8	69
BROWNSVILLE	16	1014.9	1015.6	82	64	72.9	- 3.0	91	4	51	20	2	0	64	78	7.45	3.92	5.63	8	1	0.0	0	2.0	4	26	N	24+	13	12	6	4.4	70
CORPUS CHRISTI	41	1014.9	1016.4	84	62	72.6	- 1.9	93	12	47	26+	5	0	60	70	0.85	- 1.91	0.45	6	0	0.0	0	4.7	7	36	N	15	13	10	8	4.6	65
DALLAS	481	1000.0	1017.4	77	54	65.2	- 2.6	93	13	38	20+	2	0	49	61	1.87	- 0.83	1.44	3	1	0.0	0	2.2	14	32	NW	14	18	5	8	3.7	71
DEL RIO	1026	980.7	1016.7	82	55	68.5	- 2.9	92	13	43	25+	4	0	48	53	1.26	- 0.72	1.25	2	0	0.0	0	2.6	10	17	36	22+	15	9	7	4.1	
EL PASO	3918	883.8	1015.1	78	46	62.1	- 2.3	89	11	33	18	0	0	34	38	0.01	- 0.84	0.01	1	0	0.0	0	0.2	20	33	SW	13	24	2	5	2.3	86
FORT WORTH	537	997.0	1017.5	78	52	65.0	- 2.9	92	13	37	20	2	0	49	61	1.48	- 1.11	1.24	3	1	0.0	0	1.3	15	39	2	31	18	7	6	3.5	
GALVESTON U	7			76	66	70.8	- 2.7	85	9+	53	19	0	0			4.03	1.17	2.99	5		0.0	0			33	N	15					63
HOUSTON U	41			79	60	69.6	- 2.8	90	4	47	20	1	0			5.09	1.49	2.84	6		0.0	0										
HOUSTON	50	1014.9	1017.1	80	59	69.7	- 1.7	93	4	43	20	4	0	58	71	5.45	1.68	2.81	7	2	0.0	0	3.2	5	31	35	15	12	11	8	4.6	71
LUBBOCK	3254	905.5	1016.3	77	45	60.9	- 0.3	91	13	30	19	2	2	34	41	T	- 2.00	T	0	1	0.0	0	2.6	23	29	3	31+	17	8	6	3.4	
MIDLAND	2851	918.1	1016.2	76	47	61.2	- 4.7	89	12	35	19	0	0	42	57	0.80	- 0.86	0.56	5	1	0.0	0	1.7	18	32	2	31	20	3	8	3.0	
PORT ARTHUR	16	1016.6	1017.4	79	58	68.3	- 2.0	90	10+	44	20	2	0	58	76	6.49	3.61	5.63	4	1	0.0	0	4.1	5	32	N	15	14	9	8	4.5	75
SAN ANGELO	1903	950.6	1016.9	77	49	62.8	- 5.5	90	13	35	20	1	0	49	66	1.90	0.07	1.43	3	0	0.0	0	1.6	20	31	4	31	19	5	7	3.4	
SAN ANTONIO	788	989.2	1017.2	80	54	67.0	- 3.6	92	4	34	20	2	0	52	65	1.11	- 1.39	1.00	3	2	0.0	0	2.3	4	26	NE	15+	14	11	6	4.0	71
VICTORIA	104	1012.9	1017.0	82	60	70.7	- 1.9	92	9+	42	20	4	0	58	69	0.99	- 2.49	0.80	5	1	0.0	0	3.4	4	44Y	N	14	13	8	10	4.6	
WACO	501	999.7	1017.6	81	56	68.1	- 1.3	93	9	37	20	3	0	51	58	0.01	- 2.54	0.01	1	0	0.0	0	0.8	15	28	17	14	18	7	6	3.2	
WICHITA FALLS	994	981.0	1017.4	78	49	63.2	- 3.2	94	9	37	20+	2	0	46	59	0.59	- 2.28	0.50	3	0	0.0	0	2.2	18	39	31	14	19	7	5	3.4	
UTAH																																
MILFORD	5028			67	32	49.3	- 1.4	81	1	21	17	0	17			0.99	0.22	0.55	4		3.2	1						17	8	6	3.7	

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days		Average dew point	Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below			Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	°F.	°F.	F.	°F.		°F.				°F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	874.7	1019.7	65	35	49.9	- 1.8	77	7+	24	22	0	13	32	57	1.18	0.03	0.91	3	3	3.6	3	1.3	14	32	N	21+	16	6	9	4.2	80
WENDOVER	4237			62	38	50.2	- 3.0	75	1	25	22	0	4			T	- 0.46	T	0		T	T										
VERMONT																																
BURLINGTON	332	1002.0	1014.7	57	37	47.0	- 0.6	74	9	19	31	0	9	37	70	1.41	- 1.56	0.67	9	0	T	0	4.4	21	34	SW	4	7	8	16	6.5	63
VIRGINIA																																
LYNCHBURG	916	984.4		68	43	55.4	- 2.8	80	10	30	31	0	2	43	66	4.69	2.05	2.67	7	0	0.0	0	1.6	31	22	NE	1	16	7	8	4.0	69
NORFOLK	22	1016.9	1018.1	69	50	59.3	- 2.7	82	1	32	31	0	1	49	71	1.25	- 1.67	0.76	5	1	0.0	0	2.2	2	28	NE	26+	14	6	11	5.2	65
RICHMOND	162	1012.5	1018.5	69	42	55.5	- 3.2	83	10	33	31	0	0	46	77	4.81	1.81	3.52	6	0	0.0	0	1.0	35	24	NW	20	13	9	9	4.7	61
ROANOKE	1149	976.3	1018.4	67	42	54.6	- 3.6	77	4	29	31	0	3	42	65	4.04	0.83	3.37	5	0	0.0	0	2.2	31	24	32	10	15	9	7	4.0	
WALLOPS ISLAND	9	1018.3	1018.6	65	48	56.7		78	10	33	31	0	0	48	75	1.39		0.59	7	2	0.0	0	1.9	31	49Y	NW	20	13	8	10	4.8	
WASHINGTON																																
OLYMPIA	195	1012.5	1019.9	60	39	49.1	- 2.3	75	4	31	16+	0	8	45	87	4.83	- 0.45	1.57	12	1	0.0	0	3.9	21	26	21	22	1	8	22	8.1	
QUILLAYUTE	179	1011.2	1018.8	57	41	49.4	- 2.0	81	4	30	13	0	2	46	90	10.52	- 0.01	2.67	18	1	T	0	1.8	16	30	SW	20	4	4	23	8.3	33
SEATTLE TACOMA	400	1003.1	1019.5	58	45	51.4	- 1.0	76	4	37	16	0	0	45	81	2.92	- 1.10	0.94	12	1	0.0	0	2.8	20	29	19	23	3	4	24	8.4	36
SPOKANE	2356	934.0	1018.6	59	35	47.3	- 1.8	77	5	27	28+	0	12	32	62	0.36	- 1.21	0.15	7	0	T	T	4.1	20	30	SW	20	6	9	16	6.6	49
STAMPEDE PASS R	3958	881.5		48	35	41.5	- 0.9	69	5	26	21	0	13			9.60	0.79	1.86	14		26.4	19						2	9	20	7.9	
WALLA WALLA U	949			65	44	54.8	- 0.3	81	6	35	14	0	0			0.87	- 0.66	0.51	11		0.0	0			26	W	20	10	6	15	6.2	55
YAKIMA	1052	980.4	1019.3	66	38	52.1	1.6	78	6+	29	16	0	2	36	59	0.41	- 0.19	0.14	6	0	0.0	0	3.7	27	29	20	19	7	7	17	6.4	
WEST INDIES																																
SAN JUAN P.R.	13	1010.8	1013.4	85	75	80.0	0.0	90	2	71	15	1	0	74	83	8.99	3.16	1.91	18	9	0.0	0	4.1	10	29	W	14	1	22	8	6.3	62
SWAN ISLAND	28			87	76	81.6	- 0.1	90	4+	71	30	2	0			11.27	1.57	2.91	20		0.0	0						6	12	13	6.6	
WEST VIRGINIA																																
BECKLEY	2504	929.9	1019.0	60	39	49.7		74	15	27	30	0	5	39	71	2.45		0.71	8	0	T	T	2.7	22	30	15	18	14	7	10	4.6	
CHARLESTON	939	984.1	1018.4	68	42	55.0	- 2.3	86	15	29	31	0	3	42	65	1.72	- 0.86	0.76	9	0	T	0	1.9	24	21	22	15	12	9	10	5.3	
ELKINS	1970	947.5	1019.3	62	34	47.7	- 4.4	77	13	18	31	0	15	39	76	2.46	- 0.57	1.24	10	0	0.0	0	2.4	27	25	34	5	12	6	13	5.6	
HUNTINGTON	827	988.2	1018.6	64	42	53.0	- 4.3	80	15+	31	31+	0	4	42	69	2.28	0.43	1.26	9	1	T	0	1.7	22	18	17	15+	14	8	9	4.8	
PARKERSBURG U	615			64	41	52.7	- 4.3	80	15+	27	30	0	2			1.23	- 0.82	0.78	9		0.0	0			26	S	15+					56
WISCONSIN																																
GREEN BAY	682	987.5	1013.1	60	36	47.7	- 1.7	81	7	15	30	0	12	35	64	0.72	- 1.19	0.52	6	2	T	T	6.9	24	40	SW	22	9	9	13	5.6	53
LA CROSSE	651	988.8	1013.6	62	39	50.5	- 0.6	83	7	25	25	0	9	37	65	3.32	1.13	2.17	7	3	T	T	3.7	22	33	25	22	12	6	13	5.2	
MADISON	858	983.1	1014.6	61	35	47.7	- 2.2	80	8	19	30+	0	15	36	65	1.65	- 0.56	1.16	6	1	T	0	6.6	24	35	W	10	14	6	11	4.7	64
MILWAUKEE	672	989.8	1015.1	60	38	48.9	- 1.1	82	8	23	25	0	10	35	61	1.76	- 0.34	1.03	7	2	0.0	0	7.1	23	35	SW	10	13	10	8	4.4	68
WYOMING																																
CASPER	5338	838.8	1017.5	59	31	45.2	- 3.1	76	1	15	31	0	21	25	51	1.33	0.49	0.57	8	1	11.9	3	10.8	25	44	28	21	15	7	9	4.5	
CHEYENNE	6126	813.4	1016.8	62	34	47.8	0.3	75	26+	17	15	0	14	23	44	0.68	- 0.15	0.44	6	3	4.5	3	8.9	30	57	NW	21	16	8	7	3.9	75
LANDER	5563	830.7	1018.3	57	29	43.2	- 3.9	75	1	10	15	0	20	26	55	2.17	0.96	1.71	7	0	26.5	17	2.3	25	52	SW	21	11	11	9	4.6	78
SHERIDAN	3964	879.4	1017.4	61	30	45.9	- 1.9	77	7	19	15	0	22	25	49	1.02	- 0.11	0.53	8	0	4.4	1	4.5	30	36	NW	31+	11	7	13	5.6	66

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	995.9	1018.5	22.2	7.8	14.9	-3.8	26.7	12+	1.7	20	0	0	10.6	77	80	5	38	6	2	0	0	0.6	3	11.6	W	18	16	5	10	4.3	71
HUNTSVILLE	183	995.6	1018.6	22.8	8.3	15.5	-1.8	28.9	4	1.1	20	0	0	8.9	69	85	16	59	7	1	0	0	0.7	3	9.8	36	10	17	9	5	3.5	
MOBILE	64	1009.1	1017.1	25.6	14.4	20.0	-1.1	30.0	15+	6.7	20	0	0	14.4	75	113	36	46	11	2	0	0	1.9	4	12.1	20	9	10	8	13	5.3	
MONTGOMERY	59	1010.5	1017.8	23.9	12.2	17.9	-1.3	28.9	8	5.6	20	0	0	13.3	78	154	97	95	6	3	0	0	0.9	3	11.2	5	15	10	8	13	5.6	54
ALASKA																																
ANCHORAGE PRK STRIP	26			3.9	- 1.7	1.0	-0.7	15.6	1	-13.9	25	B 0	16			18	- 30	8	7		8	T										
ANCHORAGE	35	996.3	1001.0	2.8	- 2.8	0.2		14.4	1	-16.7	25	0	18	- 5.6	67	22		8	10	0	48	25	0.6	1	17.9	3	31	4	7	20	7.7	34
ANNETTE	34	1007.1	1011.1	10.6	4.4	7.6	-0.6	15.6	2+	- 0.6	26	0	3	4.4	82	455	26	66	24	0	48	25	2.8	16	17.9	15	18+	3	5	23	8.5	
BARROW	7	1012.9	1013.6	- 6.1	- 8.9	- 7.5	1.1	0.0	1	-26.1	28	0	31	- 8.9	90	12	0	3	12	0	193	152	4.0	9	14.3	10	12	2	2	27	9.0	
BARTER ISLAND	12	1010.8	1012.6	- 5.0	-10.0	- 7.5	0.7	1.1	9	-28.9	27	0	31	-10.0	79	22	1	9	12	0	328	229	3.7	11	20.1	10	13	2	2	27	8.9	
BETHEL	38	999.0	1004.5	0.0	- 6.7	- 3.2	-2.9	9.4	1	-17.8	30+	0	26	- 5.6	83	48	9	13	20	0	53	25	1.0	34	13.0	36	31+	7	9	15	6.6	
COLD BAY	29	1003.7	1007.8	3.9	- 1.7	1.1	-3.4	10.0	11+	-11.1	31	0	17	- 1.7	82	75	- 41	11	26	0	272	178	4.5	29	19.7	33	19	2	5	24	8.3	
FAIRBANKS	133	988.2	1005.4	0.0	- 8.3	- 4.3	-1.1	16.1	2	-22.8	28	0	26	- 8.9	73	7	- 14	2	7	0	140	76	1.0	1	7.6	6	5	1	7	23	8.5	
JUNEAU	4	1005.8	1006.8	6.7	0.6	3.7	-1.7	12.8	1	- 5.0	26+	0	14	2.2	90	177	- 35	27	22	0	109	25	4.3	11	20.1	12	15	1	4	26	9.1	26
KING SALMON	13	1001.4	1003.2	0.6	- 5.6	- 2.7	-4.7	10.6	1	-18.3	26	0	24	- 5.0	83	73	19	19	14	0	135	51	0.9	29	21.5	15	1	5	9	17	7.1	
KOTZEBUE	3	1007.5	1008.1	- 3.3	- 7.8	- 5.6	-1.5	9.4	2	-21.1	27	0	26	- 8.9	77	12	- 3	4	11	0	94	76	3.9	7	15.6	10	12	14	3	14	5.4	
MC GRATH	106	991.9	1005.0	- 1.1	- 7.8	- 4.6	-1.7	12.8	1	-24.4	27	0	27	- 8.3	74	16	- 17	5	11	0	391	203	1.1	35	10.3	10	5	3	2	26	8.5	
NOME	4	1004.7	1005.5	0.0	- 6.7	- 3.6	-2.3	7.8	2+	-23.3	28	0	23	- 6.7	79	58	15	20	11	0	165	152	2.5	4	13.0	9	11	8	5	18	6.6	21
ST. PAUL ISLAND	7	1007.1	1008.2	3.3	0.0	1.7	-1.2	8.3	2	- 6.7	24	0	17	- 2.2	77	60	- 20	16	26	0	211	102	4.5	32	19.7	32	1	0	7	24	8.5	
SHEMYA	37	1012.2	1015.9	7.8	2.2	4.8	0.5	10.6	3+	- 1.1	26	0	4	2.8	81	48	- 22	7	22	0	T	0	1.8	30	22.8	19	9	0	5	26	8.7	
YAKUTAT	9	1001.4	1002.6	5.6	- 1.1	2.1	-3.4	10.0	8+	-14.4	24	0	15	1.1	92	436	- 62	78	29	2	914	660	2.3	10	15.6	13	31+	2	2	27	9.0	
ARIZONA																																
FLAGSTAFF	2131	790.0	1018.5	17.2	- 0.6	8.3	-0.1	22.2	10	- 7.2	15	0	21	- 2.2	57	25	- 13	11	5	5	T	T	0.3	11	10.3	5	23	13	11	7	4.1	
PHOENIX	340	974.3	1012.7	31.1	12.2	21.6	0.1	34.4	9	6.1	18+	13	0	6.7	45	6	- 5	6	3	1	0	0	0.8	11	13.0Y	NW	14+	23	3	5	2.6	86
TUCSON	788	925.8	1012.9	28.3	11.7	20.1	-1.1	32.8	10	6.1	17	1	0	2.8	39	8	- 8	8	2	1	0	0	1.8	15	12.1	SE	26	22	3	6	2.5	87
WINSLOW	1492	853.7	1017.8	22.8	3.9	13.3	-0.8	28.9	1	- 3.9	15	0	9	0.0	48	25	8	12	5	2	0	0	1.3	22	17.9	23	13	20	6	5	3.2	
YUMA	59	1005.4	1012.6	31.7	15.6	23.4	-0.2	36.1	9	8.9	16	17	0	5.0	36	1	- 9	1	1	2	0	0	1.1	36	15.2	N	14	22	5	4	2.4	86
ARKANSAS																																
FORT SMITH	136	1001.4	1017.9	24.4	5.6	15.1	-2.6	33.9	9	- 2.8	20	1	2	5.6	60	10	- 77	6	4	0	0	0	0.5	4	13.4	N	31+	20	4	7	3.2	76
LITTLE ROCK	78	1009.1	1018.8	22.2	7.8	15.1	-2.2	31.1	9	1.7	20	0	0	8.3	69	50	- 24	17	8	3	0	0	0.2	28	11.2	N	31	18	5	8	3.5	75
TEXARKANA	113	1005.1	1018.3	23.3	10.6	16.9	-2.0	31.1	14+	3.3	20	0	0	10.6	69	65	- 11	54	3	2	0	0	0.9	14				19	5	7	3.3	
CALIFORNIA																																
BAKERSFIELD	151	999.0	1016.4	26.7	12.2	19.5	0.2	33.3	25	7.2	22	2	0	5.0	42	T	- 8	T	0	0	0	0	0.8	36	9.4	14	14	20	7	4	2.4	
BISHOP	1252			26.1	3.3	14.7	0.6	30.6	9+	- 5.6	14	0	6			0	- 11	0	0		0	0						22	7	2	2.1	
BLUE CANYON	1609			19.4	8.9	14.1	2.0	25.6	9	- 1.1	13	0	1			0	- 87	0	0		0	0			8.9	6	13	22	6	3	2.3	
EUREKA U	13			15.0	8.9	11.8	-0.7	23.3	31	3.9	14	0	0			26	- 55	18	3		0	0			11.6	NW	13	7	10	14	6.3	50
FRESNO	100	1004.4	1016.1	27.2	9.4	18.2	0.1	33.3	10	2.2	16+	3	0	6.7	53	0	- 11	0	0	0	0	0	0.8	30	9.4	NW	20	25	3	3	1.5	92
LONG BEACH	10	1013.9	1015.1	27.8	13.9	20.7	1.5	36.1	24	10.0	31+	5	0	11.7	66	T	- 4	T	1	1	0	0	1.2	28	10.3	9	14	14	11	6	4.1	
LOS ANGELES	30	1011.2	1014.7	25.6	16.1	20.8	2.6	33.9	24	12.8	23+	3	0	11.7	64	1	- 9	1	1	1	0	0	1.8	26	10.7Y	N	16	14	10	7	4.2	
LOS ANGELES U	82			27.2	16.1	21.8	2.1	35.0	19	11.1	16	6	0			2	- 9	2	1		0	0			8.0	W	16	16	10	5	3.7	66
MT SHASTA R	1080			20.0	2.8	11.4	0.3	27.8	1	- 5.0	14	0	7			T	- 62	T	0		0	0										
OAKLAND	2	1016.9	1017.3	21.1	12.2	16.7	0.6	30.6	31	8.3	29+	0	0	9.4	68	T	- 20	T	0	0	0	0	2.1	29	9.4	33	13+	17	8	6	3.4	
RED BLUFF	104	1004.1	1016.7	28.3	11.7	19.9	1.2	34.4	9+	6.7	18	5	0	2.8	37	T	- 35	T	0	0	0	0	1.4	34	12.5	NW	12	20	7	4	2.8	91
SACRAMENTO	5	1015.6	1016.4	26.1	9.4	17.8	0.3	32.8	10	4.4	22	1	0	6.1	55	0	- 20	0	0	0	0	0	0.8	24	15.2	N	13	23	7	1	2.2	95
SANDBERG R	1377			20.6	11.1	15.7	0.8	26.1	9	2.2	14	0	0			T	- 12	T	0		0	0			18.3	35	15	19	6	6	3.3	
SAN DIEGO	4	1013.5	1014.5	24.4	15.6	19.8	0.8	31.7	25	11.1	15	0	0	12.2	67	20	8	20	2	1	0	0	1.6	31	8.9	NW	17+	15	8	8	4.1	73
SAN FRANCISCO	2	1016.9	1017.5	21.7	10.0	15.8	-0.1	30.6	9	5.6	15	0	0	8.3	67	T	- 19	T	0	0	0	0	2.9	29	13.9	N	13+	17	10	4	3.3	
SAN FRANCISCO U	16			21.1	12.8	17.0	0.7	29.4	9	10.0	28	0	0			T	- 22	T	1		0	0			10.7	W	20					75
SANTA CATALINA	478			23.3	15.6	19.4	0.9	32.8	30	11.7	29+	1	0			1	- 23	1	3	1	0	0						19	5	7	3.6	
SANTA MARIA	72			23.9	8.9	16.3	0.6	35.6	30	2.8	15	3	0			1	- 15	T	2		0	0						18	3	10	3.9	
STOCKTON	7	1015.9	1017.0	26.7	10.0	18.5	0.7	34.4	10	3.9	14	2	0	7.2	54	0	- 16	0	0	0	0	0	1.8	31	11.6	35	13	25	4	2	1.7	
COLORADO																																
ALAMOSA	2297	773.8		17.2	- 3.9	6.6	-0.3	21.7	10	-11.7	15	0	27			12	- 3	12	3		122	127						21	7	3	2.8	
COLORADO SPRINGS	1873	812.7	1017.6	17.2	1.7	9.4	-0.8	24.4	11+	- 5.0	19+	0	12	- 4.4	45	9	- 8	7	4	0	86	51	1.1	2	17.9	33	14	18	8	5	3.4	
DENVER	1610	837.5	1015.6	20.0	2.2	11.2	0.4	27.2	26	- 5.6	15	0	8	- 3.3	43	24	- 1	20	3	0	211	178	0.8	19	14.8	NW	14+	15	10	6	4.0	73
GRAND JUNCTION	1480	854.7	1016.9	21.1	6.1	13.6	0.8	26.7	2	1.1	18+	0	0	- 0.6	41	31	12	11	5	1	48	25	0.8	11	17.0	NW	2	14	11	6	4.3	77
PUEBLO	1428	857.1	1016.6	20.6	1.1	10.8	-1.8	28.9	2	- 7.8	19	0	14	- 2.8	45	5	- 20	4	4	0	T	T	0.5	34	21.0	N	18+	17	10	4	3.1	86

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile (1.6 kilometers)			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1015.9	1016.6	17.8	7.8	12.7	-0.3	25.0	9	- 1.7	31	0	2	5.6	63	95	9	61	4	0	0	0	2.2	28	15.6	30	5	13	9	9	5.1	
HARTFORD	52	1009.8	1016.3	17.8	4.4	11.1	-0.6	26.7	9	- 4.4	31	0	4	4.4	69	107	27	63	5	0	0	0	1.5	29	14.8	NW	20	10	10	11	5.7	61
NEW HAVEN	2			16.7	5.6	11.1	-1.1	22.2	9	- 4.4	31	0	2			94	7	59	5		0	0			12.5	NW	20	12	9	10	5.3	71
DELAWARE																																
WILMINGTON	24	1014.9	1017.9	18.3	5.6	12.0	-1.7	25.6	4	- 1.7	31	0	2	6.1	69	131	57	99	5	0	0	0	1.6	29	13.4	31	29	17	6	8	4.2	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1015.9	1018.1	20.0	7.8	13.9	-1.1	26.1	10+	1.7	31	0	0	6.7	66	120	42	88	7	0	0	0	1.1	29	14.8	NW	29	14	8	9	4.4	66
FLORIDA																																
APALACHICOLA U	4			25.6	17.8	21.7	-0.1	30.0	1	9.4	20	0	0			25	- 37	14	4	2	0	0			10.7	N	1	9	10	12	5.9	44
DAYTONA BEACH	9	1014.6	1016.1	27.8	18.9	23.4	0.4	32.8	1	11.1	30+	1	0	17.8	74	117	- 26	50	9	2	0	0	1.7	5	10.3	26	25	9	9	13	6.1	
FORT MYERS	5	1014.2	1014.5	30.0	21.1	25.6	1.1	33.3	8	14.4	30	5	0	20.6	78	54	- 50	17	12	5	0	0	2.2	5	15.6	5	4	8	14	9	5.6	
JACKSONVILLE	6	1015.6	1016.6	26.7	16.7	21.7	0.0	32.2	5+	8.3	30+	2	0	17.2	80	35	- 96	29	8	1	0	0	1.6	3	12.5	NE	6	7	8	16	6.5	57
KEY WEST	1	1012.2	1013.0	28.9	23.9	26.3	0.2	31.1	1	21.1	31	0	0	21.7	77	181	33	103	15	1	0	0	2.9	7	37.6	SE	5	8	11	12	6.3	60
LAKELAND U	65			28.3	19.4	24.1	0.4	32.2	1	10.6	20	1	0			36	- 38	13	9		0	0						10	10	11	5.6	62
MIAMI	2	1012.9	1013.2	28.9	22.2	25.5	0.1	31.1	25	18.3	28	0	0	21.7	81	276	68	145	15	4	0	0	1.9	7	18.3	5	4	2	12	17	7.2	
ORLANDO	33	1011.2	1015.5	28.9	19.4	24.3	1.0	32.8	1	10.6	20	2	0			50	- 50	37	5	1	0	0	1.7	4	13.0	18	1	8	11	12	6.0	
PENSACOLA	34	1013.2	1017.1	25.6	15.0	20.2	-1.2	31.1	5	7.2	20	0	0	15.0	77	91	15	39	10		0	0	2.1	3	12.1	S	9					54
TALLAHASSEE	17	1014.6	1016.7	27.2	15.0	21.1	0.2	33.3	1	5.6	30+	1	0	15.6	77	73	12	43	7	2	0	0	1.5	3	9.4	34	19	6	13	12	6.2	
TAMPA	6	1014.6	1015.0	29.4	18.9	24.1	0.3	33.9	6	8.3	30+	6	0	18.3	76	31	- 40	22	5	3	0	0	1.9	5	8.9	6	4	9	10	12	5.8	67
WEST PALM BEACH	5	1013.5	1014.1	28.9	21.7	25.3	-0.4	31.7	19+	16.7	31+	0	0	20.6	76	226	24	62	13	5	0	0	2.3	7	15.6	5	3	8	3	20	7.0	
GEORGIA																																
ATHENS	244	988.8	1017.9	22.2	8.9	15.6	-1.7	28.3	10	2.8	20	0	0	10.0	75	90	17	37	9	1	0	0	0.7	2	7.6	30	19+	15	4	12	4.6	
ATLANTA	308	981.4	1018.2	20.6	9.4	15.2	-1.7	26.7	10	4.4	20	0	0	8.9	71	191	129	61	9	3	0	0	1.1	3	11.6	NW	1	14	3	14	5.1	61
AUGUSTA	44	1012.2	1017.6	25.0	9.4	17.1	-1.3	31.1	10	2.8	21	0	0	11.1	76	46	- 5	38	5	1	0	0	0.8	35	9.4	29	19	12	7	12	5.1	
COLUMBUS	117			25.0	12.8	18.6	0.1	30.6	10	5.6	20	0	0	13.3	77	119	74	42	7		0	0	1.0	4	8.0	7	6+	10	7	14	6.1	
MACON	108	1005.1	1018.1	24.4	10.6	17.7	-1.3	30.6	10	3.3	21	0	0	11.7	74	168	117	118	8	1	0	0	1.3	2	10.7	NE	9	10	6	15	5.6	60
ROME	194			22.2	6.1	14.2	-2.0	26.7	14+	0.6	29+	0	0			162	88	91	9		0	0										
SAVANNAH	14	1015.6	1017.4	26.1	13.3	19.6	0.1	31.1	1	4.4	28	0	0	13.9	75	30	- 35	15	5	1	0	0	1.2	4	9.8	SW	1	11	9	11	5.2	56
HAWAII																																
HILO	8	1014.2	1015.5	28.9	21.1	25.0	1.1	31.1	4+	19.4	8	0	0	21.1	81	399	124	137	23	1	0	0	0.6	22	6.7	E	24+	3	9	19	7.7	24
HONOLULU	2	1014.2	1014.8	31.1	22.8	27.2	1.5	33.3	5	18.9	8	10	0	19.4	66	75	28	49	12	1	0	0	3.9	7	12.1	NE	20+	5	14	12	6.6	50
KAHULUI	15	1012.5	1014.8	30.0	21.1	25.6	0.4	31.7	10+	17.8	8	0	0	18.3	67	27	5	8	10	0	0	0	4.2	6	13.0	NE	19	5	12	14	6.7	67
LIHUE	31	1010.8	1016.0	27.8	22.2	25.0	0.1	30.6	3+	17.8	1	0	0	21.1	82	290	187	199	17	1	0	0	3.6	6	11.6	E	16	5	10	16	7.1	51
IDAHO																																
BOISE	865	919.4	1020.4	17.8	1.7	9.7	-1.2	25.6	6	- 6.1	14	0	13	- 1.1	54	7	- 14	4	5	0	T	T	0.4	15	15.2	NW	20	11	11	9	4.8	84
IDAHO FALLS 42NW R	1460			15.6	- 7.2	4.1	-2.6	23.9	7+	-15.6	15	0	30			T	- 10	T	1													
IDAHO FALLS 46W R	1503			15.6	- 5.6	5.0	-2.2	23.3	1	-13.3	15	0	30			6	- 11	6	1		0	0	2.0	25	16.5	WSW	20					
LEWISTON	431			17.2	5.0	11.1	-0.1	26.7	5	- 1.1	14	0	2			25	- 6	7	9		0	0						8	8	15	6.4	
POCATELLO	1358	865.9	1020.2	16.1	- 2.2	7.0	-2.5	24.4	1	- 8.9	15	0	24	- 4.4	50	10	- 12	8	4	1	28	T	2.4	22	24.1	SW	20	12	10	9	4.9	73
ILLINOIS																																
CAIRO U	96			19.4	8.3	14.1	-2.6	28.9	9	3.3	20	0	0			47	- 26	18	8		0	0			11.6	SW	15+	17	6	8	3.7	71
CHICAGO O HARE	201	991.2	1015.8	18.3	3.3	10.8	-0.9	28.3	9	- 5.6	30	0	9	2.2	59	55	- 15	36	6	1	T	T	2.5	23	13.4	26	10+	13	12	6	4.5	
CHICAGO MIDWAY	185	993.2		17.8	6.1	11.9	-1.0	27.8	9	- 1.1	30	0	1	2.2	56	55	- 15	29	8	0	0	0	3.1	23	14.8	W	10	14	9	8	4.4	73
MOLINE	177	993.9	1015.7	18.3	4.4	11.4	-1.3	26.1	9+	- 4.4	25	0	8	3.3	62	111	49	54	6	2	0	0	2.4	23	17.9	NW	10	13	11	7	4.2	70
PEORIA	199	992.6	1016.8	17.2	3.9	10.7	-2.2	26.7	9	- 2.8	30+	0	6	2.8	61	46	- 19	26	5	3	0	0	2.3	22	17.9	W	10	13	11	7	4.4	72
ROCKFORD	221	988.2	1015.2	17.8	3.9	10.8	-0.6	26.7	9+	- 4.4	30	0	8	3.3	64	64	- 5	29	5	1	0	0	2.7	24	13.0	29	10	15	9	7	4.1	
SPRINGFIELD	179	994.9	1017.2	17.8	4.4	11.3	-2.4	27.2	9	- 2.8	25	0	6	3.9	64	60	- 14	42	6	4	0	0	2.5	22	14.8	W	15	14	8	9	4.5	73
INDIANA																																
EVANSVILLE	116	1004.4	1018.7	19.4	5.0	12.3	-2.8	28.3	12	- 1.7	27	0	4	5.6	67	42	- 23	10	5	1	0	0	0.4	23	11.6	S	13+	15	4	12	4.5	66
FORT WAYNE	241	985.8	1017.3	15.0	2.8	8.8	-2.9	22.8	14	- 3.9	30	0	9	1.7	64	35	- 38	14	6	2	0	0	2.5	24	14.8	W	11	14	7	10	4.6	72
INDIANAPOLIS	241	988.5	1017.9	17.2	5.0	11.1	-1.9	23.9	12	- 1.7	30	0	1	3.3	61	41	- 26	23	4	1	0	0	1.6	23	17.0	NW	9	15	5	11	4.5	64
SOUTH BEND	236	988.2	1016.2	16.1	5.6	10.9	-0.9	24.4	8	- 3.9	30	0	4	3.3	62	34	- 47	15	4	2	T	T	2.8	24	11.6	29	11	11	11	9	4.9	
IOWA																																
BURLINGTON	211			18.3	5.0	11.6	-1.4	26.7	14	- 1.7	25	0	4	2.8	59	87	18		4	3	0		2.0	25	13.9	30	10	13	10	8	4.3	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		°C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	980.7	1015.5	18.9	4.4	11.6	-0.7	28.9	7	-2.2	30+	0	5	2.2	57	7	-45	6	3	2	T	0	1.8	23	15.2	NW	15	15	8	8	4.1	72
DUBUQUE	322	975.6		17.2	3.3	10.1	-0.3	26.7	8+	-3.3	30+	0	10			37	-32	17	5		0	0						15	7	9	4.3	
SIOUX CITY	334	974.6	1014.8	19.4	3.3	11.2	-1.0	29.4	7	-2.2	16	0	9	3.9	65	26	-10	26	3	1	102	102	0.9	24	16.1	NW	15	15	6	10	4.5	72
WATERLOO	265	982.4	1014.5	17.8	3.3	10.5	-0.4	28.9	7	-6.1	25	0	13	2.2	61	82	28	41	4	2	0	0	2.0	23	14.8	28	22	14	6	11	4.4	
KANSAS																																
CONCORDIA	448	962.4	1015.2	21.7	5.6	13.6	-0.7	31.1	12	-4.4	16	0	3	2.2	52	10	-33	9	2	1	0	0	2.6	21	15.2	NW	21	20	7	4	3.2	83
DODGE CITY	787	925.5	1016.1	22.2	5.6	13.8	-0.8	32.2	13	-2.2	15	1	4	1.1	49	8	-28	7	2	0	0	0	1.7	23	21.9	NW	14	18	7	6	3.8	82
GOODLAND	1113	889.3	1016.5	19.4	1.7	10.4	-1.3	30.6	2	-8.9	15	0	10	0.0	57	31	12	27	3	2	213	152	2.3	27	16.5	32	14	19	7	5	3.4	
TOPEKA	267	984.4	1016.4	21.7	4.4	13.0	-1.6	31.1	14	-4.4	16	0	7	4.4	61	11	-49	9	3	1	0	0	1.9	23	15.2	SW	14	16	8	7	3.9	81
WICHITA	403	968.8	1016.6	22.2	6.7	14.4	-1.1	32.2	13	-2.8	16	1	2	3.9	53	12	-49	9	3	1	0	0	2.0	21	19.2	NW	14	19	6	6	3.3	78
KENTUCKY																																
COVINGTON	265	986.8	1018.6	17.2	4.4	10.6	-2.8	25.0	13	-3.9	30	0	6	3.3	65	14	-43	10	5	2	0	0	1.5	24	11.2	28	15	14	5	12	5.0	
LEXINGTON	294	983.4	1019.0	18.3	6.7	12.3	-2.2	26.1	13	-0.6	30	0	1	3.9	61	37	-21	24	7	3	0	0	1.2	19	11.2	18	15	15	3	13	4.6	
LOUISVILLE	145	1000.7	1018.4	18.9	6.1	12.6	-1.8	26.1	13+	-0.6	26	0	1	5.6	64	26	-31	19	5	1	0	0	0.7	23	12.1	S	15	15	6	10	4.5	67
LOUISIANA																																
ALEXANDRIA	28	1013.5	1017.9	23.9	10.0	17.0	-2.5	31.7	9	2.2	27	0	0	12.2	78	59	-30	21	7	0	0	0	1.2	3	9.8	33	19	13	11	7	4.2	
BATON ROUGE	20	1014.9	1017.6	25.6	12.8	19.1	-1.5	30.6	14+	5.6	21+	0	0	12.8	71	62	-1	27	6	0	0	0	1.4	3	9.8	32	19	10	8	13	5.2	
LAKE CHARLES	3	1016.6	1017.6	26.7	13.9	20.2	-1.2	32.2	9	6.7	20	1	0	14.4	75	75	-3	36	6	1	0	0	1.7	5	10.3	32	15	13	6	12	4.5	
NEW ORLEANS	1	1015.9	1016.9	26.1	15.0	20.5	-0.8	31.7	9	7.8	30+	0	0	15.0	73	80	8	61	8	1	0	0	2.1	3	10.3	34	1	15	3	13	4.9	
SHREVEPORT	77	1008.8	1018.0	25.0	10.6	17.8	-2.4	32.2	9+	3.3	20	2	0	11.1	69	41	-30	19	4	1	0	0	0.8	9	15.6	31	14	15	10	6	3.5	72
MAINE																																
CARIBOU	190	989.2		10.6	1.7	5.9	-0.2	18.9	9	-7.8	31	0	11			88	3	52	10		10	T						1	8	22	8.2	
PORTLAND	14	1012.5	1014.7	15.0	1.7	8.4	-0.8	25.0	8	-7.8	31	0	10	3.9	74	92	10	60	8	0	0	0	1.8	26	13.0	NW	29	11	11	9	5.3	64
MARYLAND																																
BALTIMORE	45	1012.5	1018.2	18.3	5.6	11.9	-2.0	25.6	9+	-3.9	31	0	3	5.0	67	122	41	88	6	0	0	0	1.3	29	15.6	W	5	18	5	8	4.0	69
MASSACHUSETTS																																
BLUE HILL OBS R	192			16.7	5.6	11.1	-0.4	25.6	9	-3.3	31	0	2			85	-10	43	5		0	0			20.6	WNW	29					67
BOSTON	5	1014.9	1015.9	17.2	7.8	12.5	-0.3	25.6	9	0.0	31	0	1	3.9	61	67	-13	36	5	0	0	0	3.0	26	15.6	W	20	11	9	11	5.1	69
NANTUCKET	13	1015.9	1016.2	15.6	6.1	10.7	-1.7	20.0	10	-5.6	31	0	4	6.7	78	89	-5	30	7	0	0	0	2.2	26	18.8	SE	19	11	9	11	5.4	68
PITTSFIELD	357			14.4	1.7	8.1	-0.8	24.4	9	-7.8	31	0	12			86	4	37	7		T	0										
WORCESTER	301	979.0	1016.2	15.0	3.9	9.4	-0.8	23.9	9	-4.4	31	0	3	1.7	63	105	17	49	6	0	0	0	3.1	27	17.9	29	20	13	9	9	5.0	
MICHIGAN																																
ALPENA	210	987.5	1012.9	13.9	1.7	8.0	0.1	25.0	8+	-8.9	30	0	15	0.6	63	54	-8	30	14	4	T	T	2.4	24	13.4	SW	22	10	7	14	6.1	50
DETROIT	190	992.9	1015.8	16.1	6.1	11.2	-0.9	25.6	8	-3.3	30	0	2	2.2	56					2	0		2.9	25	13.9	29	11					
DETROIT M WAYNE CO	193	991.2	1015.6	16.7	4.4	10.6	-1.7	25.0	8	-3.9	30	0	5	3.3	65	29	-36	12	9	2	0	0	2.8	24	14.3	SW	15+	11	14	6	4.7	67
DETROIT WILLOW RUN	217	987.8	1016.2	15.6	2.8	9.1	-3.1	24.4	9	-5.6	30	0	8	1.7	62	25	-39	13	6	2	0	0	3.7	24	14.3	24	15	10	15	6	4.6	
FLINT	235	987.1	1015.3	14.4	3.3	8.7	-1.3	25.0	8	-7.2	30	0	10	1.7	64	22	-38	11	8	1	0	0	3.6	24	13.0	25	22	8	10	13	5.7	
GRAND RAPIDS	239	985.8	1015.1	16.7	4.4	10.7	0.1	27.8	8	-6.7	30	0	6	3.9	65	59	-7	23	8	2	0	0	3.0	24	17.9	W	11	8	15	8	5.5	61
HOUGHTON LAKE	350	971.9	1014.2	12.8	2.2	7.6		21.7	7	-8.9	30	0	10	2.8	72	45		18	14	5	T	0	2.9	24	11.6	23	15	8	7	16	6.4	
LANSING	256	983.1	1015.0	16.1	2.8	9.4	-1.3	26.1	8	-9.4	30	0	14	2.2	63	22	-41	13	5	1	0	0	3.4	24	20.1	W	10	8	14	9	5.6	58
MARQUETTE U	206			12.2	3.9	8.1	-0.8	27.2	7	-4.4	30	0	4			81	22	53	14		28	25			17.0	SW	22	5	8	18	7.3	42
MUSKEGON	191	991.9	1015.0	15.0	5.6	10.1	-1.3	21.7	8	-4.4	30	0	9	3.3	63	55	-10	32	9	4	T	T	2.9	24	14.3	31	11+	8	12	11	5.8	
SAULT STE MARIE	220	985.1	1011.7	11.1	2.2	6.8	-1.2	21.1	9	-3.3	18	0	12	2.8	78	125	53	33	20	2	30	T	1.4	25	16.5	NW	11	3	7	21	8.0	37
MINNESOTA																																
DULUTH	435	960.0	1012.2	11.7	1.1	6.2	-0.8	26.1	7	-6.1	17	0	16	0.0	68	90	35	49	9	3	206	203	1.7	25	20.6	W	22	6	8	17	6.8	48
INTERNATIONAL FALLS	359	968.2	1011.8	10.6	0.0	5.2	-0.6	25.6	7	-5.6	29+	0	21	0.6	74	40	-4	25	8	0	T	T	1.1	28	12.5	30	9	5	8	18	7.5	
MINNEAPOLIS	254	982.4	1013.2	15.0	2.2	8.6	-0.8	28.9	8	-5.0	24	0	11	2.2	66	90	49	75	5	2	5	T	1.4	26	17.4	NE	14	12	4	15	5.8	60
ROCHESTER	395	965.8	1013.9	15.0	2.8	8.8	-1.1	26.7	8+	-3.3	25+	0	11	1.7	65	98	55	71	8	4	5	T	2.7	24	14.3	33	31+	14	3	14	5.1	
ST CLOUD	315	974.3	1012.5	14.4	1.1	7.6	-0.9	26.7	8+	-6.1	24	0	12		65	36	-6	21	4		36	25						10	7	14	6.1	
MISSISSIPPI																																
JACKSON	94	1006.1	1018.1	24.4	8.3	16.2	-3.3	31.1	8	1.1	20	0	0	10.6	75	41	-10	20	8	0	0	0	0.9	6	8.9	S	13	19	6	6	3.5	74
MERIDIAN	88	1007.1	1018.3	24.4	8.3	16.2	-2.4	30.6	9	1.1	21	0	0	10.6	74	27	-30	15	6	1	0	0	0.8	1	8.0	33	1	15	9	7	4.3	
VICKSBURG U	71			22.8	11.7	17.1	-2.6	30.0	8	5.0	26	0	0			50	-2	50	7		0	0			8.0	NW	19	20	3	8	3.6	72

See footnotes at end of table

CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind						No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	°C.	°C.	°C.	°C.	°C.		°C.				°C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	988.5	1016.9	20.0	6.1	13.1	-1.7	29.4	9	- 0.6	23	0	2	3.3	56	52	- 27	29	6	4	0	0	1.7	22	13.4	N	13+	17	5	9	3.9	76
KANSAS CITY	226	989.5	1016.3	22.2	8.3	15.4	-0.3	31.1	14	- 0.6	16	0	1	5.0	53	11	- 61	10	3	0	0	0	1.9	21	14.8	S	21+	15	9	7	4.1	73
SAINT JOSEPH	247			23.3	5.0	14.2	0.1	30.6	14+	- 3.3	16	0	7	3.3	59	29	- 26	13	4	2	0	0	1.5	21	13.4	18	21	18	8	5	3.5	
ST LOUIS	163	997.6	1018.1	19.4	5.6	12.3	-2.3	29.4	9	0.0	30+	0	4	5.0	65	55	- 17	19	7	3	0	0	1.5	22	16.5	SW	15+	14	9	8	4.5	73
SPRINGFIELD	386	972.6	1018.0	20.6	5.0	12.9	-2.4	30.6	14	- 2.2	16	0	2	4.4	62	32	- 64	19	5	1	0	0	1.3	20	15.2	SE	14	19	5	7	3.2	74
MONTANA																																
BILLINGS	1087	892.0	1016.2	16.7	3.9	10.2	0.5	26.1	7	- 3.9	29	0	8	- 1.7	47	13	- 15	11	3	0	T	0	3.4	26	19.7	SW	20	9	10	12	5.6	61
GLASGOW	696			15.0	0.6	7.7	0.3	26.7	6	- 7.8	31	0	12			17	1	13	4		41	T						8	9	14	6.2	
GREAT FALLS	1116	888.6	1016.8	14.4	2.8	8.6	-0.1	26.1	6	- 4.4	31+	0	13	- 2.2	52	34	15	17	5	0	86	25	4.2	24	18.3	NW	8	5	9	17	7.0	57
HAVRE	787			14.4	0.6	7.6	-0.1	26.7	6	- 6.7	29	0	17			21	1	10	6		T	0			17.0	W	20	8	4	19	7.1	54
HELENA	1167	882.5	1018.9	15.6	0.0	8.0	0.4	26.1	6	- 6.1	29	0	16	- 2.2	53	19	2	10	4	0	T	T	2.4	28	18.3	W	21	6	12	13	6.1	59
KALISPELL	904	913.3	1019.4	12.8	- 2.2	5.1	-1.5	21.1	6	- 7.8	18	0	26	0.0	74	22	- 9	13	9	0	T	T	0.8	21	13.0	21	20	3	10	18	7.2	
MILES CITY	801	922.1	1015.5	16.7	1.1	8.9	-0.6	27.2	7	- 6.7	31	0	13	- 0.6	55	9	- 13		3	0	T		2.5	28								
MISSOULA	972	907.6	1020.9	13.9	- 0.6	6.7	0.0	22.8	6	- 6.7	19+	0	19	- 0.6	68	21	- 5	13	8	0	5	T	0.9	30	13.9	NW	20	8	4	19	6.7	49
NEBRASKA																																
GRAND ISLAND	561	948.9	1015.3	21.7	2.8	12.1	0.2	32.8	13	- 2.8	19	1	9	2.2	57	17	- 8	14	2	2	13	25	2.0	25	18.3	34	14	18	7	6	3.5	
LINCOLN U	351			20.6	5.6	13.1	-0.6	30.6	7	- 1.7	16	0	3			11	- 29	7	4		0	0			15.2	NW	31+	17	8	6	3.7	77
NORFOLK	471			18.9	2.8	10.9	-0.7	30.6	7	- 2.8	16	0	12			27	- 3	27	3		41	25						14	10	7	4.2	
NORTH PLATTE	846	917.4	1015.4	21.1	- 0.6	10.3	-0.3	30.0	8+	- 6.7	19	0	19	0.0	57	8	- 15	7	3	2	36	25	1.8	31	20.1	N	14	20	5	6	3.4	83
OMAHA	298	979.7	1015.2	20.6	3.9	12.2	-1.0	29.4	7	- 1.7	24+	0	8	3.9	62	16	- 28	10	4	3	T	T	1.2	22	27.7	NW	15	15	8	8	4.2	77
SCOTTSBLUFF	1206	880.1	1016.7	18.9	- 0.6	9.3	-0.9	28.3	6	- 6.7	15	0	21	- 1.1	56	21	3	12	5	1	T	T	2.7	29	19.7	29	21	17	8	6	3.8	
VALENTINE	789			18.9	0.6	9.7	0.1	28.9	8	- 5.0	19+	0	18			26	3	23	4		T	T			22.4	NW	21	15	10	6	4.3	74
NEVADA																																
ELKO	1539	848.0	1020.3	20.0	- 4.4	7.7	-0.6	27.2	1	-11.7	16+	0	27	- 6.7	42	1	- 19	T	2	0	T	T	0.6	29	13.0	25	21	18	7	6	3.4	
ELY	1906	812.1	1019.2	17.8	- 2.2	7.6	-0.1	23.9	1	-10.6	14	0	24	- 6.1	44	3	- 16	2	2	3	T	T	1.4	21	13.0	NW	13	16	7	8	4.0	86
LAS VEGAS	659	939.4	1015.5	27.2	11.1	19.2	-0.1	31.7	10+	4.4	17	0	0	- 1.1	30	2	- 3	2	2	1	0	0	1.0	25	18.8	SW	10	20	4	7	3.3	86
RENO	1342	869.3	1019.6	21.7	- 2.2	9.8	0.2	28.3	1	- 7.2	19+	0	26	- 2.8	49	T	- 13	T	0	0	0	0	0.1	27	19.7	SW	20	20	7	4	2.8	95
WINNEMUCCA	1310	871.3	1020.2	20.6	- 3.9	8.3	-0.4	27.2	1	-11.7	14	0	27	- 6.7	37	T	- 20	T	1	0	T	T	0.4	29	17.0	SW	20	16	9	6	3.7	76
NEW HAMPSHIRE																																
CONCORD	104	1002.7	1015.7	16.7	1.1	8.9	-0.4	27.2	9	-10.0	31	0	14	3.3	74	84	17	42	6	0	0	0	1.3	28	17.0	NW	20	11	10	10	5.4	62
MT WASHINGTON OBS	1909			2.2	- 6.1	- 1.9	-1.3	9.4	9	-18.9	30	0	28			139	- 18	54	14	0	338	76			54.1Y	W	20	5	7	19	7.1	43
NEW JERSEY																																
ATLANTIC CITY	20	1015.6	1018.0	18.3	5.0	11.5	-2.5	25.6	10	- 2.8	31	0	3	6.7	73	95	13	52	6	0	0	0	1.3	28	13.0	32	20	16	6	9	4.5	61
ATLANTIC CITY U	3			17.8	9.4	13.6	-1.3	22.8	29+	2.2	31	0	0			71	- 15	36	7						17.4	NW	20					
NEWARK	2	1016.3	1017.4	18.3	7.8	13.1	-1.2	26.1	9	- 0.6	31	0	1	5.6	63	96	17	67	7	0	0	0	1.8	26	14.3	32	29+	13	8	10	4.8	
TRENTON U	17			18.3	7.2	12.8	-1.0	25.6	9	0.0	31	0	1			121	49	88	5		0	0			13.9	N	29	13	11	7	4.5	65
NEW MEXICO																																
ALBUQUERQUE	1619	840.2	1016.4	21.7	5.6	13.8	-0.7	26.1	11	0.6	15	0	0	- 3.3	35	14	- 5	14	1	2	0	0	0.3	26	20.1	W	11	21	4	6	2.8	85
CLAYTON	1515			20.6	2.8	11.7	-1.2	28.3	2	- 4.4	19	0	9			18	- 8	10	3		43	25						20	7	4	3.0	
RATON	1944			20.0	0.0	9.8	-0.8	25.6	11+	- 6.7	15	0	17			19	- 7	18	4		102	51						20	6	5	3.1	
ROSWELL	1102	893.7		25.0	2.8	13.8	-1.2	32.8	13	- 4.4	20	1	14	- 1.1	41	T	- 27	T	0	0	0	0	0.4	15	13.9	W	18	21	6	4	2.5	81
SILVER CITY	1638			22.8	5.6	14.1	-1.3	26.7	11	0.0	15	0	1			1	- 20	1	2		0	0						21	6	4	2.6	
NEW YORK																																
ALBANY	84	1005.8	1016.6	16.1	2.8	9.2	-1.3	24.4	9	- 5.6	31	0	10	3.3	72	56	- 14	26	6	0	0	0	2.2	25	15.6	NW	20	9	10	12	5.6	60
BINGHAMTON	485	957.3	1016.8	13.3	3.3	8.3	-1.6	22.2	9	- 3.9	31+	0	4	2.2	69	36	- 43	15	10	0	T	T	2.3	24	12.5	NW	29+	8	8	15	6.4	49
BUFFALO	215	989.8	1015.8	14.4	4.4	9.3	-1.1	24.4	15	- 3.9	30	0	6	3.9	71	24	- 53	12	10	4	0	0	3.6	24	17.9	SW	7	9	7	15	6.2	55
NEW YORK U	40	1013.5	1016.6	18.3	8.9	13.4	-1.2	26.1	9	1.1	30	0	0	5.6	63	118	38	80	7	0	0	0	1.5	28	14.3	NW	29	16	9	6	4.0	63
J.F. KENNEDY	4	1016.6	1017.2	17.8	8.3	12.9	-1.3	23.3	16	- 1.1	31	0	1	6.7	68	125	43	82	7	0	0	0	1.8	27	13.4	30	20	14	7	10	4.6	
NEW YORK LA GUARDIA	3	1015.6	1017.4	17.8	10.0	13.7	-1.1	25.6	9	2.8	30	0	0	6.1	62	95	9	61	7	0	0	0	1.9	27	17.0	NW	20	12	9	10	4.9	
ROCHESTER	167	996.3	1016.7	16.1	3.9	10.1	-0.9	25.6	15+	- 2.8	30	0	6	2.8	63	17	- 48	8	10	4	0	0	3.0	24	16.1	SW	10	10	7	14	5.9	54
SYRACUSE	125	1001.0	1015.9	15.6	3.9	9.7	-1.3	23.9	9	- 3.9	31+	0	8	3.3	68	23	- 58	6	11	1	0	0	2.1	25	16.1	W	10	8	8	15	6.0	48
NORTH CAROLINA																																
ASHEVILLE	652	942.4	1018.8	18.3	3.3	10.9	-2.3	25.0	4	- 2.8	21	0	8	7.2	84	136	57	57	11	1	0	0	1.2	36	11.6	35	20+	15	6	10	4.5	63
CAPE HATTERAS R	2	1016.9	1017.1	22.2	14.4	18.2	-0.3	28.9	1	3.9	31	0	0	13.9	75	128	20	35	11	1	0	0	2.6	36	17.9	SW	1	9	10	12	5.4	69
CHARLOTTE	224	990.5	1018.0	21.1	7.8	14.4	-2.5	28.3	16	1.7	31	0	0	8.9	74	58	- 17	22	9	0	0	0	0.8	36	8.5	SW	1	13	8	10	4.6	64

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 ° C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
NORTH CAROLINA																																
GREENSBORO	273	986.8	1018.6	21.1	7.2	14.3	-0.9	28.9	10	1.1	21	0	0	8.9	74	83	14	45	8	0	0	0	0.6	33	10.3	SW	1	12	9	10	4.7	62
RALEIGH	132	1002.0	1018.1	21.7	7.8	14.8	-1.1	28.9	10	1.7	21	0	0	8.9	71	51	-18	20	6	0	0	0	0.8	2	17.9	34	1	12	11	8	4.7	62
WILMINGTON	9	1016.3	1017.7	26.1	12.8	19.3	0.8	32.2	17	6.1	31+	1	0	12.8	69	28	-49	15	5	1	0	0	1.3	2	13.0	SW	1	13	11	7	4.5	65
NORTH DAKOTA																																
BISMARCK	502	953.9	1014.0	16.1	-0.6	7.8	-0.3	30.0	7	-7.8	29+	0	18	-0.6	62	15	-7	8	4	0	10	T	2.0	31	18.8	NW	9	12	8	11	5.3	62
FARGO	273	979.7	1013.0	13.9	-0.6	6.7	-1.4	29.4	7	-8.3	29	0	19	0.0	68	36	7	18	5	2	30	T	1.4	29	21.5	W	22	9	8	14	5.8	58
WILLISTON	579			15.0	0.0	7.6	0.1	27.2	7	-8.3	15	0	15			9	-9	6	5		51	25			22.4	NW	30	13	7	11	5.4	61
OHIO																																
AKRON	368	972.9	1017.6	16.1	4.4	10.3	-1.3	25.0	14+	-0.6	27	0	1	3.3	66	25	-38	13	8	1	T	0	2.3	23	12.1	17	15	11	10	10	5.3	
CINCINNATI OBS	232			17.8	6.1	11.8	-2.6	26.1	13	-1.7	30	0	1			16	-41	10	7		0	0			8.0	SW	15+					60
CLEVELAND	237	987.8	1017.2	16.1	4.4	10.2	-1.4	25.6	9	-3.3	27	0	4	3.3	66	30	-31	11	7	1	0	0	3.0	22	16.1	S	15	10	7	14	5.6	64
COLUMBUS	247	988.2	1018.4	16.7	3.9	10.4	-1.9	26.1	13	-3.3	30	0	6	3.9	66	20	-34	11	7	1	T	0	1.3	23	13.4	SW	22+	13	6	12	5.0	62
DAYTON	305	981.7	1018.2	16.7	5.0	10.7	-2.4	25.0	13	-2.2	30	0	2	3.9	66	33	-24	17	8	2	0	0	2.0	23	11.6	SW	22+	13	6	12	4.9	59
MANSFIELD	395			15.0	4.4	9.6	-1.7	23.9	13	-2.8	30	0	3			31	-26	18	5	1	0	0	3.2	24				14	5	12	5.0	
TOLEDO	206	991.5	1017.1	16.7	3.9	10.2	-0.9	25.0	14	-5.0	30	0	9	1.7	60	25	-36	13	5	1	0	0	2.8	24	14.3	W	10	14	10	7	4.4	67
YOUNGSTOWN	359	974.3	1017.5	15.0	3.9	9.4	-1.6	25.0	15	-2.8	26	0	6	2.8	67	36	-33	12	8	1	T	T	2.4	23	12.1	26	11	9	6	16	6.0	
OKLAHOMA																																
OKLAHOMA CITY	390	970.9	1017.2	23.3	8.9	16.1	-1.1	31.7	13	2.2	23+	0	0	5.6	54	9	-54	9	1	0	0	0	0.9	18	16.5	NW	14	19	5	7	3.6	79
TULSA	198	993.2	1017.5	23.3	7.2	15.3	-1.8	32.8	9	0.0	23+	1	2	5.6	58	35	-49	16	6	1	0	0	1.5	19	19.2	SW	14	18	7	6	3.5	78
OREGON																																
ASTORIA	2	1019.0	1019.8	15.6	6.1	10.9	-0.7	25.6	4	0.6	13	0	0	8.3	85	148	-50	49	16	1	0	0	1.0	20	13.0	19	21	5	6	20	7.4	
BURNS U	1265	876.7	1020.9	17.8	-0.6	8.4	-0.7	27.2	1	-8.9	14	0	21	-2.2	53	8	-13	7	4		36	25	1.3	31				12	10	9	4.5	
EUGENE	109	1006.8	1020.4	17.8	6.1	11.9	0.2	28.9	4	-1.1	14	0	2	7.8	79	49	-48	18	10	1	0	0	0.8	23	10.3	18	21	6	7	18	6.8	
MEACHAM	1234	879.8	1020.4	12.2	1.7	7.0	-0.9	21.7	6+	-5.0	14	0	13			72	0	37	11		330	127	0.5	22				6	8	17	6.6	
MEDFORD	396	972.6	1020.7	20.6	3.3	11.9	0.3	30.0	4	-3.3	14	0	7	4.4	70	19	-30	7	5	0	0	0	0.3	29	8.0	26	20	16	7	8	4.3	
PENDLETON	452	965.8	1019.8	18.9	5.6	12.2	0.2	28.9	1	-0.6	14	0	1	2.8	58	19	-11	9	10	0	T	0	1.6	24	12.5	27	20	10	7	14	5.8	
PORTLAND	6	1019.0	1020.2	17.2	6.7	12.1	-0.3	27.2	4	1.1	18	0	0	8.3	82	78	-14	19	12	0	0	0	0.7	23	15.2	SW	20	7	5	19	7.2	38
SALEM	60	1012.9	1020.2	18.3	5.0	11.4	-0.8	28.3	4	-2.2	18+	0	5	8.3	85	52	-47	17	13	0	0	0	1.0	19	11.2	16	22+	8	4	19	6.5	
SEXTON SUMMIT R	1169	886.9	1019.0	16.7	6.1	11.2	0.8	25.0	4	-2.2	21+	0	5			24	-63	9	9		61	51						15	9	7	4.0	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.7	-0.1	32.2	29+	24.4	2	7	0			2	-26	2	2		0	0						16	11	4	4.3	
ENIWETOK	4	1008.1	1009.0	31.7	25.6	28.8	0.5	33.3	17+	22.2	5	18	0	24.4	78	236	6	55	24		0	0	2.6	10								
TAGUAC GUAM R	110			30.6	22.2	26.2	-0.1	31.7	29+	20.0	10	0	0			177	-156	44	23		0	0										53
JOHNSTON	2	1011.5	1012.2	28.9	25.0	26.9	-0.2	30.0	29+	22.2	4+	0	0	23.3	80	210	127	59	23	3	0	0	5.0	10	17.4	E	26	1	12	18	7.5	38
KOROR R	29	1005.4	1009.2	31.1	24.4	27.8	0.5	32.8	2	22.2	8	8	0	24.4	85	423	91	140	26	4	0	0	1.1	28	13.0	SW	26	0	0	31	10.0	58
KWAJALEIN	2	1008.5	1009.2	31.1	25.6	28.1	0.4	32.2	28+	22.8	5	2	0	24.4	79	198	-78	35	23	3	0	0	2.3	11	16.5	15	5	1	5	25	8.7	
MAJURO	3	1009.1	1009.5	30.6	25.0	27.7	0.8	31.1	30+	21.7	25	0	0	23.9	78	344	-42	79	24	3	0	0	1.6	10	13.0	E	7	2	6	23	8.4	59
MARCUS ISLAND	6			29.4	24.4	26.8	-0.9	31.7	10	21.7	27+	0	0			311	220	124	14	1	0	0	3.8	9	50.5	W	14	9	8	14	6.1	
PAGO PAGO	4	1011.5	1011.5	30.0	23.3	26.7		32.2	18	20.6	11+	1	0	23.3	85	473		113	23	2	0	0	3.4	11	11.2	E	26	2	14	15	7.3	36
PONAPE R	37	1003.4	1008.8	31.1	22.8	26.9	0.4	33.3	2	21.7	25	10	0	23.9	88	422	16	99	27	5	0	0	1.2	17	12.5	SW	31	1	8	22	8.4	49
TRUK MOEN ISLAND	2	1008.5	1008.9	30.6	23.9	27.4	0.4	32.8	5	23.3	23+	2	0	24.4	83	226	-116	55	23	1	0	0	0.4	29	15.6	N	29	1	2	28	9.3	81
WAKE	3	1011.2	1011.4	30.0	25.0	27.6	0.1	31.1	2+	23.3	10	0	0	21.7	73	64	-70	18	14	0	0	0	5.0	6	15.6	4	30	3	9	19	7.5	
YAP R	19	1006.4	1008.4	31.7	23.9	27.9	0.3	32.8	25	22.2	8	9	0	24.4	84	181	-154	55	24	0	0	0	0.2	17	8.5	SW	26	0	0	31	9.8	59
PENNSYLVANIA																																
ALLENTOWN	118	1003.7	1017.8	16.7	3.3	9.9	-2.2	23.3	9+	-5.0	31	0	6	3.3	67	70	-5	32	5	0	0	0	1.7	27	12.5	32	11	12	11	8	4.5	
ERIE	223	989.5	1016.6	15.6	6.1	10.7	-0.7	24.4	15	-0.6	26	0	2	3.9	65	44	-40	13	10	3	0	0	3.0	23	11.2	22	22+	10	6	15	5.7	
HARRISBURG	103	1005.1	1018.0	18.9	6.7	12.6	-0.6	26.7	4	-0.6	31	0	1	6.1	67	54	-22	31	8	0	0	0	1.4	28	13.9	NW	29+	12	8	11	4.9	62
PHILADELPHIA	2	1016.6	1017.8	18.3	5.0	11.7	-1.4	24.4	9+	-3.3	31	0	3	6.1	71	130	59	96	6	0	0	0	1.4	29	13.4	NW	20	14	9	8	4.5	65
PITTSBURGH	347	973.6	1017.9	16.7	4.4	10.4	-1.3	26.1	15	-3.9	30	0	4	1.7	59	35	-29	24	8	1	0	0	1.8	25	12.5	32	10	10	7	14	5.8	55
READING U	81			17.8	6.7	12.4	-1.6	25.0	9	-1.7	31	0	1			66	-6	34	7		0	0			17.0	NW	29	15	6	10	4.6	59
SCRANTON	283	983.4	1017.9	16.1	4.4	10.1	-0.4	23.3	9	-2.8	31+	0	3	4.4	71	52	-37	30	9	0	T	0	1.4	25	11.6	W	29	10	10	11	5.2	66
WILLIAMSPORT	160	998.6	1017.9	15.6	2.2	8.7	-3.1	22.8	9	-5.0	31	0	10	4.4	81	36	-48	23	8	0	0	0	1.0	27	9.4	31	29+	9	9	13	5.7	
RHODE ISLAND																																
BLOCK ISLAND	34			15.0	7.8	11.6	-1.3	18.9	10	0.0	31	0	1			61	-16	49	7		0	0						10	12	9	5.3	
PROVIDENCE	16	1013.9	1016.3	17.2	4.4	10.8	-1.0	24.4	8	-4.4	31	0	3	3.9	67	66	-13	43	5	0	0	0	2.1	26	15.6	29	20	12	9	10	5.1	66

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1015.6	1017.1	26.1	13.3	19.7	0.7	31.1	5	5.6	29+	0	0	13.9	74	43	- 29	42	2	1	0	0	1.5	2	17.0Y	SW	19	12	12	7	4.8	62
CHARLESTON U	3			24.4	16.1	20.2	0.2	30.0	5	8.3	20	0	0			7	- 63	5	3		0	0			13.0	N	1					
COLUMBIA	66	1009.5	1017.7	24.4	9.4	17.1	-1.1	31.1	5	3.3	31+	0	0	10.6	72	63	2	35	6	1	0	0	1.0	1	10.7	25	1	14	10	7	4.4	69
GNVLE SPARTANBURG	292	984.1	1018.6	21.7	8.3	14.8	-2.1	28.9	16	3.9	31+	0	0	10.0	76	96	11	46	10	1	0	0	1.1	2	10.7	NW	20	14	6	11	4.7	62
SOUTH DAKOTA																																
ABERDEEN	395	966.5	1013.8	16.7	- 0.6	8.2	-0.8	31.1	7	- 6.7	24	0	17	- 0.6	61	47	17	42	4	2	T	T	1.1	30	15.6	1	14	9	9	13	5.5	
HURON	391	966.8	1013.9	16.1	1.1	8.6	-0.7	27.2	7	- 5.6	29	0	15	1.7	68	79	50	72	3	2	T	T	1.2	28	21.0	N	14	9	10	12	5.5	67
RAPID CITY	964	904.2	1015.6	17.2	1.1	9.2	-0.8	26.7	7+	- 5.0	15	0	15	- 0.7	52	38	18	24	5	0	53	25	3.5	31	22.4	NW	21	14	9	8	4.5	68
SIOUX FALLS	432	962.4	1014.2	17.2	1.1	9.1	-1.1	28.3	8	- 5.0	24	0	15	1.7	64	36	5	30	4	1	10	T	1.5	27	17.0	36	14	15	4	12	5.2	
TENNESSEE																																
BRISTOL	459	964.4	1018.8	20.0	5.6	12.8	-1.7	25.6	15+	0.0	31	0	1	7.8	75	89	34	48	8	0	0	0	0.4	31	8.0	30	10	16	7	8	4.1	
CHATTANOOGA	203	993.6	1018.4	21.1	6.7	13.8	-2.9	25.6	14	1.7	29	0	0	9.4	80	121	44	65	8	3	0	0	0.3	35	8.0	5	15+	16	6	9	4.2	65
KNOXVILLE	299	983.1	1018.3	20.6	7.8	14.2	-1.9	27.2	14	2.8	31+	0	0	8.9	75	122	56	58	7	3	0	0	0.6	36	9.8	SW	31+	15	7	9	4.4	65
MEMPHIS	79	1008.8	1019.0	21.1	7.8	14.5	-2.8	28.9	9	2.2	28+	0	0	7.8	69	49	- 20	17	9	1	0	0	0.2	8	11.6	S	15	19	4	8	3.6	78
NASHVILLE	180	996.6	1018.5	20.6	7.2	13.9	-2.5	26.7	12	0.6	27	0	0	6.7	67	64	5	33	6	1	0	0	0.8	8	13.0	S	15	18	4	9	3.9	71
OAK RIDGE	276			20.0	6.1	13.1	-2.4	26.1	14	1.7	29+	0	0			98	30	44	7		0	0			8.9Y		26	16	5	10	4.3	
TEXAS																																
ABILENE	537	956.0	1017.2	25.0	11.1	17.8	-1.2	33.3	13	2.2	23	2	0	7.8	56	53	- 19	50	4	1	0	0	1.2	19	16.1	NE	31	20	6	5	3.3	78
AMARILLO	1098	892.7	1015.6	22.2	6.1	14.3	-1.6	30.6	13+	- 1.1	19+	0	2	0.6	45	7	- 37	7	1	1	T	0	2.1	23	18.8	NW	14	19	4	8	3.2	81
AUSTIN	182	995.3	1017.2	27.2	13.3	20.3	-1.2	33.3	13	3.9	20	3	0	10.6	59	15	- 57	10	5	2	0	0	0.8	3	11.2	N	15+	14	11	6	3.8	69
BROWNSVILLE	5	1014.9	1015.6	27.8	17.8	22.7	-1.7	32.8	4	10.6	20	2	0	17.8	78	189	100	143	8	1	0	0	0.9	4	11.6	N	24+	13	12	6	4.4	70
CORPUS CHRISTI	12	1014.9	1016.4	28.9	16.7	22.6	-1.1	33.9	12	8.3	26+	5	0	15.6	70	22	- 49	11	6	0	0	0	2.1	7	16.1	N	15	13	10	8	4.6	65
DALLAS	147	1000.0	1017.4	25.0	12.2	18.4	-1.4	33.9	13	3.3	20+	2	0	9.4	61	47	- 21	37	3	1	0	0	1.0	14	14.3	NW	14	18	5	8	3.7	71
DEL RIO	313	980.7	1016.7	27.8	12.8	20.3	-1.6	33.3	13	6.1	25+	4	0	8.9	53	32	- 18	32	2	0	0	0	1.2	10	7.6	36	22+	15	9	7	4.1	
EL PASO	1194	883.8	1015.1	25.6	7.8	16.7	-1.3	31.7	11	0.6	18	0	0	1.1	38	T	- 21	T	1	0	0	0	0.1	20	14.8	SW	13	24	2	5	2.3	86
FORT WORTH	164	997.0	1017.5	25.6	11.1	18.3	-1.6	33.3	13	2.8	20	2	0	9.4	61	38	- 28	31	3	1	0	0	0.6	15	17.4	2	31	18	7	6	3.5	
GALVESTON U	2			24.4	18.9	21.6	-1.5	29.4	9+	11.7	19	0	0			102	30	76	5		0	0			14.8	N	15					63
HOUSTON U	12			26.1	15.6	20.9	-1.6	32.2	4	8.3	20	1	0			129	38	72	6		0	0										
HOUSTON	15	1014.9	1017.1	26.7	15.0	20.9	-0.9	33.9	4	6.1	20	4	0	14.4	71	138	43	71	7	2	0	0	1.4	5	13.9	35	15	12	11	8	4.6	71
LUBBOCK	992	905.5	1016.3	25.0	7.2	16.1	-0.2	32.8	13	- 1.1	19	2	2	1.1	41	T	- 51	T	0	1	0	0	1.2	23	13.0	3	31+	17	8	6	3.4	
MIDLAND	869	918.1	1016.2	24.4	8.3	16.2	-2.6	31.7	12	1.7	19	0	0	5.6	57	20	- 22	14	5	1	0	0	0.8	18	14.3	2	31	20	3	8	3.0	
PORT ARTHUR	5	1016.6	1017.4	26.1	14.4	20.2	-1.1	32.2	10+	6.7	20	2	0	14.4	76	165	92	143	4	1	0	0	1.8	5	14.3	N	15	14	9	8	4.5	75
SAN ANGELO	580	950.6	1016.9	25.0	9.4	17.1	-3.1	32.2	13	1.7	20	1	0	9.4	66	48	2	26	3	0	0	0	0.7	20	13.9	4	31	19	5	7	3.4	
SAN ANTONIO	240	989.2	1017.2	26.7	12.2	19.4	-2.0	33.3	4	1.1	20	2	0	11.1	65	28	- 35	25	3	2	0	0	1.0	4	11.6	NE	15+	14	11	6	4.0	71
VICTORIA	32	1012.9	1017.0	27.8	15.6	21.5	-1.1	34.3	9+	5.6	20	4	0	14.4	69	25	- 63	20	5	1	0	0	1.5	4	19.7Y	N	14	13	8	10	4.6	
WACO	153	999.7	1017.6	27.2	13.3	20.1	-0.7	33.9	9	2.8	20	3	0	10.6	58	T	- 65	T	1	0	0	0	0.4	15	12.5	17	14	18	7	6	3.2	
WICHITA FALLS	303	981.0	1017.4	25.6	9.4	17.3	-1.8	34.4	9	2.8	20+	2	0	7.8	59	15	- 58	13	3	0	0	0	1.0	18	17.4	31	14	19	7	5	3.4	
UTAH																																
MILFORD	1533			19.4	0.0	9.6	-0.8	27.2	1	- 6.1	17	0	17			25	6	14	4		81	25						17	8	6	3.7	
SALT LAKE CITY	1286	874.7	1019.7	18.3	1.7	9.9	-1.0	25.0	7+	- 4.4	22	0	13	0.0	57	30	1	23	3	3	91	76	0.6	14	14.3	N	21+	16	6	9	4.2	80
WENDOVER	1291			16.7	3.3	10.1	-1.7	23.9	1	- 3.9	22	0	4			T	- 12	T	0		T	T										
VERMONT																																
BURLINGTON	101	1002.0	1014.7	13.9	2.8	8.3	-0.3	23.3	9	- 7.2	31	0	9	2.8	70	36	- 40	17	9	0	T	0	2.0	21	15.2	SW	4	7	8	16	6.5	53
VIRGINIA																																
LYNCHBURG	279	984.4		20.0	6.1	13.0	-1.6	26.7	10	- 1.1	31	0	2	6.1	66	119	52	68	7	0	0	0	0.7	31	9.8	NE	1	16	7	8	4.0	69
NORFOLK	7	1016.9	1018.1	20.6	10.0	15.2	-1.5	27.8	1	0.0	31	0	1	9.4	71	32	- 42	19	5	1	0	0	1.0	2	12.5	NE	26+	14	6	11	5.2	65
RICHMOND	49	1012.5	1018.5	20.6	5.6	13.1	-1.8	28.3	10	0.6	31	0	0	7.8	77	122	46	89	6	0	0	0	0.4	35	10.7	NW	20	13	9	9	4.7	61
ROANOKE	350	976.3	1018.4	19.4	5.6	12.6	-2.0	25.0	4	- 1.7	31	0	3	5.6	65	103	21	86	5	0	0	0	1.0	31	10.7	32	10	15	9	7	4.0	
WALLOPS ISLAND	3	1018.3	1018.6	18.3	8.9	13.7		25.6	17	0.6	31	0	0	8.9	75	35		15	7	2	0	0	0.8	31	21.9Y	NW	20	13	8	10	4.8	
WASHINGTON																																
OLYMPIA	59	1012.5	1019.9	15.6	3.9	9.5	-1.3	23.9	4	- 0.6	16+	0	8	7.2	87	123	- 11	40	12	1	0	0	1.7	21	11.6	21	22	1	8	22	8.1	
QUILLAYUTE	55	1011.2	1018.8	13.9	5.0	9.7	-1.1	27.2	4	- 1.1	13	0	2	7.8	90	267	0	68	18	1	T	0	0.8	16	13.4	SW	20	4	4	23	8.3	33
SEATTLE TACOMA	122	1003.1	1019.5	14.4	7.2	10.8	-0.6	24.4	4	2.8	16	0	0	7.2	81	74	- 23	24	12	1	0	0	1.3	20	13.0	19	23	3	4	24	8.4	36
SPOKANE	718	934.0	1018.6	15.0	1.7	9.5	-1.0	25.0	5	- 2.8	28+	0	12	0.0	52	9	- 31	4	7	0	T	T	1.8	20	13.4	SW	20	6	9	16	6.6	49
STAMPEDE PASS R	1206	881.5		8.9	1.7	5.3	-0.5	20.6	5	- 3.3	21	0	13			244	20	47	14		471	433						2	9	20	7.9	
WALLA WALLA U	289			18.3	6.7	12.7	-1.2	27.2	6	1.7	14	0	0			22	- 17	13	11		0	0			11.6	W	20	10	6	15	6.2	55

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	°C.	°C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	980.4	1019.3	18.9	3.3	11.2	0.9	25.6	6+	- 1.7	16	0	2	2.2	59	10	- 5	4	6	0	0	0	1.7	27	13.0	20	19	7	7	17	6.4	
WEST INDIES																																
SAN JUAN P.R.	4	1010.8	1013.4	29.4	23.9	26.7	0.0	32.2	2	21.7	15	1	0	23.3	83	228	80	49	18	9	0	0	1.8	10	13.0	W	14	1	22	8	6.3	62
SWAN ISLAND	9			30.6	24.4	27.6	-0.1	32.2	4+	21.7	30	2	0			286	40	74	20		0	0						6	12	13	6.6	
WEST VIRGINIA																																
BECKLEY	763	929.9	1019.0	15.6	3.9	9.8		23.3	15	- 2.8	30	0	5	3.9	71	62		18	8	0	T	T	1.2	22	13.4	15	18	14	7	10	4.6	
CHARLESTON	286	984.1	1018.4	20.0	5.6	12.8	-1.3	30.0	15	- 1.7	31	0	3	5.6	65	44	- 22	19	9	0	T	0	0.8	24	9.4	22	15	12	9	10	5.3	
ELKINS	600	947.5	1019.3	16.7	1.1	8.7	-2.4	25.0	13	- 7.8	31	0	15	3.9	76	62	- 14	31	10	0	0	0	1.1	27	11.2	34	5	12	6	13	5.6	
HUNTINGTON	252	988.2	1018.6	17.8	5.6	11.7	-2.4	26.7	15+	- 0.6	31+	0	4	5.6	69	58	11	32	9	1	T	0	0.8	22	8.0	17	15+	14	8	9	4.8	
PARKERSBURG U	187			17.8	5.0	11.5	-2.4	26.7	15+	- 2.8	30	0	2			31	- 21	20	9		0	0			11.6	S	15+					56
WISCONSIN																																
GREEN BAY	208	987.5	1013.1	15.6	2.2	8.7	-0.9	27.2	7	- 9.4	30	0	12	1.7	64	18	- 30	13	6	2	T	T	3.1	24	17.9	SW	22	9	9	13	5.6	53
LA CROSSE	198	988.8	1013.6	16.7	3.9	10.3	-0.3	28.3	7	- 3.9	25	0	9	2.8	65	84	29	55	7	3	T	T	1.7	22	14.8	25	22	12	6	13	5.2	
MADISON	262	983.1	1014.6	16.1	1.7	8.7	-1.2	26.7	8	- 7.2	30+	0	15	2.2	65	42	- 14	29	6	1	T	0	3.0	24	15.6	W	10	14	6	11	4.7	64
MILWAUKEE	205	989.8	1015.1	15.6	3.3	9.4	-0.6	27.8	8	- 5.0	25	0	10	1.7	61	45	- 9	26	7	2	0	0	3.2	23	15.6	SW	10	13	10	8	4.4	68
WYOMING																																
CASPER	1627	838.8	1017.5	15.0	- 0.6	7.3	-1.7	24.4	1	- 9.4	31	0	21	- 3.9	51	34	12	14	8	1	302	76	4.8	25	19.7	28	21	15	7	9	4.5	
CHEYENNE	1867	813.4	1016.8	16.7	1.1	8.8	0.2	23.9	26+	- 8.3	15	0	14	- 5.0	44	17	- 4	11	6	3	114	76	4.0	30	25.5	NW	21	16	8	7	3.9	75
LANDER	1696	830.7	1018.3	13.9	- 1.7	6.2	-2.2	23.9	1	-12.2	15	0	20	- 3.3	55	55	24	43	7	0	673	432	1.0	25	23.2	SW	21	11	11	9	4.6	78
SHERIDAN	1208	879.4	1017.4	16.1	- 1.1	7.7	-1.1	25.0	7	- 7.2	15	0	22	- 3.9	49	26	- 3	13	8	0	112	25	2.0	30	16.1	NW	31+	11	7	13	5.6	66

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

HEATING DEGREE DAYS

(Base 65°F.)

OCTOBER 1966

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	203	206	99
HUNTSVILLE	178	179	139
MOBILE	32	32	22
MONTGOMERY	77	77	68
ALASKA			
ANCHORAGE	1008	2099	
ANNETTE	591	1286	1344
BARROW	1438	4228	4178
BARTER ISLAND	1435	3964	3979
BETHEL	1195	2537	2367
COLD BAY	956	2549	2196
FAIRBANKS	1255	2035	2348
JUNEAU	812	1925	1847
KING SALMON	1168	2532	2056
KOTZEBUE	1327	2725	2739
MC GRATH	1273	2547	2363
NOME	1214	2832	2764
ST. PAUL ISLAND	926	2703	2618
SHEMYA	748	2400	2337
YAKUTAT	899	2294	1875
ARIZONA			
FLAGSTAFF	556	787	873
PHOENIX	8	8	22
TUCSON	20	20	25
WINSLOW	278	282	251
YUMA	0	0	0
ARKANSAS			
FORT SMITH	207	215	139
LITTLE ROCK	198	201	136
TEXARKANA	124	124	78
CALIFORNIA			
BAKERSFIELD	32	33	37
BISHOP	205	239	290
BLUE CANYON	233	491	551
EUREKA U	358	1096	1114
FRESNO	65	66	78
LONG BEACH	5	5	52
LOS ANGELES	1	1	133
LOS ANGELES U	0	0	37
MT SHASTA R	381	623	588
OAKLAND	98	199	275
RED BLUFF	31	31	53
SACRAMENTO	60	65	93
SANDBERG U	163	249	232
SAN DIEGO	4	4	58
SAN FRANCISCO	148	429	362
SAN FRANCISCO U	102	573	586
SANTA CATALINA	55	99	75
SANTA MARIA	128	352	434
STOCKTON	47	52	77
COLORADO			
ALAMOSA	651	1031	1082
COLORADO SPRINGS	489	633	622
DENVER	391	461	560
GRAND JUNCTION	256	274	343
PUEBLO	413	450	380
CONNECTICUT			
BRIDGEPORT	308	363	373
HARTFORD	398	496	477
NEW HAVEN	393	493	446
DELAWARE			
WILMINGTON	346	430	321
DIST.OF COLUMBIA			
WASH NATL AP	246	287	250
FLORIDA			
APALACHICOLA U	11	11	16
DAYTONA BEACH	3	3	0
FORT MYERS	0	0	0
JACKSONVILLE	20	20	12
KEY WEST	0	0	0
LAKELAND U	3	3	0
MIAMI	0	0	0
ORLANDO	1	1	0
PENSACOLA	30	30	19
TALLAHASSEE	33	33	28
TAMPA	7	7	0
WEST PALM BEACH	0	0	0
GEORGIA			
ATHENS	170	174	127
ATLANTA	177	182	145
AUGUSTA	122	122	78
COLUMBUS	63	63	87
MACON	94	94	71
ROME	232	240	185
SAVANNAH	50	50	47
IDAHO			
BOISE	476	569	547
IDAHO FALLS 42NW R	784	1005	986
IDAHO FALLS 46W R	736	977	943
LEWISTON	400	449	526
POCATELLO	623	784	665
ILLINOIS			
CAIRO U	249	279	200
CHICAGO O HARE	420	560	510
CHICAGO MIDWAY	363	450	407
MOLINE	386	508	443
PEORIA	419	535	419
ROCKFORD	417	546	529
SPRINGFIELD	388	493	363
INDIANA			
EVANSVILLE	341	398	286
FORT WAYNE	525	734	492
INDIANAPOLIS	402	479	406
SOUTH BEND	412	575	489
IOWA			
BURLINGTON	376	493	415
DES MOINES	375	524	471
DUBUQUE	453	640	649
SIOUX CITY	400	545	486
WATERLOO	438	623	597
KANSAS			
CONCORDIA	285	367	333
DODGE CITY	273	332	284
GOODLAND	436	513	468
TOPEKA	316	382	327
WICHITA	247	280	262
KENTUCKY			
COVINGTON	428	498	366
LEXINGTON	340	405	293
LOUISVILLE	324	359	302
LOUISIANA			
ALEXANDRIA	135	135	56
BATON ROUGE	55	55	31
LAKE CHARLES	41	41	19
NEW ORLEANS	33	33	19
SHREVEPORT	99	99	47
MAINE			
CARIBOU	683	1246	1211
PORTLAND	549	861	768
MARYLAND			
BALTIMORE	353	421	312
MASSACHUSETTS			
BLUE HILL OBS R	397	562	511
BOSTON	322	411	385
NANTUCKET	420	614	459
PITTSFIELD	563	899	827
WORCESTER	489	730	637
MICHIGAN			
ALPENA	574	942	1026
DETROIT	390	502	447
DETROIT M WAYNE CO	427	576	449
DETROIT WILLOW RUN	505	719	447
FLINT	531	826	593
GRAND RAPIDS	426	584	605
HOUGHTON LAKE	592	956	
LANSING	491	716	597
MARQUETTE U	565	898	907
MUSKEGON	455	625	560
SAULT STE MARIE	638	1058	1060
MINNESOTA			
DULUTH	670	1155	1142
INTERNATIONAL FALLS	724	1179	1247
MINNEAPOLIS	536	761	747
ROCHESTER	527	798	719
ST CLOUD	591	881	849
MISSISSIPPI			
JACKSON	155	155	59
MERIDIAN	149	149	81
VICKSBURG	121	121	53
MISSOURI			
COLUMBIA	305	370	305
KANSAS CITY	203	234	259
ST JOSEPH	267	339	351
ST LOUIS	336	414	311
SPRINGFIELD	309	377	268
MONTANA			
BILLINGS	446	584	694
GLASGOW	588	807	956
GREAT FALLS	537	730	882
HAVRE	594	809	982
HELENA	570	746	985
KALISPELL	733	1091	1124
MILES CITY	521	672	688
MISSOULA	645	808	1062
NEBRASKA			
GRAND ISLAND	353	481	495
LINCOLN U	314	428	382
NORFOLK	415	586	517
NORTH PLATTE	442	612	[illegible]
OMAHA	354	474	422
SCOTTSBLUFF	500	637	567
VALENTINE	476	706	679
NEVADA			
ELKO	584	745	829
ELY	592	813	897
LAS VEGAS	47	47	78
RENO	473	747	824
WINNEMUCCA	552	714	780
NEW HAMPSHIRE			
CONCORD	520	775	738
MT WASHINGTON OBS	1124	3015	2806
NEW JERSEY			
ATLANTIC CITY	373	458	290
ATLANTIC CITY U	263	310	259
NEWARK	286	349	315
TRENTON U	305	384	321
NEW MEXICO			
ALBUQUERQUE	247	262	241
CLAYTON	361	440	382
RATON	466	[illegible]	594
ROSWELL	257	267	220
SILVER CITY	230	238	187
NEW YORK			
ALBANY	502	726	597
BINGHAMTON	552	828	[illegible]
BUFFALO	495	720	637
NEW YORK U	270	333	263
J.F. KENNEDY	295	355	294
NEW YORK LA GUARDIA	256	325	250
ROCHESTER	458	664	581
SYRACUSE	473	672	581
NORTH CAROLINA			
ASHEVILLE	405	494	369
CAPE HATTERAS R	77	77	78
CHARLOTTE	231	233	130
GREENSBORO	237	251	225
RALEIGH	216	227	185
WILMINGTON	57	57	74
NORTH DAKOTA			
BISMARCK	577	902	861
FARGO	644	958	858
WILLISTON	592	876	936
	593	877	936
OHIO			
AKRON	445	606	486
CINCINNATI OBS	359	434	302
CLEVELAND	452	635	523
COLUMBUS	440	552	437
DAYTON	420	511	394
MANSFIELD	480	696	542
TOLEDO	451	614	539
YOUNGSTOWN	494	729	557
OKLAHOMA			
OKLAHOMA CITY	166	172	179
TULSA	202	215	176
OREGON			
ASTORIA	405	876	861
BURNS	548	817	774
EUGENE	352	461	563
MEACHAM	626	1179	1076
MEDFORD	352	442	450
PENDLETON	333	410	461
PORTLAND	345	444	502
SALEM	375	517	517
SEXTON SUMMIT R	397	887	776
PENNSYLVANIA			
ALLENTOWN	463	533	443
ERIE	420	586	518
HARRISBURG	312	381	361
PHILADELPHIA	362	445	351
PITTSBURGH	435	599	489
PITTSBURGH U	386	513	410
READING U	325	416	311
SCRANTON	451	622	585
WILLIAMSPORT	531	736	495
RHODE ISLAND			
BLOCK ISLAND	371	472	401
PROVIDENCE	417	554	484
SOUTH CAROLINA			
CHARLESTON	51	51	[illegible]
CHARLESTON U	28	28	24
COLUMBIA	127	127	84
GRNVLE-SPARTANBURG	202	208	137
SOUTH DAKOTA			
ABERDEEN	560	832	766
HURON	535	805	764
RAPID CITY	504	745	680
SIOUX FALLS	508	737	674
TENNESSEE			
BRISTOL	303	324	287
CHATTANOOGA	252	256	161
KNOXVILLE	232	241	201
MEMPHIS	227	236	149
NASHVILLE	255	268	188
OAK RIDGE	288	304	231
TEXAS			
ABILENE	119	[illegible]	[illegible]
AMARILLO	[illegible]	[illegible]	[illegible]
AUSTIN	31	31	[illegible]
BROWNSVILLE	4	4	[illegible]
CORPUS CHRISTI	5	5	0
DALLAS	80	80	62
DEL RIO	26	26	31
EL PASO	126	128	84
FORT WORTH	79	79	65
GALVESTON U	16	16	
HOUSTON U	24	24	0
HOUSTON	27	27	6
LUBBOCK	170	181	192
MIDLAND	159	166	87
PORT ARTHUR	46	46	22
SAN ANGELO	127	127	68
SAN ANTONIO	57	57	41
VICTORIA	17	17	5
WACO	52	52	43
WICHITA FALLS	119	121	99
UTAH			
MILFORD	478	560	542
SALT LAKE CITY	460	521	[illegible]
WENDOVER	452	489	[illegible]
VERMONT			
BURLINGTON	551	874	833
VIRGINIA			
LYNCHBURG	[illegible]	[illegible]	274
NORFOLK	191	213	[illegible]
RICHMOND	293	340	250
ROANOKE	317	[illegible]	[illegible]
WALLOPS ISLAND	257	[illegible]	
WASHINGTON			
OLYMPIA	485	874	[illegible]
QUILLAYUTE WBAS	479	1028	[illegible]
SEATTLE TACOMA	414	669	671
SPOKANE	544	[illegible]	[illegible]
STAMPEDE PASS R	723	1683	[illegible]
WALLA WALLA U	312	456	347
YAKIMA	394	463	606
WEST VIRGINIA			
BECKLEY	469	673	
CHARLESTON	315	360	317
ELKINS	531	782	569
HUNTINGTON	369	432	320
PARKERSBURG U	378	464	324
WISCONSIN			
GREEN BAY	531	863	736
LA CROSSE	450	627	621
MADISON	534	836	713
MILWAUKEE	496	[illegible]	725
WYOMING			
CASPER	609	778	738
CHEYENNE	526	744	803
LANDER	667	858	784
SHERIDAN	584	[illegible]	914

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

HURRICANE INEZ, SEPTEMBER 21 - OCTOBER 11

Richard M. De Angelis
Marine Branch, Evironmental Data Service

Hurricane Inez, winding its way through the northern Caribbean Sea, the Straits of Florida and the Gulf of Mexico, paid unwelcome visits to Guadeloupe, Hispaniola, Cuba, the Florida Keys and the Yucatan Peninsula before finally exhausting itself over the mountains of central Mexico. This great hurricane, with maximum winds exceeding 140 kt. and minimum pressure dropping to 927 mb. left a path of devastation, devastation which may total more than 1,000 dead and $200 million in damage when a final evaluation is made.

Inez, organizing some 1,400 mi. east of the tropical island of Trinidad on September 21, spent the first 5 days of its 21-day existence in the development stage. Under the watchful eyes of reconnaissance aircraft the storm matured to hurricane strength, while maintaining a west-northwesterly track and a forward speed of about 10 kt. Inez reached hurricane intensity on the 26th but it was not until the following day that its effects were first felt on land.

Generating winds up to 105 kt., with a central pressure of 961 mb., hurricane Inez battered the Leeward Islands from Antigua to Dominica with hurricane force winds, as its center passed over Guadeloupe on the 27th. Strong winds, high tides and torrential rains in Guadeloupe destroyed thousands of homes as small villages were virtually swept away. Total damage has been estimated near $50 million with 27 people killed and about 600 injured.

Hurricane Inez, continuing to intensify, traversed the eastern waters of the Caribbean and by the 28th was buffeting the southern coast of Puerto Rico with gale force winds. Although the storm was generating maximum winds of 130-150 kt. near its center, with a minimum pressure of 932 mb. the island was spared most of its fury when the storm's center passed about 75 mi. to the south. Maximum winds reached 26 kt. with gusts to 45 kt. along the southern coast. Mona Island, a short distance west of Puerto Rico, estimated winds near 60-70 kt. on the evening of the 28th.

Early on the 29th Inez reached its peak intensity when the central pressure dropped to 927 mb. generating maximum winds of 140 kt., and hurricane force winds outward 70 mi. from the center. Lashing the southern coast of the Dominican Republic, the severe hurricane made its way to the Barahona Peninsula where winds of 100 kt. or more raked the entire peninsula and tides 10-15 ft. above normal inundated the entire southern coast of the Dominican Republic. After ravaging the Barahona Peninsula, Inez turned its full fury on Haiti. Moving through the "Valley of Death," a deep trough between two mountain ranges on the Tiburon Peninsula of Haiti, the storm touched off torrential rains and local winds may well have exceeded 140 kt. Accelerating northwestward Inez passed over the island of Gonave late on the 29th pounding western Haiti with hurricane force winds, torrential rains and 10- to 15-ft. tides which flooded the northern shores of the Tiburon Peninsula.

Total damage in Hispaniola was estimated near $32 million -- $12 million in the Dominican Republic and $20 million in Haiti. Between 74 and 100 people lost their lives in the Dominican Republic while a rough estimate in Haiti puts the figure at 750. (In 1963 hurricane Flora moved through the same area in Haiti killing some 5,000 people and causing $125 million worth of damage.) Estimates of 1,000 people injured in Haiti and 450 seriously injured in the Dominican Republic have been reported.

After battering Hispaniola for more than 24 hr., Inez moved into the Caribbean again and reorganized for its invasion of Cuba. On the 30th of September the hurricane pushed into southeastern Cuba between Guantanamo City and Santiago. Minimum pressure at this time was near 985 mb. and Guantanamo City reported a sustained wind of 120 kt. The U. S. Naval Base at Guantanamo Bay was hammered as the storm crossed Oriente Province; none of the base personnel were seriously injured. More than 125,000 people were evacuated from low-lying coastal areas and only one death was reported as 6- to 10 ft. tides swept the southeastern coast. Cuba's Sierra Maestra Mountains left Inez weak and disorganized. Drifting northwestward, the storm spread heavy rains and strong winds over most areas in Oriente Province. Early on the 1st of October Inez turned westward and moved into the Gulf of Guacanaybo. Remaining over water only briefly, the weak storm turned northward and moved inland again near Trinidad, Cuba. Poorly organized and generating below hurricane force winds, Inez drifted northward and moved off the coast north of Santa Clara early on the 2d. Maximum winds at this time were 45 kt. and central pressure had risen to 994 mb.

Inez, moving into the Florida Straits, regenerated to hurricane strength late on the 2d some 95 mi. south-southeast of Miami. About this time the revitalized hurricane spawned a tornado in Nassau which killed one person and injured three others as it ripped across New Providence Island. Following a north-northeast course Inez continued to intensify; its renewed violence was felt on the 3d when a 23-ft. boat with 46 Cuban refugees aboard, sank in high seas about 35 mi. south of Miami with only one survivor. Maximum winds increased to 75 kt. and pressure dipped to 985 mb. as storm-generated gales battered the southeast Florida coast and the northern Bahama Islands. Inez moved just east of the Bimini Islands (100 mi. east of Miami) where it stalled for about 8 hr. and then unexpectedly turned west-southwestward toward the Florida Keys. Maximum winds were observed at Bimini -- 70 kt. -- and minor flooding occurred in the Bahamas as 1 ft. of water poured into Nassau's main street. Three people were killed, bringing the total in the Bahamas to five. Communication facilities were disrupted and total damage was estimated at $15.5 million.

About 60 mi. north of Nassau the 17,243-ton Liberian freighter, VERONA, was disabled in high seas and 65-kt. winds, but managed to ride out the storm when Coast Guard cutters were unable to reach her. As Inez moved toward the Keys a 353-ft. Panamanian vessel, the FREIGHT TRANSPORTER was disabled 10 mi. off the mainland near Miami while an 82-ft. Coast Guard Cutter, POINT THATCHER, was beached by gales and heavy surf just off Miami Beach.

The Miami area felt the brunt of the storm early on the 4th as the center passed 45 mi. southeast of the city. Maximum winds at the National Hurricane Center in Coral Gables reached 40 kt. with gusts to 52 kt. at 0935 EST, and the lowest pressure recorded was 995 mb. at 0713 EST. Gales in the area occurred intermittently up to 35 hr., ending late on the 4th. Except for a momentary gust of 80 kt. at Flamingo and 65 kt. at Homestead Air Force Base, no winds of hurricane force were recorded on the mainland.

The Florida Keys, battered by gales early on the 4th, began to feel the full force of the storm on the afternoon of the 4th. Part of the eye passed directly over the Keys on its west-southwesterly journey. Slowly intensifying as it moved through the Keys, the storm dealt its strongest winds after the passage of the eye. Lowest recorded pressure in the Keys was 983 mb. at Islamorada. Higest reported winds were 85 kt. at Plantation Key.

Tides along the southeast coast of Florida and in the Keys were about 2-4 ft. above normal. Hurricane force winds in the Keys generally lasted about 4 hr. Damage in Florida -- including the Keys -- was restricted to Dade, Broward, and Monroe Counties and totaled about $5 million. Forty-eight people lost their lives; 45 were Cuban refugees in a small boat.

Located just south of Dry Tortugas early on the 5th Inez, packing winds up to 90 kt. and with a central pressure of 985 mb., headed away from the Keys on a west-southwesterly track. Once again Cuba -- this time the northwestern section -- felt the fury of hurricane Inez as the storm's center passed 60 mi. northwest of Pinar Del Rio Province early on the 6th. Havana reported 12 in. of rain in 30 hr. as coastal sections west of the capital were battered by strong winds, torrential rains and high tides. In the low-lying coastal areas of Havana Province 21,000 people were evacuated because of the flooding and 4 people lost their lives, bringing Cuba's total to 5. Thirty people were injured in Cuba and total damage was estimated at $20 million. After lashing Cuba, Inez turned toward the Yucatan Peninsula.

While Inez moved through the Bahamas to the Yucatan Peninsula many ship reports confirmed the intensity of the storm. On the 3d the TEXACO NORTH DAKOTA, about 25 mi. southeast of Miami, reported a north wind of 50 kt. while the following day the P. W. THIRTLE, in the same area, reported an 85-kt. easterly wind, accompanied by a pressure of 994.9 mb. Late on the 4th the ESSO LIMA passed near the eye of the hurricane and recorded a 90-kt. wind with a pressure of 990.9 mb. The FLYING "A" DELAWARE within 80 mi. of the storm's center, on the 6th reported a 50-kt. wind. Late on the 6th and into the 7th the INGER was battered continuously by winds of 50-kt. or more for about 6 hr. as she sailed northward in the wake of the storm.

Intensifying slowly, the hurricane moved southwestward to within 50 mi. of the extreme northeastern tip of the Yucatan Peninsula by late on the 6th. At this time central pressure was 961 mb. and maximum winds reached 95 kt. Inez, changing to a west-southwesterly course, paralleled the Yucatan coast lashing the sparsely-populated coastal sections with hurricane force winds, high tides and torrential rains before departing late on the 7th. Evacuation of some 15,000 people from Progreso, in anticipation of the storm, held loss of life to a minimum. Thirteen fishermen were feared drowned in the backlash of the hurricane as it moved into the open waters of the southwestern Gulf of Mexico.

By the 8th Inez was well out to sea (330 mi. southeast of Brownsville, Texas). Energized by the warm waters of the Gulf of Mexico, the storm intensified with maximum winds reaching 115 kt. and pressure falling to 948 mb. The storm, continuing its erratic movement turned to a northwesterly track that threatened Texas. Preparations were made along the Texas-Louisiana coasts to remove offshore oil drillers. A helicopter, assisting in the evacuation, crashed off the Louisiana coast, killing all 11 people aboard.

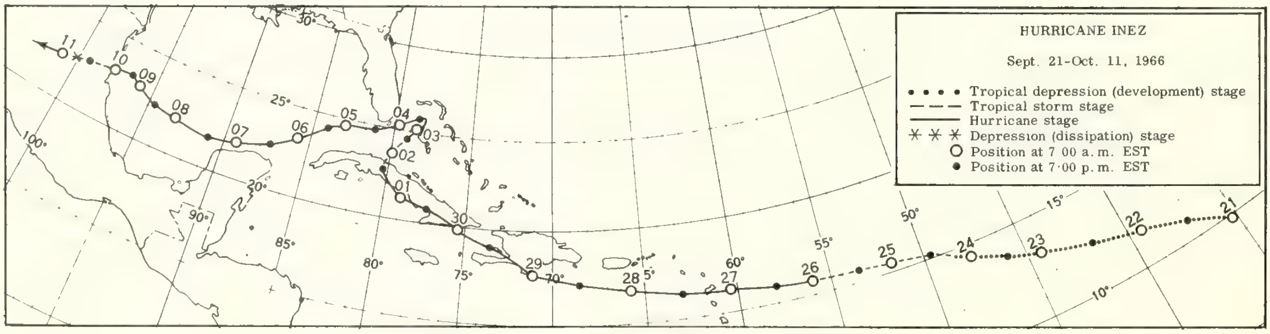
For the next 24 hr. the hurricane drifted northwestward, weakening slightly, and by late on the 9th the center was located about 200 mi. southeast of Brownsville. The central pressure was 960 mb. and maximum winds were 115 kt. Inez then turned toward the Mexican coast. On the 10th the hurricane moved inland about 40 mi. north of Tampico -- which was reporting 85-kt. winds with gusts to 95 kt. Tides 10-12 ft. above normal pummelled the coast just north of the eye, while torrential rains touched off extensive flash flooding in the southern half of the State of Tamaulipas. Soto la Marina, midway between Tampico and Brownsville, reported 10.12 in. of rain in 24 hr. Inez, moving inland over mountainous terrain, began to dissipate and, early on the 11th, about 70 mi. west of Tampico, finally exhausted itself. Mexico, hit extremely hard, reported 65 people killed with 250 injured and damage totaling an estimated $100 million.

TROPICAL CYCLONE DATA

HURRICANE INEZ, SEPT. 21-OCT. 11, 1966

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet)		Storm Rainfall (inches)	Remarks
		Low	Time+	Fastest Mile	Time+	Gusts	Time+	#	Time+		
PUERTO RICO											
Ponce (Mercedita Airport)	28			20	1300 A	30	1300 A				Eye passed 70 mi. south of Ponce at 1200 A.
Mona Island	28			70-80‡	1930 A						
FLORIDA											
Miami, NHC	4	29 38	0713	ENE 46	1035	ENE 60	0935	2.7	0713	2.51	Tides along the coast were about 3 ft. above normal. Three people were killed in Florida. Gales occurred intermittently for 34 hr. 45 min. at NHC.
Miami. WBAS	4	29 41	0640	NE 41	0754	NE 63	0750			3.24	Damage in Dade, Broward and Monroe Counties estimated at $5 million - $3.72 million in personal property and $1.25 million in crop.
Homestead AFB	4	29.24	1135	NNE 46	0955	NNE 79	0932			0.62	
Tavernier	4	29.11	1400	SE 90	1600	SSE 100+	1700	2.0		.97	
Plantation Key	4	29 22	1330	ESE 98	1645	ESE 110	1640			4.21	Florida Bay Tide 3.5 ft. above normal.
Grassy Key	4	29 10	1405	SSE 86	1855	SSE 92	1915	3.0		3.25	
Key West, WBAS	5	29.18	04/1936	SSE 84	0006	SSE 90	0013	4.25		4.15	Tides in Keys generally 2-4 ft. above normal.
Boca Chica, NAS	4	29 20		SE 69	2342	S 94	2342			1.19	
Ft. Meyers, WBAS	4	29 66	1600	E 35	1450	44	1450			0.09	Tides well below normal due to winds blowing offshore.
Dry Tortugas Coast Guard	5	29 15		E 92	0333	E 114	1000				
TEXAS											
Port Isabel	9	29.84	1830 C	ENE 17				2.20†	0400-0700 C	trace	
Brownsville	9	29 78	1555 C	N 22						trace	

+ Times are Eastern Standard except Central Standard (C) and Atlantic Standard (A) where indicated.
# Tide above normal.
‡ Estimated.
† Mean low water.


HURRICANE INEZ
Sept. 21-Oct. 11, 1966
• • • • Tropical depression (development) stage
— — — Tropical storm stage
——— Hurricane stage
✳ ✳ ✳ Depression (dissipation) stage
○ Position at 7 00 a.m. EST
● Position at 7·00 p.m. EST
11
10
09
08
07
06
05
04
03
02
01
30
29
28
27
26
25
24
23
22
21
30°
25°
20°
15°
10°
100°
90°
85°
80°
75°
70°
65°
60°
55°
50°

STORM SUMMARY

OCTOBER 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS	DEATHS	INJURIES	PROP-ERTY	CROPS
Alabama *																													
Alaska *																													
Arizona *																													
Arkansas																3													
California						0	0	2	0	1	0	4	0	0	0	4	0									1	31	3	5
Colorado										0	0	°4	C					3	0	°4	C								
Connecticut *																													
Delaware																										0	0	3	0
Florida	2	2	0	0	1									1														6	6
Georgia *																													
Hawaii																										0	0	4	
Idaho												?																6	
Illinois	1	1	0	20	6					0	1	°5	C																
Indiana *																													
Iowa	12	1	6	172	7	0	0	5	3	1	0	4	3	2	0	3	0	0	0	4	0								
Kansas										0	0	5	5					0	0	5	6								
Kentucky										1	2	3																	
Louisiana										0	0	6	0																
Maine	1	1	0	0	4					0	0	3	0																
Maryland																										0	0	4	0
Massachusetts										0	0	4	0													0	0	R4	0
Michigan										0	0	4	0	0	1	4	0												
Minnesota	1	1	0	1	3	0	0	5	5	0	0	4	5	0	0	4	0	0	0	3	3	0	0	4	4				
Mississippi														3	0	4	0												
Missouri	9	1	0	32	6	0	0	0	4																				
Montana *																													
Nebraska										0	0	6	5					0	0	6	5	0	0	6	5				
Nevada *																													
New Hampshire *																													
New Jersey *																													
New Mexico *																													
New York *																													
North Carolina *																													
North Dakota *																													
Ohio	1	1	0	3	5																								
Oklahoma *																													
Oregon	1	1	0	0	3																								
Pacific Area *																													
Pennsylvania *																													
Puerto Rico						0	0	°3	C																	2	0	°3	C
Rhode Island *																													
South Carolina	1	1	0	8	4																								
South Dakota						0	0	0	5	0	0	5	0	0	0	4	0												
Tennessee														0	0	3	0												
Texas										0	1	4	0													0	0	5	0
Utah *																													
Vermont										0	0	3	0																
U. S. Virgin Is.*																													
Virginia *																													
Washington *																													
West Virginia *																													
Wisconsin *																													
Wyoming *																													

° Includes crop damage
C Crop damage
R Rain

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
∅ For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.
† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

OCTOBER 1966

Elmer R. Nelson, Office of Hydrology

There was no significant flooding reported in the Country during October.

ATLANTIC SLOPE DRAINAGE

Heavy rains on the 19th caused light flooding on the Millstone River at Blackwells Mills, N. J., and on Assunpink Creek at Trenton, N. J., on the 19th and 20th. Rancoas Creek at Pemberton, N. J., reached, but did not exceed flood stage on the 20th. New 24-hour rainfall record amounts occurred through the central and northeastern portions of New Jersey. No flooding of importance occurred on larger streams but some flash flooding was reported on small streams. Flood damage occurred for the second consecutive month at Elizabeth, N. J.

Two to three occurrences of substantial rain during October brought the total rainfall for the month to above normal for southern and central New England and Maine. A flash flood bulletin for minor overflow of small streams and brooks in the southern two-thirds of Maine was issued by the Weather Bureau on the 20th.

In the Susquehanna Basin in Pennsylvania, precipitation during the month averaged 56 percent of normal. The average monthly flow of the Susquehanna River at Harrisburg, Pa., was 33 percent of the normal average monthly flow for October. Only minor rises occurred during the month.

In the Potomac Basin in Virginia and Maryland, precipitation (2.68 inches) during October averaged near normal. There was some minor flooding of small streams in central and northern Virginia, but no damage was reported.

Precipitation during the month ranged from 1 inch above normal over the Dan and upper Roanoke Basins in Virginia to more than 2 inches below normal at numerous locations along the lower reaches of the Cape Fear, Neuse, Roanoke, and Tar River Basins in eastern North Carolina. No flooding was reported during October. However, a sharp rise of 10 feet occurred along the middle reaches of the upper Roanoke from heavy precipitation (2.5 inches), on the 18th and 19th. Only minor rises of 2 to 4 feet were reported elsewhere in eastern North Carolina. The Tar River at Greenville, N. C., receded to a new low water record of 1.6 feet. The previous lowest stage of record at this point was 1.9 feet in 1925.

Total rainfall in South Carolina during the month ranged from about 1/4 inch along the coast to about 6 inches in the extreme upper Yadkin Basin near its source. Rainfall, in general, was below normal from the coast to the Fall line and above normal from the Fall line to the Blue Ridge Mountains. All streams remained well within their banks except for an 8- to 10-foot rise along the Yadkin beginning on the 19th following heavy rain. The upper Santee River at Rimini, S. C., approached within 4 feet of flood stage on the 25th.

MISSISSIPPI SYSTEM

Upper Mississippi Basin.--Although heavy rains (3 to 6 inches) occurred over southeastern Minnesota and parts of central Wisconsin from the 13th through the 15th, runoff was very light and no flooding was reported. Mean streamflow along the upper Mississippi River averaged near the long-term mean except in the reach from Brainerd to Minneapolis, Minn., where it averaged about 1 foot below. Compared to October 1965, streamflow this October averaged 3 feet below that of 1 year ago.

Ohio Basin.--An earth and concrete dam failure at Lake Latonka, Mercer County, Pa., on the 20th caused $50,000 in damages. Thirty families were evacuated from the low-lying sections of Mercer along Neshannock Creek. A powerline was washed out and several head of cattle were drowned. Routes 62 and 58 were closed to traffic for a short time. River levels elsewhere in the Ohio Basin above McMechen, W. Va., remained near seasonal levels with no flood stages being reached on the main rivers or major tributaries.

Minor flooding occurred on the South Chicamauga Creek near Chicamauga, Tenn., from the 18th to the 20th. No damage was reported.

Missouri Basin.--There was very little runoff from the occasional heavy rains in the basin due to the dry soil conditions. The streams remained low throughout the month.

Snow accumulations of 4 to 8 inches occurred in extreme northwestern Kansas on the 14th. This was one of the most severe snowstorms of record for the fall season in that area.

Arkansas Basin.--The Cimarron River at Perkins, Okla., had a monthly average stage of 1.7 feet which is a record low October average stage. The previous record low average stage was 1.8 feet recorded in 1956 and 1964. The normal average stage for this point is 4.2 feet. The Arkansas River at Van Buren, Ark., showed an average monthly stage of 5.9 feet, or 1.3 feet below normal.

Lower Mississippi Basin.--The lower Mississippi River remained at a low level during October. At Memphis, Tenn., the stage ranged from a low of 1 foot below zero (-1 foot) to 2.5 feet above the zero of the gage.

WEST GULF OF MEXICO DRAINAGE

The total rainfall during the month averaged near normal. Most of the rain occurred during the period from the 13th to the 18th, but had little effect on the rivers as the stages were low and the ground was dry.

Colorado Basin.--Some flash flooding occurred in Yuma County, Ariz., on the 4th. Timely warnings were issued by the Weather Bureau.

Great Basin.--Drought conditions continued during October. At Reno, Nev., only 0.75 inch of precipitation had been reported during the first 10 months of the year. This is less than 14 percent of the normal 5.5 inches for this period.

PACIFIC SLOPE DRAINAGE

Columbia Basin.--The Willamette River at Portland, Oreg., had an average stage of 2.5 feet during October. This was 0.2 foot below the mean October stage.

During the period from June through October the average stage at Portland ranked as the 10th lowest of record and the lowest since 1944. The record low stage for this period occurred in 1889.

FLOOD STAGE DATA

River and station	Flood stage	Above flood stages -dates		Crest*	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE	*Ft.*			*Ft.*	
Millstone: Blackwells Mills, N.J.	■	19	20	9.1	20
Rancocas Creek: Pemberton, N. J.	2.7	20	20	2.7	20

River and station	Flood stage	Above flood stages -dates		Crest*	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE	*Ft.*			*Ft.*	
Assunpink Creek. Trenton (Staff Gage), N.J.	5	19	20	5.5	19

* Provisional

RAWINSONDE DATA

Average monthly values

OCTOBER 1966

ALBANY, N. Y. 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	86	4.6	87	233	3.5
1000	31	140			235	4.1
950	31	563	6.7	68	263	10.9
900	31	1,005	5.1	63	278	15.5
850	31	1,471	3.6	57	281	17.7
800	31	1,962	1.9	57	275	19.8
750	31	2,481	.1	53	267	24.5
700	31	3,032	- 2.0	45	266	28.6
650	31	3,617	- 5.0	45	265	32.1
600	31	4,245	- 8.3	43	264	37.3
550	31	4,910	-12.3	43	264	40.0
500	31	5,638	-16.8	38	260	41.4
450	31	6,417	-22.1	36	260	46.8
400	31	7,277	-28.2	37	260	49.1
350	31	8,222	-35.1	39	253	51.7
300	31	9,280	-42.6	37	263	55.2
250	31	10,472	-47.6		264	57.7
200	31	11,934	-54.5		266	62.0
175	31	12,786	-55.6		266	57.5
150	31	13,766	-56.7		265	53.8
125	31	14,917	-58.3		268	43.3
100	31	16,316	-59.4		266	35.4
80	31	17,719	-57.7		264	25.6
70	31	18,562	-57.0		261	20.6
60	31	19,541	-56.0		262	16.1
50	31	20,703	-54.7		269	13.2
40	30	22,140	-53.6		276	12.0
30	29	23,996	-52.5		296	10.7
25	28	25,177	-51.8		314	8.9
20	28	26,627	-50.3		311	8.2
15	27	28,512	-48.1		306	10.7
10	25	31,208	-45.1		301	13.6
7	5	33,754	-41.0			

ALBUQUERQUE, N. MEX. 841 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,619	7.5	47	53	1.9
1000	31	159				
950	31	588				
900	31	1,047				
850	31	1,526				
800	31	2,030	10.6	38	265	3.7
750	31	2,563	7.6	41	276	8.5
700	31	3,129	4.6	42	283	11.5
650	31	3,724	.6	39	278	13.0
600	31	4,366	- 2.9	30	275	14.8
550	31	5,045	- 7.5	28	275	18.6
500	31	5,785	-11.8	R21	270	23.5
450	31	6,579	-17.0	R20	272	26.0
400	31	7,457	-23.6	R23	270	29.5
350	31	8,419	-30.7	R24	268	35.4
300	31	9,497	-38.[illegible]	R22	267	39.4
250	30	10,729	-46.9		263	45.3
200	30	12,178	-55.6		264	49.3
175	28	13,025	-59.5		266	44.3
150	28	13,951	-63.[illegible]		268	39.6
125	28	15,095	-65.8		268	35.7
100	26	16,443	-67.4		277	23.5
80	26	17,789	-66.8		289	15.2
70	24	18,605	-64.3		287	8.9
60	24	19,551	-62.3		276	6.8
50	23	20,685	-59.0		264	6.4
40	23	22,093	-56.4		286	3.1
30	19	23,940	-52.9		248	2.9
25	18	25,119	-51.3		274	2.7
20	16	26,568	-49.8		305	1.7
15	12	28,456	-48.0			

AMARILLO, TEXAS 893 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,095	7.6	63	240	5.1
1000	31	149				
950	31	583				
900	31	1,033				
850	31	1,507	12.8	42	253	10.1
800	31	2,014	11.0	39	257	11.1
750	31	2,553	8.1	41	257	13.2
700	31	3,117	5.2	37	267	12.4
650	31	3,717	1.7	37	267	14.4
600	31	4,359	- 2.2	30	263	16.7
550	31	5,043	- 6.2	25	266	20.8
500	31	5,784	-11.2	26	266	25.4
450	31	6,580	-17.0	28	267	31.3
400	31	7,458	-23.6	34	262	38.3
350	31	8,420	-30.8	37	260	44.3
300	31	9,495	-38.8	33	263	49.7
250	31	10,724	-47.1		263	60.2
200	30	12,178	-55.8		263	65.5
175	30	13,021	-59.6		263	64.9
150	30	13,976	-63.5		264	60.6
125	30	15,088	-66.1		266	49.1
100	30	16,433	-68.0		273	32.4
80	27	17,778	-66.0		282	18.3
70	27	18,591	-63.8		273	12.2
60	27	19,540	-61.6		264	6.6
50	27	20,679	-58.4		255	5.4
40	27	22,091	-55.5		265	3.1
30	26	23,932	-53.0		260	1.4
25	26	25,110	-51.5		300	.8
20	25	26,562	-50.1		348	.8
15	24	28,458	-47.2		11	1.7
10	13	31,157	-42.9			

ANCHORAGE, ALASKA 998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	45	- .4	67	25	1.0
1000	30	25			35	2.1
950	30	434	- 1.2	64	97	3.1
900	30	865	- 3.4	70	129	1.4
850	30	1,315	- 5.8	74	161	4.1
800	30	1,787	- 8.9	83	158	8.2
750	30	2,282	-11.9	83	162	10.1
700	30	2,809	-15.1	80	169	11.7
650	30	3,361	-18.5	71	173	12.6
600	30	3,958	-22.3	67	186	13.4
550	30	4,591	-26.6	62	191	12.4
500	30	5,274	-31.5	56	198	13.8
450	30	6,011	-36.9	57	201	15.2
400	30	6,817	-42.3	53	204	17.7
350	30	7,708	-48.0		216	21.6
300	30	8,713	-52.7		217	28.6
250	30	9,887	-52.7		227	29.3
200	30	11,335	-50.7		240	27.2
175	30	12,205	-50.5		243	25.3
150	30	13,209	-50.9		244	23.7
125	30	14,394	-51.5		242	23.7
100	30	15,840	-52.1		250	24.5
80	30	17,280	-53.1		248	23.3
70	29	18,147	-53.5		249	24.9
60	29	19,137	-54.1		253	24.5
50	29	20,305	-54.5		255	24.3
40	29	21,732	-54.9		258	27.0
30	28	23,555	-55.2		262	29.5
25	27	24,721	-55.0		265	30.1
20	25	26,148	-54.4		265	31.9
15	24	27,998	-54.1		269	31.9
10	8	30,544	-53.9			

* ANNETTE, ALASKA 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	37	6.9	83	153	6.0
1000	28	105			167	5.1
950	28	527	3.8	84	173	13.2
900	28	963	1.1	85	186	14.8
850	28	1,421	- 1.6	84	198	16.5
800	28	1,901	- 4.2	72	209	17.9
750	28	2,406	- 7.0	73	214	21.0
700	28	2,945	- 9.6	60	232	20.2
650	28	3,510	-13.1	54	236	22.7
600	28	4,120	-16.7	58	245	24.5
550	28	4,765	-20.9	58	248	26.8
500	28	5,467	-25.7	51	248	29.9
450	28	6,219	-30.9	50	251	35.7
400	28	7,051	-36.5	50	254	40.2
350	28	7,964	-43.[illegible]	50	259	44.9
300	28	8,989	-49.0		271	39.6
250	28	10,174	-52.4		267	43.5
200	28	11,612	-53.7		270	38.3
175	25	12,481	-53.8		275	42.0
150	25	13,469	-54.7		275	35.9
125	24	14,633	-54.8		274	33.8
100	24	16,060	-54.8		277	28.7
80	24	17,488	-54.8		268	24.7
70	24	18,340	-55.4		269	24.5
60	24	19,322	-55.9		268	22.0
50	24	20,483	-55.8		267	21.8
40	22	21,906	-55.9		263	23.3
30	20	23,736	-55.3		265	19.8
25	19	24,906	-55.1		270	23.5
20	19	26,334	-54.3		274	24.1
15	17	28,192	-53.6		280	21.8
10	15	30,811	-52.3			
7	9	33,189	-49.6			

ATHENS, GA. 989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	11.2	90	21	2.7
1000	31	155				
950	31	588	13.9	69	71	3.9
900	31	1,042	12.3	64	152	1.4
850	31	1,520	10.7	57	252	5.2
800	31	2,025	9.2	49	255	11.7
750	31	2,557	7.0	45	261	15.2
700	31	3,124	4.7	36	267	15.0
650	31	3,723	1.9	33	264	18.8
600	31	4,366	- 1.7	31	264	21.2
550	31	5,048	- 5.7	29	267	21.2
500	30	5,797	-10.4	26	267	24.9
450	30	6,591	-16.2	27	268	29.9
400	30	7,477	-22.8	32	270	34.8
350	30	8,443	-29.5	27	273	41.0
300	30	9,526	-37.4	26	273	48.0
250	30	10,762	-46.2		276	55.2
200	30	12,216	-54.8		278	63.7
175	30	13,062	-58.9		276	65.3
150	29	14,025	-63.0		276	63.3
125	29	15,138	-66.3		276	50.3
100	29	16,482	-68.2		272	33.0
80	28	17,829	-66.		273	17.9
70	28	18,644	-63.3		272	11.3
60	28	19,600	-59.6		247	3.5
50	28	20,747	-57.3		56	2.1
40	28	22,164	-55.2		76	8.4
30	27	24,006	-52.9		68	12.2
25	27	25,187	-51.3		66	11.5
20	26	26,644	-48.7		64	11.7
15	25	28,549	-46.3		57	[illegible].9
10	12	31,293	-42.8			

* BARROW, ALASKA 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	- 7.3	90	89	7.2
1000	31	104			90	7.0
950	31	501	- 9.4	89	78	11.3
900	31	919	-10.7	84	61	11.1
850	31	1,358	-12.1	78	92	10.1
800	31	1,820	-13.7	67	92	9.5
750	31	2,312	-16.1	64	89	8.2
700	31	2,826	-18.2	58	94	7.2
650	31	3,378	-21.2	58	101	7.6
600	31	3,964	-24.7	55	110	6.8
550	31	4,593	-28.6	46	107	6.4
500	31	5,269	-33.5	37	104	6.0
450	31	6,001	-38.6	34	108	4.9
400	31	6,803	-44.1		108	6.0
350	31	7,688	-50.2		122	6.0
300	31	8,681	-56.3		124	5.8
250	31	9,828	-59.0		129	3.5
200	31	11,241	-54.6		215	4.7
175	30	12,101	-53.9		238	6.8
150	30	13,091	-53.6		239	8.9
125	30	14,263	-53.7		239	11.1
100	29	15,691	-54.1		244	13.2
80	29	17,118	-55.1		250	15.7
70	29	17,968	-55.7		252	16.9
60	28	18,932	-56.5		250	19.6
50	28	20,086	-57.3		256	19.6
40	26	21,496	-58.1		249	23.7
30	24	23,334	-58.5		256	28.9
25	22	24,501	-58.3		256	30.7
20	19	25,964	-57.7		258	33.6
15	16	27,866	-56.5		253	35.4
10	13	30,566	-54.6		252	37.9

BARTER IS., ALASKA 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	15	- 6.8	80	111	7.0
1000	30	97			106	7.2
950	30	496	- 8.1	89	102	11.7
900	30	916	- 8.9	77	105	8.9
850	30	1,358	-10.4	67	110	7.6
800	30	1,823	-12.5	67	123	8.4
750	30	2,315	-14.8	66	122	9.5
700	30	2,834	-17.7	62	126	9.5
650	30	3,380	-20.8	55	131	9.3
600	30	3,973	-24.6	52	135	7.4
550	30	4,595	-28.8	49	138	7.4
500	30	5,278	-33.4	46	137	6.6
450	30	6,005	-38.6	47	143	6.0
400	30	6,812	-44.1		135	7.0
350	30	7,696	-50.0		125	8.5
300	30	8,690	-55.9		132	7.8
250	30	9,844	-57.3		190	7.4
200	30	11,270	-53.1		231	8.4
175	29	12,131	-52.5		233	10.7
150	29	13,127	-52.7		241	13.8
125	29	14,304	-52.8		243	14.2
100	28	15,746	-53.2		248	17.1
80	27	17,181	-54.2		251	18.6
70	27	18,035	-54.8		254	18.6
60	25	19,002	-56.0		256	20.6
50	25	20,159	-57.0		254	22.9
40	23	21,561	-57.9		258	28.2
30	22	23,378	-58.9		260	32.8
25	19	24,548	-59.0		263	36.9
20	15	26,043	-57.8		265	35.5
15	10	27,969	-56.3			
10	6	30,780	-54.4			

BETHEL, ALASKA 1000 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	39	- 3.8	85	322	1.7
1000	31	34			343	9.9
950	31	437	- 4.6	82	5	3.3
900	31	865	- 7.3	86	14	1.7
850	31	1,309	- 9.7	86	313	1.7
800	31	1,776	-12.3	79	292	2.9
750	31	2,265	-15.1	70	292	3.5
700	31	2,787	-18.1	66	265	4.1
650	31	3,331	-21.6	61	281	3.9
600	31	3,923	-25.3	56	265	3.9
550	31	4,539	-29.5	52	275	5.1
500	31	5,224	-34.1	49	256	5.1
450	31	5,945	-39.1	55	244	6.0
400	31	6,752	-44.8		236	6.6
350	31	7,637	-49.0		231	10.5
300	31	8,642	-51.3		258	15.5
250	31	9,828	-50.3		261	18.3
200	31	11,290	-49.2		261	18.6
175	31	12,166	-49.3		258	19.6
150	31	13,176	-49.9		258	20.4
125	31	14,365	-50.8		259	21.2
100	31	15,817	-51.2		261	21.2
80	31	17,263	-52.5		261	23.3
70	31	18,124	-52.9		264	24.7
60	31	19,119	-53.5		260	25.1
50	30	20,289	-53.8		264	26.8
40	29	21,716	-54.3		266	28.9
30	29	23,560	-54.3		269	34.0
25	28	24,732	-54.1		277	38.3
20	27	26,171	-53.7		271	38.9
15	18	28,025	-52.9		281	39.0
10	6	30,748	-51.1			

BISMARCK, N. DAK. 954 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	505	2.0	78	333	2.9
1000	30	119				
950	30	540			296	3.1
900	30	981	7.7	48	295	12.2
850	30	1,450	5.4	49	305	15.3
800	30	1,943	2.6	51	306	18.8
750	30	2,461	- .2	48	307	22.3
700	30	3,013	- 3.4	48	302	26.2
650	30	3,591	- 6.8	51	300	27.0
600	30	4,216	-10.5	53	298	31.1
550	30	4,874	-14.6	52	296	33.8
500	30	5,596	-19.5	52	294	35.5
450	30	6,363	-24.8	50	296	38.7
400	30	7,219	-30.8	46	290	41.2
350	30	8,154	-37.5	43	288	44.1
300	30	9,200	-45.2		288	47.0
250	30	10,397	-52.1		286	47.2
200	30	11,826	-55.6		288	49.9
175	30	12,675	-56.4		284	47.6
150	30	13,651	-57.5		281	42.7
125	30	14,802	-57.7		284	40.6
100	30	16,208	-57.8		283	32.8
80	30	17,613	-58.0		289	25.4
70	28	18,458	-57.4		289	21.0
60	27	19,439	-57.3		290	18.5
50	26	20,590	-56.7		284	15.3
40	26	22,010	-55.2		278	14.6
30	25	23,853	-53.1		275	14.8
25	25	25,029	-52.5		269	16.5
20	23	26,475	-51.3		266	21.0
15	20	28,339	-49.6		268	25.1
10	19	31,019	-47.5		263	37.5
7	11	33,390	-45.0			

BOISE, IDAHO 920 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	868	4.4	66	135	3.7
1000	31	180				
950	31	604				
900	31	1,047	8.8	51	146	1.0
850	31	1,521	8.7	44	250	3.5
800	31	2,020	5.9	45	271	6.8
750	31	2,547	2.9	45	281	12.0
700	31	3,102	- .3	46	282	13.4
650	31	3,690	- 3.4	46	287	16.1
600	31	4,321	- 6.8	42	289	18.6
550	31	4,990	-11.0	41	289	21.0
500	31	5,721	-15.7	43	288	23.3
450	31	6,503	-21.4	44	287	25.4
400	31	7,367	-27.7	42	287	28.9
350	31	8,313	-34.6	40	289	30.7
300	31	9,372	-42.6	33	288	34.2
250	31	10,583	-50.6		292	37.1
200	31	12,012	-57.4		294	38.5
175	31	12,851	-59.4		289	36.9
150	31	13,813	-60.8		285	34.4
125	31	14,943	-61.9		283	33.6
100	30	16,321	-62.1		278	29.9
80	28	17,700	-61.3		278	22.7
70	28	18,529	-60.4		275	19.2
60	28	19,491	-59.3		279	15.2
50	27	20,634	-58.7		273	12.0
40	27	22,042	-56.8		281	11.8
30	26	23,876	-54.1		270	13.6
25	26	25,049	-52.8		267	14.0
20	25	26,495	-51.5		265	17.5
15	22	28,378	-49.8		266	21.8
10	14	31,054	-46.6			

* BOOTHVILLE, LA. 1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1	19.9	87	14	5.8
1000	31	135	20.6	79	27	7.6
950	31	580	18.2	76	69	8.5
900	31	1,040	16.0	70	65	3.7
850	31	1,526	14.0	55	272	.8
800	31	2,037	12.5	52	297	2.5
750	31	2,578	10.0	45	306	4.7
700	31	3,148	7.6	41	296	6.0
650	30	3,751	4.5	42	291	7.2
600	30	4,403	.8	45	296	9.1
550	30	5,091	- 3.6	39	285	11.1
500	30	5,843	- 8.5	34	277	13.4
450	30	6,646	-14.1	30	276	15.7
400	30	7,536	-20.3	32	275	18.8
350	30	8,512	-26.5	34	276	22.9
300	30	9,607	-34.[illegible]	33	271	29.3
250	30	10,856	-44.1		269	34.2
200	29	12,315	-54.2		274	40.6
175	28	13,168	-59.4		276	40.6
150	27	14,119	-64.8		274	36.1
125	26	15,216	-69.7		275	34.4
100	26	16,532	-72.6		273	24.3
80	26	17,852	-69.1		275	11.1
70	25	18,655	-65.6		278	5.1
60	25	19,600	-61.7		45	.8
50	25	20,735	-59.4		110	4.3
40	25	22,142	-56.1		76	7.0
30	25	23,981	-53.3		72	9.5
25	25	25,159	-51.5		76	11.8
20	25	26,616	-48.9		60	8.9
15	24	28,522	-45.7		62	8.0
10	14	31,211	-41.2		336	7.2

* BROWNSVILLE, TEXAS 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	7	18.6	93	330	2.5
1000	31	132	21.5	82	6	4.1
950	31	580	19.5	80	88	6.4
900	31	1,042	17.0	74	99	6.4
850	31	1,529	15.1	62	93	4.7
800	31	2,042	13.2	53	64	4.5
750	30	2,583	10.6	47	41	4.7
700	30	3,155	7.8	43	17	3.3
650	30	3,763	4.5	41	14	4.3
600	30	4,411	.8	40	336	3.1
550	30	5,097	- 3.4	38	305	3.7
500	30	5,853	- 8.2	31	273	5.1
450	30	6,658	-13.5	26	264	6.0
400	30	7,551	-19.3	27	261	11.1
350	30	8,530	-26.2	29	263	15.7
300	30	9,627	-34.3	31	258	20.4
250	30	10,878	-43.8		258	24.7
200	29	12,339	-54.4		267	28.7
175	29	13,183	-60.3		267	28.9
150	29	14,131	-66.0		264	25.8
125	29	15,221	-71.9		263	22.0
100	26	16,524	-76.7		275	12.0
80	25	17,814	-72.5		298	4.5
70	25	18,607	-68.0		67	4.1
60	24	19,539	-64.5		100	6.6
50	23	20,663	-61.7		100	9.5
40	23	22,056	-58.2		87	9.9
30	23	23,883	-54.3		72	12.6
25	23	25,059	-51.5		71	13.8
20	22	26,517	-48.4		79	10.1
15	21	28,424	-45.3		56	7.2
10	19	31,174	-40.4		77	3.9
7	15	33,609	-37.2		228	8.0
5	7	35,947	-34.5			

BUFFALO, N. Y. 990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	218	6.4	79	221	5.8
1000	31	134				
950	31	557	7.0	69	240	15.0
900	31	1,000	5.3	62	257	19.0
850	31	1,465	3.1	59	263	21.4
800	31	1,955	1.0	55	261	23.9
750	31	2,471	- 1.0	55	264	25.8
700	31	3,021	- 3.2	49	263	29.3
650	31	3,602	- 6.0	46	266	32.1
600	31	4,227	- 9.4	42	265	34.6
550	31	4,892	-13.4	38	264	38.5
500	31	5,614	-18.1	35	252	42.5
450	31	6,389	-23.3	34	261	46.8
400	31	7,246	-29.1	33	260	49.1
350	31	8,188	-35.8	36	262	54.6
300	31	9,243	-42.9		264	57.1
250	31	10,453	-49.7		268	56.1
200	31	11,896	-54.4		267	61.6
175	31	12,749	-55.2		268	59.6
150	31	13,731	-56.1		269	52.4
125	31	14,886	-57.6		270	42.7
100	31	16,289	-58.8		266	34.0
80	31	17,695	-57.5		266	31.3
70	31	18,539	-56.8		268	23.9
60	31	19,516	-56.2		262	16.1
50	30	20,675	-54.9		263	14.8
40	30	22,105	-53.8		275	13.6
30	27	23,965	-52.0		280	11.7
25	26	25,149	-51.4		280	13.6
20	25	26,606	-50.3		285	14.8
15	24	28,495	-48.6		291	18.3
10	17	31,122	-46.6			
7	7	33,513	-44.3			

*CANTON IS., PACIFIC AREA + 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	30.4	62	80	12.8
1000	31	87	28.5	62	79	13.0
950	31	530	22.9	68	80	15.0
900	31	1,008	19.5	66	89	16.1
850	31	1,499	17.3	50	95	16.5
800	31	2,016	16.1	36	94	14.8
750	31	2,561	14.2	27	90	13.0
700	31	3,141	11.2	24	89	12.4
650	31	3,754	7.3	25	81	13.0
600	31	4,409	3.5	22	86	12.6
550	31	5,106	- .3	21	93	11.5
500	31	5,866	- 4.5	20	92	9.7
450	31	6,686	- 9.3	20	92	7.8
400	31	7,590	-15.2	19	106	7.2
350	31	8,585	-22.3	19	120	8.7
300	31	9,698	-30.9	19	145	10.5
250	31	10,964	-41.2		170	10.1
200	31	12,441	-53.3		187	7.8
175	31	13,287	-60.3		208	6.6
150	31	14,232	-67.7		231	6.8
125	31	15,308	-75.4		217	7.2
100	31	16,580	-80.3		106	5.2
80	31	17,866	-70.8		88	5.2
70	30	18,664	-67.5		268	4.3
60	29	19,601	-62.8		264	8.9
50	29	20,734	-59.6		271	13.4
40	29	22,139	-56.9		271	21.0
30	29	23,976	-53.4		267	27.0
25	28	25,152	-52.0		270	28.7
20	25	26,611	-49.2		270	24.9
15	24	28,519	-44.9		266	15.3
10	19	31,254	-39.8		84	26.0
7	6	33,715	-33.4			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* CAPE HATTERAS, N. C.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	16.9	81	8	5.8
1000	31	141	17.2	70	9	6.6
950	31	575	14.3	72	24	5.8
900	31	1,033	11.6	68	301	2.5
850	31	1,510	10.4	57	267	9.1
800	31	2,014	8.8	49	263	13.2
750	31	2,545	6.6	45	258	14.4
700	31	3,111	4.1	39	264	17.7
650	31	3,705	1.1	34	263	20.2
600	31	4,350	-2.5	35	257	21.8
550	31	5,029	-6.3	30	257	23.1
500	31	5,776	-10.6	30	258	27.4
450	31	6,569	-16.8	31	259	31.9
400	31	7,450	-23.4	31	261	37.1
350	31	8,415	-30.1	33	259	40.2
300	31	9,495	-38.0	35	261	45.5
250	31	10,729	-46.2		266	55.6
200	30	12,187	-54.7		272	60.4
175	29	13,027	-58.6		273	61.2
150	28	13,982	-61.9		276	49.3
125	28	15,101	-65.1		271	42.2
100	28	16,454	-66.8		266	33.4
80	28	17,810	-64.2		266	19.8
70	28	18,631	-61.7		265	11.8
60	28	19,589	-59.3		264	9.9
50	28	20,738	-57.1		274	3.5
40	28	22,155	-55.3		44	3.7
30	28	23,999	-53.2		63	11.5
25	28	25,178	-51.6		67	11.5
20	28	26,631	-50.1		57	7.2
15	23	28,528	-46.9		40	6.6
10	5	31,240	-43.8			
7						

* CARIBOU, ME.
990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	191	3.0	89	247	5.4
1000	31	103				
950	31	522	4.3	74	254	12.0
900	31	960	2.4	72	270	16.7
850	31	1,421	.8	68	273	19.0
800	31	1,906	-.9	62	266	22.0
750	31	2,421	-3.0	53	265	25.3
700	31	2,964	-5.2	54	266	28.9
650	31	3,541	-8.1	50	266	31.3
600	30	4,161	-11.9	43	268	36.1
550	30	4,819	-15.6	41	266	42.2
500	30	5,535	-20.7	39	266	47.4
450	30	6,301	-25.2	37	265	50.5
400	29	7,152	-31.1	36	263	53.6
350	29	8,086	-37.7	37	261	58.7
300	29	9,134	-44.2		265	63.3
250	29	10,340	-49.9		265	64.5
200	29	11,785	-53.2		262	61.6
175	29	12,645	-53.1		263	56.9
150	29	13,637	-53.9		263	50.1
125	29	14,805	-55.0		262	42.2
100	29	16,227	-55.1		257	34.0
80	29	17,651	-55.4		260	21.8
70	29	18,502	-55.0		258	18.8
60	29	19,489	-54.5		259	19.4
50	29	20,656	-54.3		263	19.2
40	29	22,088	-54.1		262	16.5
30	29	23,939	-52.7		277	15.0
25	28	25,119	-51.5		287	13.8
20	26	26,564	-50.8		295	11.3
15	25	28,437	-49.0		295	14.2
10	13	31,089	-45.6		297	17.9
7						

CHARLESTON, S. C.
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	13	14.7	88	7	4.7
1000	31	147	17.2	81	30	6.4
950	31	588	16.4	68	61	6.4
900	31	1,045	14.2	62	60	1.7
850	31	1,526	12.2	57	255	4.3
800	31	2,034	10.4	53	265	8.7
750	31	2,568	8.1	41	263	10.9
700	31	3,136	5.5	37	264	13.2
650	31	3,736	2.6	32	265	15.3
600	31	4,383	-1.0	29	264	16.1
550	31	5,067	-5.2	27	268	18.6
500	31	5,815	-10.2	28	268	21.6
450	31	6,616	-15.7	25	268	25.3
400	31	7,499	-22.0	29	272	28.9
350	31	8,466	-29.1	31	269	34.2
300	31	9,551	-36.9	28	272	40.8
250	31	10,790	-45.3		271	48.2
200	31	12,247	-54.9		274	51.5
175	31	13,091	-59.6		275	51.5
150	31	14,045	-64.0		275	49.3
125	31	15,151	-67.6		274	39.2
100	31	16,484	-69.6		272	26.6
80	30	17,820	-66.9		266	14.6
70	30	18,632	-63.6		259	9.7
60	30	19,585	-60.3		255	3.5
50	30	20,728	-58.2		85	2.3
40	29	22,139	-56.1		74	6.4
30	29	23,981	-52.8		77	9.5
25	28	25,158	-51.4		74	8.4
20	26	26,613	-49.7		69	6.6
15	22	28,529	-45.9		48	5.2
10	6	31,211	-42.9			
7						

* COLD BAY, ALASKA
1004 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	.7	84	288	8.4
1000	31	60			300	9.7
950	31	472	-.4	72	293	14.8
900	31	[illegible]	-3.6	80	287	17.5
850	31	1,352	-6.8	83	287	16.9
800	31	1,823	-9.6	[illegible]	285	19.2
750	31	[illegible]	-12.0	58	284	22.0
700	31	2,844	-14.7	53	283	24.1
650	31	3,401	-17.8	50	279	28.2
600	31	3,997	-21.2	47	273	29.7
550	31	4,631	-25.3	45	270	31.7
500	31	5,320	-29.9	44	271	35.0
450	31	6,056	-34.8	41	266	37.3
400	31	6,876	-40.4	38	257	39.4
350	31	7,776	-45.8		256	39.0
300	31	8,792	-49.9		257	42.9
250	31	9,979	-50.8		254	41.8
200	31	11,435	-50.0		258	35.4
175	31	12,308	-49.8		258	34.0
150	31	13,315	-50.5		261	33.8
125	31	14,503	-51.1		258	31.5
100	31	15,753	-51.4		252	27.4
80	31	17,399	-52.2		252	24.1
70	30	18,253	-52.3		253	24.1
60	30	19,249	-52.7		253	24.5
50	30	20,425	-52.7		257	30.3
40	30	21,865	-52.8		259	27.6
30	30	23,724	-52.3		265	23.1
25	29	24,901	-52.4		265	23.5
20	28	26,342	-52.2		264	24.7
15	22	28,206	-51.7		275	27.4
10	18	30,831	-50.8		272	42.5
7	11	33,131	-49.6			

COLUMBIA, MO.
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	238	[illegible]	[illegible]	[illegible]	[illegible]
1000	31	145				
950	31	569	[illegible]	[illegible]	243	8.4
900	31	1,020	[illegible]	47	[illegible]	[illegible]
850	31	1,493	[illegible]	[illegible]	[illegible]	[illegible]
800	31	1,991	[illegible]	44	266	[illegible]
750	31	2,513	3.7	[illegible]	265	[illegible]
700	31	3,076	1.4	[illegible]	[illegible]	[illegible]
650	31	3,665	[illegible]	[illegible]	[illegible]	[illegible]
600	31	4,302	[illegible]	[illegible]	261	[illegible]
550	31	4,972	[illegible]	31	282	[illegible]
500	31	5,709	-14.7	[illegible]	278	[illegible]
450	31	6,489	-20.4	[illegible]	[illegible]	[illegible]
400	31	7,361	[illegible]	[illegible]	279	[illegible]
350	31	8,311	-33.7		[illegible]	[illegible]
300	31	9,376	-40.7	[illegible]	[illegible]	[illegible]
250	31	10,597	[illegible]		276	[illegible]
200	31	12,044	[illegible]		275	[illegible]
175	31	12,891	[illegible]		276	65.1
150	31	13,855	[illegible]		277	[illegible]
125	31	[illegible]	[illegible]		278	48.4
100	31	16,357	[illegible]		277	[illegible]
80	31	17,727	[illegible]		273	[illegible]
70	31	[illegible]	[illegible]		273	[illegible]
60	31	19,511	[illegible]		274	14.8
50	30	20,656	[illegible]		268	[illegible]
40	30	22,076	[illegible]		[illegible]	[illegible]
30	30	23,925	[illegible]		277	[illegible]
25	29	25,106	[illegible]		285	4.9
20	28	26,562	[illegible]		264	5.8
15	23	28,450	-47.8		297	6.6
10						
7						

DAYTON, OHIO
983 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	297	6.0	83	226	2.5
1000	31	156				
950	31	581	8.5	61	245	8.4
900	31	1,025	6.7	54	271	12.6
850	31	1,493	5.1	48	279	15.5
800	31	1,987	3.3	44	275	18.3
750	31	2,507	1.9	40	265	19.6
700	31	3,063	-.5	39	263	22.9
650	31	3,647	-3.4	39	265	26.4
600	31	4,282	-6.8	35	265	30.5
550	31	4,952	-10.5	31	267	33.8
500	31	5,684	-15.0	31	267	36.1
450	31	6,469	-20.3	30	267	42.0
400	31	7,336	-26.7	32	268	45.6
350	31	8,287	-33.6	32	269	50.3
300	31	9,351	-41.6	38	272	54.4
250	31	10,566	-49.6		271	60.0
200	31	12,006	-55.6		268	62.2
175	31	12,853	-57.6		269	59.6
150	31	13,821	-59.6		272	53.8
125	31	14,957	-61.4		271	45.1
100	31	16,336	-62.5		273	33.6
80	31	17,718	-60.7		272	24.1
70	31	18,551	-59.1		269	20.2
60	31	19,519	[illegible]		265	15.7
50	30	20,671	-56.1		267	13.0
40	30	22,096	-54.2		271	9.5
30	30	23,951	-52.2		276	5.2
25	30	25,133	-51.2		299	2.7
20	30	26,588	-49.6		315	6.6
15	26	28,474	-47.8		335	7.2
10	9	31,128	-46.5			
7						

DEL RIO, TEXAS
981 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	314	14.9	68	66	3.3
1000	31	148				
950	31	585	17.1	58	126	6.6
900	31	1,046	15.7	58	160	8.5
850	31	1,530	14.4	53	177	6.2
800	31	2,041	12.9	49	211	2.9
750	31	2,579	10.2	46	271	2.7
700	31	3,153	7.0	43	265	6.6
650	31	3,756	3.6	44	260	10.3
600	31	4,406	.1	40	264	10.9
550	31	5,095	-3.8	29	267	11.3
500	31	5,847	-8.3	29	267	13.2
450	31	6,651	-14.0	25	266	16.5
400	31	7,541	-20.4	25	266	17.5
350	31	8,517	-27.5	24	268	22.3
300	31	9,608	-35.6	28	265	27.2
250	31	10,853	-44.7		266	33.4
200	31	12,313	-54.7		264	39.0
175	31	13,157	-60.2		263	40.2
150	31	14,105	-65.6		259	40.8
125	30	15,197	-70.8		261	[illegible]
100	30	16,507	-73.6		[illegible]	[illegible]
80	29	17,825	-69.5		274	7.0
70	29	18,626	-66.4		266	3.5
60	29	19,567	-62.7		193	2.3
50	29	20,700	-59.7		118	4.3
40	29	22,101	-57.3		70	5.2
30	29	23,934	-54.0		79	8.7
25	29	25,109	-52.0		69	10.9
20	29	26,560	-49.9		67	7.0
15	18	28,464	-46.9		57	4.3
10	8	31,125	-42.8			
7						

DENVER, COLO.
839 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,611	4.6	57	209	3.1
1000	31	155				
950	31	581				
900	31	1,030				
850	31	1,501				
800	31	2,000	8.8	42	275	5.8
750	31	2,528	6.8	36	299	10.1
700	31	3,096	3.5	36	301	12.6
650	31	3,687	-.9	40	300	16.5
600	31	4,327	-5.1	42	293	20.0
550	31	4,995	-9.4	41	292	19.8
500	31	5,735	-14.5	38	286	21.0
450	31	6,516	-20.0	[illegible]	283	24.3
400	31	7,387	-26.3	34	284	29.1
350	31	8,339	-33.4	31	284	34.4
300	31	9,403	-41.0	22	282	38.1
250	31	10,623	-48.7		278	44.5
200	31	12,066	-55.4		272	47.2
175	31	12,911	-58.6		[illegible]	48.8
150	31	13,875	-60.6		[illegible]	47.4
125	31	[illegible]	-62.4		274	43.1
100	30	[illegible]	[illegible]		[illegible]	[illegible]
80	30	17,757	-63.2		274	23.5
70	30	18,581	-61.5		275	16.7
60	30	19,541	-59.5		[illegible]	11.1
50	30	20,686	-58.2		278	9.5
40	29	22,099	-55.6		265	8.4
30	29	23,945	-52.9		263	11.1
25	28	25,129	-50.8		262	11.5
20	28	26,587	-49.9		262	11.3
15	[illegible]	[illegible]	[illegible]		255	12.4
10						
7						

DODGE CITY, KANS.
925 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	791	7.3	65	239	4.9
1000	31	143				
950	31	571				
900	31	1,020	11.9	48	240	7.0
850	31	1,499	11.9	37	257	9.7
800	31	2,004	9.6	33	278	10.9
750	31	2,538	6.5	33	282	13.0
700	31	3,100	3.7	33	285	15.3
650	31	3,693	.1	31	280	15.7
600	31	4,335	-3.9	32	276	17.5
550	31	5,010	-8.3	27	275	22.3
500	31	5,749	-13.3	27	271	27.2
450	31	6,536	-19.1	32	271	32.4
400	31	7,410	-25.6	33	271	40.0
350	31	8,364	-32.7	30	270	46.8
300	31	9,433	-40.3	23	268	53.2
250	31	10,655	-48.4		268	61.0
200	31	12,098	-56.1		268	66.4
175	31	12,940	-59.4		269	66.6
150	31	13,899	-62.1		271	61.8
125	31	15,019	-64.4		276	45.6
100	31	16,376	-66.0		272	34.2
80	31	17,733	-64.5		274	21.0
70	31	18,551	-62.9		277	16.3
60	31	19,503	-61.1		275	12.6
50	31	20,641	-58.5		263	[illegible]
40	31	22,052	-55.9		253	8.2
30	30	23,891	-52.7		252	6.4
25	28	25,069	-51.6		235	4.1
20	27	26,518	-50.0		263	1.7
15	26	28,400	-48.3		284	3.5
10	25	31,080	-45.2		283	9.5
7	10	33,451	-43.8			

EL PASO, TEXAS
884 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,193	10.7	53	337	1.9
1000	31	150				
950	31	585				
900	31	1,043				
850	31	1,524	14.4	41	54	.8
800	31	2,034	[illegible]	44	214	3.7
750	31	2,567	9.3	42	248	6.4
700	31	3,142	5.9	[illegible]	252	10.1
650	31	3,739	2.6	36	247	14.4
600	31	4,390	-1.1	26	255	15.9
550	31	[illegible]	-5.1	[illegible]	260	[illegible]
500	31	5,823	-10.0	24	260	[illegible]
450	31	6,622	-15.8	21	257	25.1
400	31	7,507	-21.8	[illegible]	[illegible]	[illegible]
350	31	8,479	-28.7	25	260	[illegible]
300	30	9,565	-36.8	24	260	37.5
250	30	10,805	-45.7		256	44.7
200	30	12,261	-55.4		254	54.4
175	30	13,104	-60.0		255	[illegible]
150	30	14,056	-64.4		257	[illegible]
125	30	15,160	-68.6		261	39.4
100	30	16,487	-70.8		268	23.1
80	[illegible]	17,814	[illegible]		265	11.7
70	30	18,619	-65.2		284	[illegible]
60	30	19,564	[illegible]		257	[illegible]
50	29	[illegible]	[illegible]		[illegible]	[illegible]
40	29	22,105	-56.4		[illegible]	[illegible]
30	27	[illegible]	-53.5		[illegible]	7.4
25	26	25,125	-51.7		[illegible]	[illegible]
20	26	26,579	-49.8		[illegible]	7.6
15	22	28,475	-47.2		[illegible]	[illegible]
10	7	31,168	-42.3			
7						

ELY, NEV.
812 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,908	.1	62	198	5.6
1000	31	197				
950	31	621				
900	31	1,070				
850	31	1,537				
800	31	2,028	5.4	48	209	3.5
750	31	2,557	5.0	40	297	1.2
700	31	3,118	1.9	37	303	5.2
650	31	3,709	-1.3	34	300	9.5
600	31	4,347	-5.1	34	291	12.8
550	31	5,020	-9.1	32	291	[illegible]
500	31	5,757	-13.9	29	289	16.5
450	31	6,542	-19.8	33	297	15.3
400	31	7,414	-26.1	29	300	18.1
350	31	8,367	-33.4	32	303	17.3
300	31	9,432	-41.4	26	305	20.2
250	31	10,646	-49.9		302	26.0
200	30	12,083	-56.3		295	23.9
175	30	12,924	-59.6		290	24.9
150	30	13,882	-61.5		277	27.6
125	30	15,006	-63.5		269	23.1
100	30	16,370	-64.9		270	21.6
80	29	17,733	-63.7		270	14.6
70	29	18,553	-63.0		279	11.8
60	29	19,503	-61.5		286	8.5
50	29	20,640	-59.1		305	5.6
40	28	22,041	-57.3		273	5.1
30	27	23,876	-54.1		255	7.4
25	26	25,050	-52.1		269	12.6
20	25	26,505	-50.3		272	12.4
15	24	28,388	-48.9		265	14.4
10	20	31,064	-47.0		270	16.1
7	14	33,434	-43.7		274	16.3
5	9	35,693	-42.1			

EMPALME, MEXICO
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	18.6	65	345	4.5
1000	31	110	22.2	54	341	5.2
950	31	554	23.6	42	348	6.4
900	31	1,028	21.4	38	10	2.1
850	31	1,520	18.1	39	178	2.7
800	31	2,036	14.7	36	180	7.2
750	31	2,574	11.4	32	190	9.9
700	31	3,152	8.8	25	190	11.1
650	31	3,757	5.4	22	193	8.9
600	31	4,411	1.6	19	214	8.7
550	31	5,100	-3.1	19	238	10.3
500	31	5,853	-8.4	20	242	11.1
450	31	6,661	-14.0	22	247	16.9
400	31	7,546	-20.4	23	246	21.4
350	31	8,522	-27.2	24	251	25.4
300	31	9,614	-35.4	26	247	32.2
250	31	10,858	-44.5		246	37.3
200	30	12,320	-54.8		241	44.7
175	30	13,162	-60.4		242	44.7
150	30	14,108	-66.1		243	44.4
125	30	15,201	-70.4		248	32.4
100	29	16,517	-73.0		257	19.4
80	28	17,830	-69.9		283	6.8
70	27	18,630	-66.5		281	1.0
60	26	19,570	-62.9		55	5.2
50	26	20,700	-60.2		100	6.8
40	26	22,103	-56.8		83	7.6
30	22	23,933	-53.5		82	[illegible]
25	19	25,105	-51.8		75	10.1
20	14	26,551	-49.5		56	6.2
15						
10						
7						
5						

* FAIRBANKS, ALASKA
989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	135	-4.7	75	352	2.1
1000	29	49				
950	29	453	-3.6	71	77	4.5
900	29	[illegible]	[illegible]	71	110	6.4
850	29	1,327	-7.6	71	124	5.8
800	28	[illegible]	[illegible]	[illegible]	146	6.2
750	28	2,285	[illegible]	74	168	6.0
700	28	2,812	[illegible]	72	165	7.2
650	28	3,362	[illegible]	[illegible]	179	8.5
600	28	3,957	[illegible]	71	[illegible]	9.3
550	28	4,580	[illegible]	68	[illegible]	11.8
500	28	5,267	-32.5	64	195	13.8
450	28	5,994	-37.7	59	200	15.9
400	28	6,804	[illegible]	59	205	18.3
350	28	7,690	-49.4		[illegible]	20.2
300	28	8,687	-54.8		207	24.1
250	28	9,849	-55.4		216	19.8
200	28	11,286	[illegible]		228	19.6
175	28	12,153	-51.4		232	18.8
150	28	13,154	[illegible]		235	18.6
125	28	14,337	-51.7		237	21.0
100	28	15,782	-52.3		241	20.0
80	28	17,222	-53.3		246	22.1
70	28	18,079	[illegible]		[illegible]	[illegible]
60	28	19,068	[illegible]		249	21.8
50	28	20,233	[illegible]		[illegible]	22.9
40	26	21,650	[illegible]		[illegible]	25.6
30	25	23,498	[illegible]		254	26.6
25	24	24,674	[illegible]		[illegible]	28.2
20	22	26,103	[illegible]		254	30.1
15	14	27,965	-54.7		252	34.2
10	7	30,616	-53.7			
7						
5						

FLINT, MICH.
988 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	234	5.1	77	230	6.2
1000	31	130				
950	31	550	7.2	64	252	13.2
900	31	995	4.9	67	265	17.5
850	31	1,460	2.7	65	267	19.4
800	31	1,949	.9	59	266	[illegible]
750	31	2,463	-1.1	52	266	[illegible]
700	31	3,015	-3.8	45	267	28.6
650	31	3,593	-6.5	41	271	29.9
600	31	4,220	-9.7	40	273	31.1
550	31	4,885	-13.6	40	274	34.2
500	31	5,606	-18.2	38	273	39.2
450	31	6,377	-23.6	37	273	41.4
400	31	7,236	-29.6	33	270	46.8
350	31	8,175	-36.2	32	273	52.6
300	31	9,229	-43.1	[illegible]	273	[illegible]
250	31	10,439	-49.8		272	[illegible]
200	[illegible]	11,886	-54.2		271	[illegible]
175	[illegible]	12,740	-54.9		270	[illegible]
150	[illegible]	13,721	-56.5		272	[illegible]
125	[illegible]	14,875	-57.7		273	43.1
100	29	16,280	-58.9		268	34.6
80	29	17,683	-57.8		268	26.4
70	29	18,525	-57.0		[illegible]	[illegible]
60	28	19,505	-56.2		268	18.1
50	28	20,666	-55.2		268	[illegible]
40	28	22,096	-53.3		267	[illegible]
30	26	23,954	-51.4		273	[illegible]
25	26	25,141	-50.4		287	[illegible]
20	22	26,592	-49.2		[illegible]	[illegible]
15	11	[illegible]	-46.6			
10						
7						
5						

FORT WORTH, TEXAS
998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	180	[illegible]	[illegible]	220	[illegible]
1000	31	158			339	3.7
950	31	595	[illegible]	[illegible]	[illegible]	[illegible]
900	31	1,050	[illegible]	[illegible]	245	[illegible]
850	31	1,531	[illegible]	[illegible]	[illegible]	[illegible]
800	31	2,038	[illegible]	[illegible]	[illegible]	7.4
750	31	2,577	[illegible]	[illegible]	294	7.4
700	31	3,141	[illegible]	[illegible]	284	[illegible]
650	31	3,745	1.8	[illegible]	276	[illegible]
600	31	[illegible]	-1.1	[illegible]	274	[illegible]
550	31	5,071	-5.1	34	277	[illegible]
500	31	5,819	-9.9	[illegible]	278	[illegible]
450	31	6,620	-15.5	[illegible]	276	[illegible]
400	31	7,501	-22.3	[illegible]	[illegible]	[illegible]
350	31	8,469	-29.3	[illegible]	[illegible]	[illegible]
300	31	9,553	-37.2	[illegible]	[illegible]	[illegible]
250	31	10,790	-45.5		272	[illegible]
200	31	12,244	-55.5		272	[illegible]
175	[illegible]	[illegible]	-60.1		[illegible]	[illegible]
150	31	14,038	-64.5		270	[illegible]
125	[illegible]	[illegible]	[illegible]		271	[illegible]
100	[illegible]	16,468	[illegible]		274	[illegible]
80	[illegible]	17,796	[illegible]		[illegible]	[illegible]
70	[illegible]	18,606	[illegible]		[illegible]	[illegible]
60	[illegible]	19,552	[illegible]		260	[illegible]
50	[illegible]	20,687	[illegible]		223	[illegible]
40	[illegible]	[illegible]	[illegible]		349	[illegible]
30	[illegible]	23,933	[illegible]		[illegible]	[illegible]
25	[illegible]	25,109	[illegible]		[illegible]	[illegible]
20	[illegible]	26,559	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]		[illegible]	7.4
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

[illegible]
933 [illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]	3.4	71	[illegible]	[illegible]
1000	31	124				
950	31	545				
900	31	[illegible]	7.1	[illegible]	[illegible]	[illegible]
850	31	[illegible]	5.5	[illegible]	[illegible]	[illegible]
800	31	[illegible]	2.5	[illegible]	[illegible]	[illegible]
750	31	[illegible]	[illegible]	55	[illegible]	[illegible]
700	31	[illegible]	- 3.5	[illegible]	[illegible]	[illegible]
650	31	[illegible]	- 7.4	49	[illegible]	[illegible]
600	31	[illegible]	-11.4	47	[illegible]	[illegible]
550	31	4,874	-15.6	41	[illegible]	34.6
500	31	[illegible]	-20.2	41	292	38.1
450	31	[illegible]	-25.2	41	293	[illegible]
400	31	7,207	-31.3	42	293	43.7
350	31	[illegible]	-38.1	44	[illegible]	46.2
300	31	[illegible]	[illegible]		[illegible]	[illegible]
250	31	[illegible]	-52.3		276	52.3
200	31	[illegible]	[illegible]		[illegible]	[illegible]
175	31	[illegible]	-56.5		291	47.0
150	31	[illegible]	-57.4		[illegible]	42.0
125	31	[illegible]	-57.6		[illegible]	36.3
100	31	[illegible]	-58.3		286	33.2
80	31	17,588	-57.4		282	27.4
70	31	[illegible]	[illegible]		[illegible]	22.5
60	31	[illegible]	-57.4		281	[illegible]
50	[illegible]	[illegible]	-56.5		284	[illegible]
40	31	[illegible]	-55.9		278	14.8
30	30	[illegible]	-54.2		279	15.7
25	30	24,988	-53.1		276	16.9
20	[illegible]	[illegible]	-52.5		271	21.2
15	29	[illegible]	-50.9		273	23.9
10	[illegible]	[illegible]	-48.5		273	30.9
7	15	[illegible]	[illegible]		278	40.8
5	[illegible]	[illegible]	-43.5			

* GRAND JUNCTION, COLO.
855 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,474	8.2	51	[illegible]	[illegible]
1000	31	153				
950	31	584				
900	31	1,038				
850	31	1,519			125	5.6
800	31	2,022	8.8	46	[illegible]	3.9
750	31	2,551	[illegible]	45	253	2.7
700	[illegible]	3,116	[illegible]	47	[illegible]	7.8
650	31	3,707	- 1.4	[illegible]	279	11.8
600	31	4,344	- 5.4	48	275	15.7
550	31	[illegible]	- 9.7	49	[illegible]	[illegible]
500	31	5,751	-14.2	39	283	20.8
450	31	[illegible]	-19.8	37	283	24.7
400	31	[illegible]	-26.1	37	284	27.2
350	31	8,359	-33.4	[illegible]	279	30.3
300	31	9,424	-41.0	[illegible]	279	34.6
250	31	10,643	-49.0		275	42.2
200	31	12,083	-55.7		272	44.1
175	31	[illegible]	[illegible]		273	43.7
150	31	[illegible]	-60.6		274	40.2
125	31	[illegible]	-62.8		[illegible]	[illegible]
100	31	[illegible]	-64.8		275	[illegible]
80	31	17,746	-64.4		280	21.4
70	31	[illegible]	-62.5		[illegible]	17.3
60	31	19,519	-60.7		[illegible]	11.3
50	31	[illegible]	-59.0		[illegible]	9.1
40	31	22,063	-56.6		261	5.0
30	[illegible]	[illegible]	-53.5		268	9.7
25	30	[illegible]	-51.6		266	10.7
20	[illegible]	26,532	[illegible]		268	9.1
15	[illegible]	[illegible]	-48.9		[illegible]	11.1
10	27	31,093	-46.4		266	16.3
7	15	33,469	-43.7			
5						

* GREAT FALLS, MONT.
887 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]	5.5	61	[illegible]	9.3
1000	31	131				
950	31	561				
900	31	[illegible]				
850	31	1,475	6.9	46	254	25.4
800	31	[illegible]	3.6	50	276	21.4
750	31	2,492	.6	51	281	23.1
700	31	3,042	- 3.0	51	[illegible]	26.0
650	31	3,626	- 6.3	48	[illegible]	29.3
600	31	4,249	- 9.8	43	[illegible]	34.2
550	31	[illegible]	[illegible]	[illegible]	[illegible]	36.5
500	31	5,634	-18.5	41	[illegible]	[illegible]
450	31	6,409	-23.6	38	291	41.2
400	31	7,265	-29.7	39	[illegible]	45.1
350	31	8,204	-36.7	45	290	50.9
300	31	9,256	-43.8		288	55.0
250	31	10,459	-51.9		287	53.8
200	31	11,863	-58.1		284	45.5
175	31	12,722	-58.7		280	48.8
150	31	13,689	-58.7		279	46.4
125	30	14,831	-58.7		274	40.2
100	[illegible]	[illegible]	-59.2		272	32.6
80	26	[illegible]	[illegible]		281	28.2
70	26	18,472	[illegible]		275	23.3
60	26	19,444	-57.5		277	21.2
50	[illegible]	[illegible]	-57.3		277	21.2
40	[illegible]	22,004	-56.6		280	17.3
30	24	23,841	-54.9		272	16.7
25	24	25,009	-53.8		269	15.5
20	23	26,454	-52.4		267	17.5
15	22	[illegible]	-50.7		261	20.4
10	[illegible]	30,989	[illegible]		266	29.3
7	13	[illegible]	-44.5		266	41.4
5	7	35,688	[illegible]			

GREEN BAY, WIS.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]	4.6	77	240	4.9
1000	31	107				
950	31	529	6.6	65	253	14.2
900	31	971	[illegible]	58	271	17.7
850	31	1,437	3.5	58	274	19.0
800	31	[illegible]	1.4	54	275	20.6
750	31	2,444	- 1.3	[illegible]	276	23.1
700	31	2,993	- 4.0	44	276	28.4
650	31	3,572	- 6.8	36	[illegible]	31.1
600	31	4,195	-10.4	35	282	34.2
550	31	4,855	-14.4	35	283	37.3
500	31	5,576	-19.3	36	[illegible]	39.0
450	31	6,345	-24.4	[illegible]	281	39.8
400	31	7,200	[illegible]	39	281	44.1
350	31	8,136	-37.1	38	[illegible]	47.6
300	31	9,186	-44.2		283	52.6
250	31	10,390	-50.5		284	57.7
200	31	11,832	[illegible]		283	55.8
175	31	[illegible]	-54.9		282	54.6
150	31	13,671	-55.7		281	52.1
125	31	14,829	-57.0		276	45.1
100	[illegible]	[illegible]	-57.2		274	35.7
80	[illegible]	17,647	-57.1		275	26.8
70	29	18,494	-56.1		273	21.8
60	29	19,478	-55.3		265	17.1
50	29	[illegible]	-54.7		270	15.2
40	29	22,075	-53.1		265	12.8
30	29	23,937	-51.3		263	15.2
25	29	25,124	-50.3		268	16.9
20	29	26,585	-48.8		271	20.6
15	28	28,481	-47.4		276	23.7
10	24	31,149	-45.		279	29.7
7	8	33,507	-43.4			
5						

GREENSBORO, N. C.
987 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	273	9.4	68	323	1.4
1000	31	160				
950	31	591	12.2	64	298	2.7
900	31	1,042	10.8	61	297	5.8
850	31	1,517	9.4	55	265	9.9
800	31	2,019	8.0	44	274	13.4
750	31	2,549	6.2	37	269	14.6
700	31	3,113	3.5	37	266	16.7
650	31	3,709	.8	32	267	20.6
600	31	4,351	- 2.6	28	268	23.5
550	31	5,029	- 6.6	33	267	26.4
500	31	5,774	-11.5	32	270	29.1
450	31	6,566	-17.1	30	271	32.6
400	31	7,444	-24.1	30	272	36.5
350	31	8,404	-31.1	31	272	38.7
300	31	9,481	-38.6	29	274	44.9
250	31	10,712	-46.7		276	54.8
200	31	12,165	-54.7		272	59.1
175	31	13,012	-58.4		275	58.9
150	31	13,973	-61.8		274	56.1
125	31	15,094	-64.4		274	44.7
100	31	16,451	-66.0		269	32.1
80	31	17,808	-64.0		266	22.1
70	31	18,631	-61.2		267	16.5
60	31	19,593	-58.6		265	10.5
50	31	20,744	-56.5		275	5.2
40	31	22,165	-55.0		355	2.1
30	31	24,010	-53.1		73	5.4
25	30	25,190	-51.3		64	6.0
20	28	26,660	-48.8		52	7.4
15	27	28,557	-46.4		26	6.0
10	22	31,273	-42.9		3	5.6
7	8	33,633	-40.9			
5						

GUAM, MARIANA IS.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	111	[illegible]	94	95	[illegible]
1000	29	[illegible]				
950	29	547	23.7	[illegible]	87	8.5
900	29	1,015	[illegible]	[illegible]	[illegible]	8.5
850	[illegible]	[illegible]	18.7	78	90	[illegible]
800	[illegible]	2,029	15.8	75	91	[illegible]
750	29	[illegible]	13.1	67	91	8.0
700	[illegible]	3,154	10.3	61	93	8.2
650	29	[illegible]	6.8	54	[illegible]	8.7
600	29	[illegible]	2.6	[illegible]	[illegible]	9.5
550	29	[illegible]	- 1.2	55	80	10.9
500	29	[illegible]	- 5.6	[illegible]	84	12.6
450	29	[illegible]	-10.5	47	93	10.9
400	29	[illegible]	-16.1	41	[illegible]	9.7
350	29	[illegible]	-23.0	[illegible]	87	7.8
300	29	[illegible]	-31.2	35	[illegible]	5.4
250	29	[illegible]	[illegible]		115	4.5
200	29	12,434	-53.3		118	7.2
175	29	[illegible]	-60.4		111	9.9
150	29	14,222	-68.1		106	13.4
125	29	15,293	[illegible]		[illegible]	17.5
100	28	[illegible]	[illegible]		[illegible]	24.3
80	27	17,835	-74.6		[illegible]	18.3
70	26	[illegible]	-70.5		[illegible]	[illegible]
60	[illegible]	19,546	-66.2		93	12.8
50	24	[illegible]	-61.7		[illegible]	10.9
40	[illegible]	[illegible]	-57.4		[illegible]	11.3
30	24	23,896	[illegible]		[illegible]	13.8
25	20	[illegible]	-51.5		82	14.0
20	19	[illegible]	-49.0		79	20.2
15	[illegible]	28,427	-45.7		[illegible]	30.1
10	6	31,140	-42.4			
7						
5						

HILO, HAWAII
1014 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	11	[illegible]	88	[illegible]	4.5
1000	31	135	23.0	81	235	3.9
950	31	584	19.7	88	99	3.1
900	31	1,046	16.5	90	[illegible]	6.6
850	31	1,551	13.6	[illegible]	91	6.8
800	31	2,041	11.6	63	[illegible]	5.4
750	31	[illegible]	9.6	[illegible]	69	4.3
700	31	3,151	7.7	42	[illegible]	2.9
650	31	[illegible]	5.2	37	27	[illegible]
600	31	4,410	1.6	35	16	[illegible]
550	31	5,103	- 2.3	[illegible]	339	[illegible]
500	31	[illegible]	- 7.0	[illegible]	329	2.1
450	31	6,669	-12.2	29	310	4.1
400	31	7,563	-18.2	32	297	6.8
350	31	8,546	[illegible]	32	291	11.1
300	31	9,645	-34.1	30	[illegible]	16.7
250	30	10,894	-44.4		291	23.7
200	[illegible]	12,349	-56.5		290	29.3
175	30	13,184	-62.7		[illegible]	30.9
150	[illegible]	14,123	-67.8		291	27.8
125	[illegible]	15,207	-71.8		285	20.2
100	28	16,518	-73.0		[illegible]	10.5
80	27	17,831	-71.5		54	1.4
70	26	[illegible]	-68.7		74	5.8
60	25	19,559	-64.2		66	10.9
50	22	20,683	-60.9		93	11.8
40	22	22,081	-57.8		88	12.8
30	21	23,915	-53.9		[illegible]	18.1
25	21	[illegible]	-51.8		90	17.7
20	20	26,548	-48.8		87	18.5
15	12	28,446	-46.3		74	18.5
10						
7						
5						

HUNTINGTON, W. VA.
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	246	7.3	85	215	1.9
1000	30	161				
950	30	589	10.2	60	255	6.4
900	30	1,035	[illegible]	59	276	10.9
850	30	1,506	6.5	50	278	13.8
800	[illegible]	[illegible]	[illegible]	46	270	16.7
750	30	2,527	3.5	41	268	18.8
700	30	3,086	[illegible]	40	268	22.3
650	30	3,676	- 1.6	36	273	25.4
600	30	4,314	[illegible]	31	271	27.8
550	[illegible]	[illegible]	- 8.7	32	268	32.1
500	30	5,726	-13.6	33	263	35.9
450	30	6,514	-19.2	31	267	38.3
400	30	7,387	-25.4	30	270	43.1
350	30	8,343	-32.4	30	273	48.2
300	[illegible]	9,413	-40.4	33	271	52.4
250	30	10,634	-48.4		272	58.9
200	30	12,080	-55.0		272	65.1
175	30	12,929	-57.5		274	60.4
150	30	13,895	-60.5		271	55.2
125	[illegible]	15,026	[illegible]		270	46.2
100	29	16,398	-63.6		267	34.2
80	29	17,774	-61.5		268	23.5
70	[illegible]	18,606	-59.7		267	18.1
60	[illegible]	19,574	-57.9		265	13.6
50	28	20,730	-55.5		270	9.3
40	28	22,157	-54.1		[illegible]	6.6
30	28	[illegible]	-52.4		315	2.1
25	27	25,190	-51.1		24	2.9
20	[illegible]	26,636	-49.2		5	4.1
15	11	28,562	-46.7			
10						
7						
5						

* INTERNAT. FALLS, MINN.
968 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	360	2.3	70	243	2.1
1000	31	92				
950	31	508	3.	69	257	4.3
900	31	947	2.7	63	276	10.3
850	31	1,408	1.0	60	291	12.6
800	31	1,894	[illegible]	59	292	15.0
750	31	2,404	[illegible]	57	290	17.3
700	31	2,951	- 5.9	56	294	21.6
650	31	[illegible]	- 9.1	53	291	22.9
600	31	4,143	-12.3	49	295	27.0
550	31	4,795	-16.5	50	292	30.5
500	31	5,514	[illegible]	51	288	33.4
450	31	6,275	-26.1	50	291	34.2
400	31	7,126	-31.9	47	290	39.4
350	31	8,056	-38.7	44	290	41.6
300	31	9,098	-45.9		287	47.2
250	31	[illegible]	-52.8		284	52.8
200	31	[illegible]	[illegible]		280	52.1
175	31	12,573	-54.6		283	49.1
150	31	13,559	-54.8		281	41.6
125	31	[illegible]	-55.5		279	35.9
100	31	16,143	-55.8		281	30.5
80	31	17,563	-55.8		280	23.5
70	31	18,412	-56.2		279	20.4
60	31	19,392	-55.9		279	19.2
50	31	[illegible]	-55.6		274	16.9
40	31	21,977	-54.5		271	16.9
30	31	23,824	-53.4		271	18.5
25	31	[illegible]	[illegible]		[illegible]	20.0
20	30	26,446	-51.5		269	21.6
15	27	28,322	-49.8		269	25.8
10	21	31,009	-45.8		266	29.7
7	8	33,441	-41.3			
5						

JACKSON, MISS.
1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	94	11.3	89	340	1.9
1000	31	153	13.4	78	41	2.7
950	31	569	14.9	64	70	4.7
900	31	1,044	13.2	63	299	1.9
850	31	1,524	12.3	53	298	6.0
800	31	2,031	10.3	49	274	8.0
750	31	2,568	[illegible]	42	268	9.5
700	31	3,133	5.8	41	274	10.7
650	31	3,734	3.0	37	269	13.8
600	31	4,381	- 1.0	39	269	17.1
550	31	5,064	- 5.0	34	270	20.2
500	31	5,812	-10.0	32	270	21.8
450	31	6,614	-15.3	32	271	24.5
400	31	7,496	-22.1	33	270	30.1
350	31	8,465	-28.9	29	270	35.2
300	31	9,549	-36.9	29	271	39.4
250	31	10,787	-45.6		271	47.8
200	31	12,242	-55.1		274	54.4
175	31	13,085	-59.8		274	54.6
150	31	14,038	-63.9		274	50.3
125	29	15,140	-68.6		273	42.5
100	29	16,465	-70.7		276	30.7
80	23	17,797	-67.9		276	15.9
70	27	18,603	-64.7		281	9.3
60	27	19,551	-61.5		264	4.7
50	27	20,688	-58.7		239	3.1
40	27	22,095	-56.4		62	3.3
30	27	23,933	-53.3		78	7.2
25	25	25,110	-51.5		78	8.0
20	25	26,564	-49.2		76	8.5
15	25	28,461	-46.4		55	7.6
10	23	31,167	-43.1		350	5.6
7	13	33,609	-39.2			
5	5	35,921	-36.6			

* JACKSONVILLE, FLA.
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	18.1	90	351	4.1
1000	31	149	19.8	[illegible]	[illegible]	5.2
950	31	594	18.4	76	[illegible]	7.6
900	31	1,054	[illegible]	73	94	3.5
850	31	[illegible]	14.3	57	179	1.0
800	31	[illegible]	[illegible]	51	263	3.5
750	31	2,588	9.3	50	266	5.2
700	31	[illegible]	6.3	44	261	6.8
650	31	3,762	3.4	[illegible]	268	[illegible]
600	31	[illegible]	- .1	28	263	9.5
550	31	[illegible]	- 4.2	[illegible]	270	11.7
500	31	[illegible]	- 8.7		275	[illegible]
450	31	[illegible]	-14.1	29	273	19.0
400	31	7,536	-20.0	27	[illegible]	23.1
350	31	[illegible]	-27.2	[illegible]	272	[illegible]
300	31	[illegible]	-34.8	26	270	36.7
250	31	[illegible]	[illegible]		268	42.2
200	31	[illegible]	-54.5		[illegible]	48.2
175	31	13,161	-59.6		[illegible]	45.6
150	[illegible]	14,113	-64.7		[illegible]	42.5
125	30	15,213	-69.4		275	35.5
100	30	[illegible]	[illegible]		276	25.8
80	30	[illegible]	[illegible]		274	9.1
70	[illegible]	[illegible]	[illegible]		[illegible]	4.7
60	29	[illegible]	-61.3		239	1.6
50	29	20,743	-58.8		[illegible]	5.6
40	29	22,157	-56.1		79	8.5
30	[illegible]	[illegible]	-53.6		79	9.9
25	[illegible]	[illegible]	-51.4		[illegible]	[illegible]
20	27	[illegible]	-49.6		[illegible]	7.2
15	[illegible]	[illegible]	-45.9		29	3.1
10	[illegible]	[illegible]	[illegible]		339	7.8
7						

JOHN F. KENNEDY INT. ARPT.NY
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]	10.2	75	304	4.3
1000	31	147	10.6	67	307	5.8
950	31	[illegible]	9.4	60	291	8.0
900	31	[illegible]	7.5	56	273	9.7
850	31	1,491	[illegible]	[illegible]	268	13.0
800	31	1,987	[illegible]	49	[illegible]	19.0
750	31	2,516	2.2	47	[illegible]	[illegible]
700	31	[illegible]	- .2	44	270	24.5
650	31	3,658	- 3.0	[illegible]	270	28.2
600	31	4,287	- 6.6	40	[illegible]	31.1
550	31	4,961	-10.6	38	265	33.6
500	31	[illegible]	-15.2	34	[illegible]	39.0
450	31	6,476	-20.5	[illegible]	261	41.2
400	31	7,341	-26.0	39	262	46.4
350	31	[illegible]	-33.7	38	[illegible]	54.8
300	31	9,356	-41.5	37	258	59.2
250	31	10,572	-49.2		260	62.7
200	31	12,015	-54.8		[illegible]	62.2
175	31	12,865	-56.9		[illegible]	59.6
150	31	13,838	-58.5		[illegible]	55.9
125	31	14,978	-60.6		265	46.8
100	31	16,364	[illegible]		263	39.2
80	31	17,754	-59.6		[illegible]	29.3
70	31	[illegible]	-58.5		263	22.7
60	31	19,566	-56.6		265	17.5
50	31	20,726	-55.2		268	13.8
40	31	22,156	-53.7		[illegible]	8.4
30	31	24,011	-52.4		[illegible]	[illegible]
25	31	25,192	-51.5		344	[illegible]
20	[illegible]	26,643	-49.8		343	5.8
15	22	[illegible]	-47.0		308	11.3
10	5	31,221	-45.8			
7						

JOHNSTON IS., PACIFIC AREA
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	3	26.2	83	98	10.1
1000	31	112	25.6	84	94	11.3
950	31	562	22.4	39	89	12.6
900	31	1,033	19.5	85	66	12.2
850	31	1,525	16.9	79	89	10.3
800	31	2,041	14.5	74	67	7.6
750	31	2,579	11.9	69	89	6.4
700	31	3,161	9.	63	54	6.0
650	31	3,767	5.4	51	35	5.1
600	31	4,421	1.5	53	95	3.7
550	31	[illegible]	- 2.4	43	143	3.1
500	31	[illegible]	[illegible]	33	172	3.3
450	31	6,677	-12.1	34	168	3.3
400	[illegible]	7,575	-18.1	36	227	7.4
350	30	8,559	[illegible]	[illegible]	232	13.0
300	30	9,661	-33.4	34	247	19.8
250	30	10,915	-43.2		253	27.6
200	[illegible]	12,379	-55.3		[illegible]	31.7
175	30	[illegible]	-62.0		236	31.5
150	[illegible]	14,157	-68.5		265	25.3
125	30	15,236	-73.2		273	15.7
100	28	16,533	-75.9		322	3.1
80	28	[illegible]	-73.2		69	6.2
70	26	18,617	-69.4		79	10.9
60	25	19,546	-65.8		92	11.7
50	[illegible]	20,664	-61.7		92	9.9
40	[illegible]	22,059	-57.8		63	11.5
30	23	23,892	-54.0		66	14.4
25	[illegible]	[illegible]	-51.6		67	17.1
20	16	26,535	-48.5		87	21.6
15	10	28,458	-45.7			
10						
7						

KEY WEST, FLORIDA
1012 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	16	3	25.4	82	46	7.4
1000	16	108	24.3	82	54	12.0
950	16	558	20.1	83	[illegible]	12.8
900	16	1,023	17.5	76	65	9.9
850	16	1,510	14.9	70	73	5.4
800	16	2,022	12.6	62	97	5.1
750	16	2,561	9.9	58	[illegible]	2.7
700	16	3,133	7.6	48	321	3.9
650	16	3,731	4.0	41	347	2.7
600	16	[illegible]	.9	33	334	3.1
550	16	5,071	- 3.3	33	321	5.2
500	16	5,829	- 7.8	28	331	9.7
450	16	6,635	-12.6	26	325	12.0
400	15	7,533	-18.2	22	319	11.7
350	15	8,517	-25.3	22	306	10.9
300	15	9,617	-33.7	24	306	14.4
250	15	10,869	-43.6		307	15.5
200	15	12,332	-55.0		279	17.5
175	15	13,175	-60.6		279	19.0
150	15	14,121	-66.3		280	17.9
125	15	15,211	-71.8		293	11.8
100	15	16,513	-74.6		292	7.0
80	15	17,826	-70.2		349	4.3
70	15	18,624	-66.9		59	3.1
60	15	19,563	-63.2		75	4.5
50	15	20,694	-59.9		100	5.1
40	14	[illegible]	-56.3		60	8.7
30	13	23,940	-52.3		81	7.4
25	13	[illegible]	-50.3		87	9.1
20	11	26,602	-47.8		94	6.8
15	11	28,511	-44.7		81	7.4
10	[illegible]	[illegible]	[illegible]			
7	[illegible]	33,731	-36.2			

KING SALMON, ALASKA
1002 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	15	- 3.6	84	254	.6
1000	30	52			343	5.4
950	30	438	- 3.6	79	347	4.1
900	30	864	- 6.3	82	313	4.7
850	30	1,309	- 8.6	82	286	5.4
800	30	1,777	-11.0	73	273	8.2
750	30	2,271	-13.5	66	276	10.1
700	30	2,793	-16.7	62	266	11.5
650	30	3,348	-20.0	57	262	14.2
600	30	3,937	-23.4	48	258	15.3
550	30	4,567	-27.4	46	255	16.5
500	30	5,248	-31.7	45	249	18.8
450	30	5,980	-36.9	44	251	20.0
400	30	6,792	-42.1		246	22.0
350	30	7,685	-47.6		250	22.1
300	29	8,678	-52.0		250	23.7
250	29	9,860	-50.7		253	28.0
200	29	11,318	-49.8		262	28.0
175	29	12,191	-49.8		258	26.8
150	28	13,199	-50.2		261	24.9
125	27	14,390	-50.7		259	25.8
100	27	15,843	-50.9		259	24.5
80	26	17,296	-51.9		257	23.9
70	26	18,160	-52.6		258	25.1
60	26	19,154	-53.1		257	25.6
50	26	20,328	-53.4		255	25.8
40	26	21,762	-54.1		262	29.9
30	23	23,619	-54.0		268	30.3
25	22	24,792	-53.8		268	33.6
20	15	26,252	-53.8		268	32.1
15	5	28,148	-53.7			
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1966

+ KOROR, CAROLINE IS. 1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	28.[illegible]	81	306	2.1
1000	31	88	27.6	81	295	2.7
950	31	535	23.6	80	200	5.2
900	31	1,013	20.8	77	285	4.5
850	31	1,506	18.1	74	300	2.9
800	31	2,024	15.4	65	5	1.6
750	31	2,567	12.6	62	71	2.1
700	31	3,147	9.3	53	77	4.7
650	31	3,756	6.2	55	90	6.6
600	31	4,412	2.4	56	91	8.
550	31	5,105	- 1.5	51	92	9.1
500	31	5,864	- 5.7	45	100	10.7
450	31	6,680	-10.1	41	93	5.9
400	31	7,533	-15.6	36	64	7.4
350	31	8,577	-22.6	33	82	7.0
300	31	9,659	-31.[illegible]	31	97	8.5
250	31	10,954	-41.3		100	11.1
200	31	12,428	-53.7		90	13.6
175	31	13,272	-60.[illegible]		83	18.3
150	31	14,2[illegible]3	-68.4		62	22.1
125	31	15,284	-76.1		62	29.3
100	30	16,555	-78.6		58	25.6
80	30	17,842	-72.5		61	13.2
70	30	18,634	-67.6		61	7.0
60	30	19,571	-63.5		120	.2
50	30	20,698	-60.4		275	3.3
40	30	22,097	-57.6		272	5.4
30	30	23,925	-54.0		255	5.1
25	29	25,101	-51.6		262	3.3
20	29	26,558	-48.8		164	5.6
15	26	28,459	-45.9		107	7.8
10	26	31,186	-41.0		91	30.3
7	17	33,610	-37.3			
5						

KOTZEBUE, ALASKA [illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	- 5.7	78	73	8.9
1000	31	62			62	7.4
950	31	465	- 6.[illegible]	69	83	9.5
900	31	886	- 8.3	72	85	7.0
850	31	1,323	-10.5	72	87	7.4
800	31	1,793	-12.5	68	88	6.4
750	31	2,281	-15.0	65	85	5.1
700	31	2,803	-17.7	59	97	5.1
650	31	3,351	-20.9	54	86	5.6
600	31	3,941	-24.8	51	79	5.1
550	31	4,563	-29.[illegible]	50	86	5.2
500	31	5,243	-33.5	50	65	5.4
450	31	5,971	-38.6	56	81	6.2
400	31	6,773	-44.4		90	7.8
350	31	7,656	-50.2		95	8.5
300	31	8,649	-55.[illegible]		106	8.4
250	31	9,803	-56.7		130	3.9
200	31	11,234	-52.7		233	3.9
175	31	12,097	-52.[illegible]		242	6.4
150	31	13,094	-52.1		250	9.1
125	31	14,274	-52.4		256	9.[illegible]
100	31	15,715	-52.3		254	13.[illegible]
80	31	17,151	-53.4		[illegible]	16.[illegible]
70	31	18,006	-54.4		257	17.[illegible]
60	31	18,993	-55.1		251	19.4
50	31	20,155	-56.0		251	22.[illegible]
40	31	21,571	-56.6		253	23.7
30	30	23,403	-56.7		255	25.6
25	28	24,548	-56.9		259	30.7
20	25	25,918	-57.1		270	36.5
15	11	27,799	-56.[illegible]		268	37.9
10	5	30,393	-54.3			

KWAJALEIN, MARSHALL IS. [illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	27.[illegible]	[illegible]	[illegible]	4.5
1000	31	91	27.[illegible]	[illegible]	[illegible]	[illegible]
950	31	[illegible]	24.[illegible]	[illegible]	1[illegible]7	[illegible]
900	31	1,017	21.[illegible]	[illegible]	[illegible]	7.[illegible]
850	31	1,512	18.[illegible]	[illegible]	[illegible]	7.[illegible]
800	31	2,0[illegible]9	[illegible]	[illegible]	[illegible]	3.4
750	31	2,575	13.[illegible]	[illegible]	[illegible]	[illegible].1
700	31	3,155	10.[illegible]	[illegible]	[illegible]	[illegible]
650	31	3,765	[illegible]	[illegible]	[illegible]	[illegible]
600	31	4,418	[illegible].7	62	[illegible]	4.7
550	31	5,117	- 1.[illegible]	[illegible]	[illegible]	[illegible].1
500	31	5,876	- [illegible]	[illegible]	[illegible]	[illegible]
450	31	6,690	-10.3	[illegible]	[illegible]	4.7
400	31	7,593	-15.9	57	[illegible]	[illegible]
350	31	8,581	-22.8	[illegible]	[illegible]	1.4
300	31	9,699	-31.1	[illegible]	[illegible]	[illegible]
250	31	[illegible]	-41.4		[illegible]	4.1
200	31	[illegible]	-54.1		[illegible]	5.4
175	31	13,273	-61.[illegible]		[illegible]	[illegible]
150	31	14,218	[illegible]		[illegible]	[illegible]
125	30	[illegible]	-76.3		[illegible]	[illegible].1
100	27	16,559	[illegible]		76	1[illegible]
80	24	[illegible]	-74.[illegible]		[illegible]	[illegible]
70	22	18,624	[illegible]		[illegible]	7.4
60	22	19,554	[illegible]		[illegible]	1.9
50	22	20,680	-[illegible]1.[illegible]		[illegible]	[illegible]
40	20	22,065	[illegible]		[illegible]	[illegible]
30	19	23,900	-54.[illegible]		[illegible]	[illegible]
25	17	25,078	-5[illegible]		[illegible]	1.4
20	17	26,528	-50.1		[illegible]	4.3
15	16	28,427	-45.2		[illegible]	15.[illegible]
10	11	31,166	-41.7		[illegible]	41.[illegible]
7	9	33,604	-35.[illegible]			
5	7	35,937	-34.[illegible]			

[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	15.1	[illegible]	[illegible]	[illegible]
1000	31	[illegible]	17.1	[illegible]	[illegible]	[illegible]
950	31	[illegible]	15.6	[illegible]	[illegible]	[illegible]
900	31	[illegible]	14.1	[illegible]	[illegible]	[illegible]
850	31	[illegible]	12.9	[illegible]	[illegible]	[illegible]
800	31	2,035	11.3	[illegible]	[illegible]	[illegible]
750	31	2,573	[illegible]	[illegible]	[illegible]	[illegible]
700	31	3,142	[illegible]	[illegible]	[illegible]	[illegible]
650	31	3,744	[illegible]	[illegible]	[illegible]	[illegible]
600	31	4,392	[illegible]	[illegible]	[illegible]	11.[illegible]
550	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
500	31	5,826	- 9.3	[illegible]	[illegible]	[illegible]
450	31	[illegible]	-14.7	[illegible]	[illegible]	[illegible]
400	31	7,517	- 1[illegible]	[illegible]	[illegible]	[illegible]
350	31	8,490	[illegible]	[illegible]	[illegible]	[illegible]
300	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
250	31	10,824	[illegible]		[illegible]	[illegible]
200	31	12,283	[illegible]		[illegible]	41.[illegible]
175	31	13,127	[illegible]		[illegible]	[illegible]
150	31	[illegible]	[illegible]		[illegible]	[illegible]
125	31	15,181	[illegible]		[illegible]	[illegible]
100	31	[illegible]	-7[illegible]		[illegible]	[illegible]
80	31	17,816	[illegible]		[illegible]	[illegible]
70	31	18,618	[illegible]		[illegible]	[illegible]
60	31	[illegible]	[illegible]		[illegible]	[illegible]
50	31	[illegible]	[illegible]		[illegible]	[illegible]
40	31	22,107	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	28	25,121	-51.[illegible]		[illegible]	[illegible]
20	26	26,573	-49.5		74	[illegible]
15	25	[illegible]	-46.3		[illegible]	[illegible]
10	[illegible]	[illegible]	-42.4		[illegible]	[illegible]
7						
5						

[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1000	[illegible]	[illegible]				
950	[illegible]	591				
900	[illegible]	[illegible]				
850	[illegible]	[illegible]				
800	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
750	[illegible]	2,521	[illegible]	[illegible]	[illegible]	[illegible]
700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
650	[illegible]	3,671	- [illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,307	- [illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	4,972	[illegible]	[illegible]	[illegible]	[illegible]
500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	9,350	[illegible]		[illegible]	[illegible]
250	[illegible]	10,558	[illegible]		[illegible]	[illegible]
200	31	11,987	[illegible]		[illegible]	[illegible]
175	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
150	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	16,305	[illegible]		[illegible]	[illegible]
80	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
70	[illegible]	1[illegible],515	[illegible]		[illegible]	[illegible]
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	22,039	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	26,509	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
10	[illegible]	31,067	[illegible]			
7						
5						

‡ LAS VEGAS, NEV. 937 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	9	660	17.3	58		
1000	9	93				
950	9	547				
900	9	1,005	19.8	43		
850	9	1,495	16.5	44		
800	9	2,008	12.3	51		
750	9	2,551	8.[illegible]	58		
700	9	3,112	3.8	58		
650	9	3,708	- .3	62		
600	9	4,347	- 4.0	58		
550	9	5,022	- 8.1	52		
500	9	5,765	-12.2	42		
450	9	6,562	-17.8	39		
400	9	7,433	-24.3	37		
350	9	8,390	-32.2	37		
300	9	9,462	-39.2	25		
250	9	10,697	-43.[illegible]			
200	9	12,172	-51.0			
175	9	13,033	-54.9			
150	8	14,013	-59.3			
125	8	15,142	-63.7			
100	7	16,498	-65.4			
80	6	17,852	-64.3			
70	6	18,669	-63.6			
60	6	19,616	-62.2			
50	6	20,749	-59.3			
40	6	22,156	-56.7			
30	6	23,991	-53.7			
25	6	25,171	-50.5			
20	6	26,627	-49.4			
15	6	28,518	-47.4			
10						
7						
5						
4						

* LIHUE, HAWAII 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	36	23.2	[illegible]	61	6.[illegible]
1000	31	142	23.4	83	62	7.6
950	31	584	20.1	[illegible]	71	10.3
900	31	1,054	16.[illegible]	49	75	10.5
850	31	1,540	14.[illegible]	36	78	7.8
800	31	2,05[illegible]	12.[illegible]	55	83	6.[illegible]
750	31	2,588	11.1	41	81	4.5
700	31	3,164	8.3	37	55	2.9
650	31	3,768	5.3	28	42	1.9
600	31	4,422	1.[illegible]	25	352	1.4
550	31	5,110	- 2.4	28	310	2.3
500	31	5,867	- 6.9	33	267	2.9
450	30	6,678	-12.[illegible]	32	28[illegible]	2.7
400	30	7,571	-18.6	35	274	4.1
350	30	8,552	-26.1	33	[illegible]	9.1
300	30	9,648	-34.9	35	[illegible]	14.[illegible]
250	30	10,893	-45.1		[illegible]	22.5
200	30	12,344	-56.[illegible]		277	26.4
175	29	13,179	-62.[illegible]		[illegible]	27.4
150	29	14,115	-67.7		[illegible]	24.9
125	26	15,196	-72.4		[illegible]	19.4
100	24	16,503	-73.5		281	11.[illegible]
80	24	17,816	-70.4		[illegible]	[illegible].3
70	24	18,612	-68.0		7[illegible]	5.7
60	23	19,543	-64.8		[illegible]	4.5
50	23	20,665	-60.8		67	11.7
40	23	22,063	-57.8		[illegible]	13.4
30	23	23,991	-54.3		91	15.[illegible]
25	23	25,065	-52.0		93	15.[illegible]
20	22	26,521	-49.[illegible]		[illegible]	14.4
15	21	28,415	-46.9		78	16.5
10	20	31,122	-41.9		10[illegible]	9.[illegible]
7	19	33,557	-38.6		211	1.9
5	17	35,884	-36.2		238	5.5
4	6	37,450	-34.1			

LITTLE ROCK, ARK. [illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	9.7	84	[illegible]	1.7
1000	31	128	12.[illegible]	[illegible]	[illegible]	2.1
950	31	566	[illegible]	[illegible]	[illegible]	1.7
900	31	1,043	11.3	[illegible]	[illegible]	4.3
850	31	1,52[illegible]	10.3	[illegible]	[illegible]	7.6
800	31	2,024	8.8	47	[illegible]	[illegible]
750	31	2,554	6.5	45	[illegible]	10.3
700	31	3,120	3.9	[illegible]	[illegible]	12.5
650	31	3,717	.9	[illegible]	[illegible]	16.1
600	31	4,359	- 2.7	[illegible]	[illegible]	18.1
550	31	5,037	- 6.7	[illegible]	[illegible]	[illegible]
500	31	[illegible]	-11.4	[illegible]	[illegible]	26.4
450	31	6,572	-17.[illegible]	34	[illegible]	31.3
400	31	7,455	[illegible]	[illegible]	[illegible]	35.9
350	31	8,419	[illegible]	[illegible]	[illegible]	40.4
300	31	9,499	-37.[illegible]	[illegible]	[illegible]	[illegible]
250	31	10,734	-46.[illegible]		[illegible]	[illegible].7
200	31	[illegible]	[illegible]		[illegible]	[illegible]
175	31	13,031	[illegible]		[illegible]	[illegible]
150	31	13,987	[illegible]		[illegible]	[illegible]
125	31	15,098	[illegible]		[illegible]	47.[illegible]
100	30	16,441	-68.9		[illegible]	34.[illegible]
80	30	17,782	-65.9		[illegible]	21.2
70	30	18,596	[illegible]		[illegible]	14.6
60	30	19,547	[illegible]		[illegible]	9.9
50	[illegible]	20,688	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	-55.9		[illegible]	[illegible]
30	29	23,940	-53.2		[illegible]	1.[illegible]
25	[illegible]	25,118	-51.2		[illegible]	[illegible]
20	[illegible]	26,572	-49.6		[illegible]	[illegible].1
15	21	28,455	-47.2		[illegible]	4.3
10	24	31,117	-44.[illegible]			
7						
5						
4						

MCGRATH, ALASKA [illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	103	- 5.[illegible]	[illegible]	[illegible]	1.7
1000	31	[illegible]				
950	31	[illegible]	[illegible]	[illegible]	47	4.7
900	31	869	- 7.[illegible]	[illegible]	[illegible]	4.7
850	31	1,313	- 9.[illegible]	[illegible]	[illegible]	4.5
800	31	[illegible]	-11.[illegible]	[illegible]	[illegible]	[illegible]
750	31	2,271	-13.[illegible]	[illegible]	[illegible]	[illegible]
700	31	2,795	[illegible]	74	[illegible]	[illegible]
650	31	3,345	[illegible]	[illegible]	[illegible]	8.[illegible]
600	31	3,938	-23.[illegible]	51	[illegible]	[illegible].5
550	31	4,563	[illegible]	[illegible]	[illegible]	[illegible]
500	31	5,246	[illegible]	[illegible]	[illegible]	[illegible]
450	31	5,971	-38.1	54	[illegible]	1[illegible]
400	31	6,782	-43.6	[illegible]	[illegible]	[illegible]
350	31	7,669	-48.[illegible]	[illegible]	[illegible]	[illegible]
300	31	8,672	-53.[illegible]	[illegible]	[illegible]	19.6
250	31	9,847	[illegible]		[illegible]	[illegible]
200	31	11,300	-50.1		[illegible]	[illegible]
175	31	12,173	-49.8		[illegible]	17.1
150	31	[illegible]	-50.3		[illegible]	[illegible]
125	31	14,370	-50.7		[illegible]	19.[illegible]
100	31	[illegible]	-51.4		[illegible]	[illegible]
80	31	17,267	-52.4		[illegible]	[illegible]
70	31	[illegible]	-53.0		[illegible]	[illegible]
60	31	19,121	-53.6		[illegible]	[illegible]
50	31	20,292	-54.[illegible]		[illegible]	[illegible]
40	31	21,722	-54.[illegible]		[illegible]	[illegible]
30	29	23,574	[illegible]		[illegible]	[illegible]
25	26	24,743	[illegible]		[illegible]	[illegible]
20	19	26,105	[illegible]		[illegible]	[illegible]
15	12	27,886	[illegible]			
10						
7						
5						
4						

+ [illegible], MARSHALL IS.

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	[illegible]	[illegible]	[illegible]	[illegible]
1000	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
950	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
900	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
850	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
750	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
650	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
500	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
250	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
200	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
175	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
150	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
70	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
7						
5						
4						

+ MARCUS IS., N. PACIFIC 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	9	28.[illegible]	77	99	6.5
1000	29	113	26.1	74	102	10.9
950	29	562	22.3	76	101	13.[illegible]
900	29	1,033	19.[illegible]	69	107	12.6
850	29	1,524	17.[illegible]	59	107	12.0
800	29	2,04[illegible]	15.[illegible]	55	107	10.5
750	29	2,581	12.7	5[illegible]	108	7.2
700	29	3,161	9.8	43	121	5.8
650	29	3,770	6.2	42	131	5.6
600	29	4,425	2.5	41	141	6.2
550	29	5,121	- 1.3	39	161	5.6
500	29	5,878	- 5.9	34	169	7.
450	29	6,690	-11.[illegible]	3[illegible]	174	8.7
400	29	7,591	-17.[illegible]	28	195	8.7
350	29	8,579	-23.9	25	210	7.4
300	29	9,687	-32.1	25	22[illegible]	11.7
250	29	10,948	-41.7		235	13.4
200	29	12,423	-53.1		247	17.7
175	29	13,271	-59.5		256	18.8
150	29	14,221	-65.8		271	17.1
125	29	[illegible]	-71.5		270	9.9
100	29	16,614	-75.[illegible]		248	4.1
80	27	17,908	-73.		100	4.9
70	27	18,699	-68.2		[illegible]	7.8
60	27	19,635	-63.6		96	12.4
50	25	20,765	-60.1		93	17.3
40	25	22,170	-56.6		94	18.1
30	21	24,009	-52.7		99	17.9
25	20	25,194	-49.6		100	17.7
20	16	26,670	-47.0		100	15.0
15	16	28,593	-43.2		109	13.[illegible]
10	10	31,334	-40.4			
7	5	33,775	-36.9			
5						

* MEDFORD, OREG. 973 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	401	5.4	85	[illegible]	.5
1000	31	178				
950	31	606	9.1	74	280	1.
900	31	1,051	10.2	6[illegible]	172	1.2
850	31	1,526	9.3	51	188	1.9
800	31	2,027	7.[illegible]	43	263	5.4
750	31	2,557	4.7	4[illegible]	[illegible]	9.1
700	31	3,116	[illegible]	3[illegible]	[illegible]	11.7
650	31	3,709	- 1.[illegible]	29	[illegible]	15.7
600	31	4,346	- 4.[illegible]	[illegible]	[illegible]	19.8
550	31	5,023	- 9.3	29	[illegible]	23.9
500	31	5,755	-14.3	31	[illegible]	24.9
450	31	6,540	-[illegible].1	29	[illegible]	27.2
400	31	7,408	-26.6	34	[illegible]	26.8
350	31	8,359	-33.9	31	[illegible]	29.3
300	31	9,421	-42.[illegible]	25	[illegible]7	30.3
250	31	10,632	-50.5		[illegible]	34.8
200	31	12,061	-57.8		[illegible]	34.8
175	31	12,897	-60.7		[illegible]	34.2
150	31	13,853	-61.8		[illegible]	34.0
125	31	14,978	-6[illegible]		[illegible]	32.2
100	31	16,350	-63.4		[illegible]	27.[illegible]
80	31	17,722	-62.6		277	[illegible]
70	31	18,548	-61.2		[illegible]	19.8
60	31	19,506	[illegible]		[illegible]	15.9
50	31	20,647	[illegible]		[illegible]	13.4
40	30	[illegible]	-57.[illegible]		[illegible]	11.8
30	30	23,882	[illegible]		[illegible]	10.1
25	30	25,053	-53.1		[illegible]7	11.7
20	30	[illegible]	-51.5		[illegible]	1[illegible]
15	30	28,375	-4[illegible]		[illegible]	15.1
10	25	31,042	-47.5		[illegible]	[illegible]
7	15	33,443	-44.3		[illegible]	[illegible]
5	7	[illegible]	-42.4			

* MIAMI, FLA. 1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	[illegible]	91	[illegible]	[illegible]
1000	31	114	[illegible]	[illegible]	[illegible]	4.[illegible]
950	31	566	21.[illegible]	[illegible]	71	[illegible]
900	31	[illegible]	[illegible]	[illegible]	[illegible]	7.4
850	31	1,517	15.7	[illegible]	[illegible]	5.6
800	31	[illegible]	13.1	[illegible]	[illegible]	[illegible]
750	31	[illegible]	10.5	[illegible]	[illegible]	1.7
700	31	[illegible]	7.[illegible]	51	117	[illegible]
650	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
600	31	[illegible]	[illegible]	45	[illegible]	[illegible]
550	31	[illegible]	[illegible]	[illegible]	[illegible]	4.3
500	31	[illegible]	- 7.5	[illegible]	[illegible]	[illegible]
450	31	[illegible]	-12.3	[illegible]	[illegible]	7.2
400	31	[illegible]	-18.[illegible]	[illegible]	[illegible]	11.5
350	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	31	[illegible]	-33.7	[illegible]	[illegible]	15.[illegible]
250	31	[illegible]	-43.6		[illegible]	17.1
200	31	[illegible]	-54.8		[illegible]	[illegible]
175	[illegible]	[illegible]	-60.9		[illegible]	[illegible]
150	[illegible]	[illegible]	-67.[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	-72.6		[illegible]	[illegible]
100	28	[illegible]	-75.9		[illegible]	[illegible]
80	27	[illegible]	[illegible]		[illegible]	[illegible]
70	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	[illegible]	[illegible]		[illegible]	11.[illegible]
30	[illegible]	[illegible]	-53.8		[illegible]	[illegible]
25	[illegible]	[illegible]	-51.8		[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
7	[illegible]	[illegible]	-35.[illegible]			
5						

* [illegible], TEXAS [illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	[illegible]	207	[illegible]
1000	31	155				
950	31	[illegible]				
900	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
850	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
800	31	2,034	12.[illegible]	[illegible]	[illegible]	7.[illegible]
750	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
700	[illegible]	3,142	[illegible]	[illegible]	[illegible]	[illegible]
650	[illegible]	3,745	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,391	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	5,073	[illegible]	[illegible]	[illegible]	[illegible]
500	31	5,826	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	6,628	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	7,513	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	8,485	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	9,571	[illegible]	[illegible]	[illegible]	[illegible]
250	[illegible]	10,812	[illegible]		[illegible]	[illegible]
200	[illegible]	12,269	[illegible]		[illegible]	[illegible]
175	[illegible]	13,114	[illegible]		[illegible]	[illegible]
150	[illegible]	14,068	[illegible]		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	[illegible]	17,824	[illegible]		[illegible]	[illegible]
70	[illegible]	18,625	[illegible]		[illegible]	[illegible]
60	[illegible]	19,570	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	22,112	[illegible]		[illegible]	[illegible]
30	27	23,943	[illegible]		[illegible]	[illegible]
25	27	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	26,564	[illegible]		[illegible]	[illegible]
15	[illegible]	28,447	-47.1		[illegible]	[illegible]
10	[illegible]	31,153	-43.3		[illegible]	[illegible]
7	[illegible]	33,540	[illegible]		[illegible]	[illegible]
5	[illegible]	35,854	[illegible]			

[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1000	[illegible]	146				
950	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
900	[illegible]	1,048	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	1,533	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	2,044	[illegible]	[illegible]	[illegible]	[illegible]
750	31	2,583	[illegible]	[illegible]	[illegible]	[illegible]
700	31	3,158	[illegible]	[illegible]	[illegible]	[illegible]
650	[illegible]	3,762	[illegible]	[illegible]	[illegible]	[illegible]
600	[illegible]	4,412	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	5,101	[illegible]	[illegible]	[illegible]	[illegible]
500	[illegible]	5,852	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	6,661	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	7,549	[illegible]	[illegible]	[illegible]	[illegible]
350	[illegible]	8,528	[illegible]	[illegible]	[illegible]	[illegible]
300	[illegible]	9,625	[illegible]		[illegible]	[illegible]
250	[illegible]	10,675	[illegible]		[illegible]	[illegible]
200	[illegible]	12,330	-54.5		[illegible]	[illegible]
175	[illegible]	13,161	[illegible]		[illegible]	[illegible]
150	[illegible]	[illegible]	-66.5		[illegible]	[illegible]
125	[illegible]	15,216	-72.0		[illegible]	[illegible]
100		16,515	-75.6		[illegible]	[illegible]
80	[illegible]	17,818	-71.1		[illegible]	[illegible]
70	[illegible]	18,612	-67.6		[illegible]	[illegible]
60	[illegible]	19,554	-63.5		[illegible]	[illegible]
50	[illegible]	20,684	-60.5		[illegible]	[illegible]
40	[illegible]	22,060	-57.5		[illegible]	[illegible]
30	[illegible]	23,920	[illegible]		[illegible]	[illegible]
25	[illegible]	25,100	[illegible]		[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
15						
10						
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

OCTOBER 1966

MONTGOMERY, ALA. 1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	61	13.5	92	12	2.5
1000	31	153	14.8	83	48	4.1
950	31	591	16.1	71	77	3.9
900	31	1,049	14.0	55	308	1.6
850	31	1,530	12.2	62	280	4.9
800	31	2,037	10.8	49	278	8.0
750	31	2,573	8.5	46	275	8.5
700	31	3,143	6.0	41	263	10.7
650	31	3,745	2.8	39	265	12.4
600	31	4,390	- .7	38	264	15.2
550	31	5,075	- 4.9	[illegible]	266	16.7
500	31	5,824	- 9.6	30	272	19.0
450	31	6,628	-15.0	30	275	21.2
400	31	7,511	-21.4	32	274	24.1
350	31	8,482	-28.4	31	270	29.1
300	31	9,570	-36.3	29	269	34.4
250	31	10,811	-45.2		270	40.8
200	31	12,268	-54.8		274	46.0
175	31	13,113	-59.4		272	46.8
150	31	14,069	-63.7		274	43.3
125	30	15,172	-67.9		274	37.1
100	30	16,505	-69.8		269	24.5
80	30	17,842	-66.4		267	14.6
70	30	18,655	-63.5		265	8.4
60	30	19,608	-60.4		261	5.8
50	30	20,753	-57.4		266	1.7
40	30	22,171	-55.0		60	4.5
30	28	24,019	-52.1		74	6.6
25	28	25,203	-50.5		76	7.2
20	28	26,667	-48.0		66	6.0
15	27	28,575	-44.9		29	4.5
10	24	31,308	-40.6		312	5.6
7	19	33,754	-36.8		276	11.7
5	13	36,074	-33.9			

* NANTUCKET, MASS. 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	14	8.9	85	274	3.7
1000	31	138	10.5	72	256	5.8
950	31	561	8.9	57	263	9.1
900	31	1,011	7.5	[illegible]	265	12.8
850	31	1,481	5.5	40	264	15.9
800	31	1,977	4.9	37	268	18.5
750	31	2,499	2.8	40	266	20.8
700	31	3,057	.4	38	262	23.9
650	31	3,646	- 2.7	37	260	28.2
600	31	4,279	- 6.2	37	257	34.8
550	31	4,949	-10.4	37	257	35.7
500	31	5,682	-14.8	36	259	39.2
450	31	6,464	-20.2	35	254	42.5
400	31	7,334	-26.3	36	254	45.6
350	31	8,287	-33.2	33	253	51.5
300	31	9,353	-41.2	30	258	55.9
250	31	10,570	-49.3		262	58.9
200	31	12,011	-55.1		261	62.2
175	31	12,861	-56.8		260	60.6
150	30	13,836	-58.4		262	55.0
125	29	14,972	-60.1		259	47.8
100	29	16,361	-60.1		258	40.4
80	28	17,751	-59.1		258	30.9
70	28	18,591	-57.5		262	21.0
60	28	19,565	-56.6		260	16.7
50	28	20,725	-55.2		256	16.1
40	28	22,151	-54.3		266	9.9
30	27	23,998	-52.9		295	7.8
25	27	25,175	-51.9		330	6.4
20	26	26,622	-50.5		342	6.6
15	23	28,509	-48.0		332	7.0
10	20	31,207	-44.7		306	10.5
7	17	33,617	-40.9		280	23.7
5	5	35,848	-38.1			

* NASHVILLE, TENN. 998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	180	8.4	87	100	.6
1000	31	161			14	2.1
950	31	590	11.1	63	236	.6
900	31	1,059	9.5	58	271	5.4
850	31	1,513	8.2	52	273	9.1
800	31	2,012	7.1	45	280	11.5
750	31	2,544	5.4	46	274	14.4
700	31	3,103	2.6	44	276	18.6
650	31	3,700	- .2	39	273	21.0
600	31	4,337	- 3.6	35	270	24.7
550	31	5,027	- 7.8	36	266	27.4
500	31	5,754	-12.5	35	264	30.1
450	31	6,547	-17.8	34	267	33.4
400	31	7,421	-24.2	32	266	36.9
350	31	8,382	-31.1	32	268	42.5
300	31	9,458	-38.8	30	268	48.6
250	31	10,687	-47.2		269	53.8
200	31	12,137	-54.9		271	59.1
175	31	12,984	-58.8		276	61.0
150	31	13,944	-61.7		273	56.1
125	31	15,065	-64.4		271	47.6
100	31	16,423	-65.7		271	34.2
80	31	17,783	-63.8		266	21.8
70	31	18,605	-61.6		261	16.7
60	31	19,565	-59.1		258	10.9
50	31	20,715	-56.6		267	7.8
40	30	22,136	-54.6		267	3.3
30	30	23,983	-52.5		356	.6
25	30	25,165	-51.0		44	2.5
20	30	26,622	-49.0		65	2.7
15	29	28,516	-46.9		45	4.5
10	28	31,228	-43.6		316	4.7
7	17	33,642	-39.6		289	11.5

NOME, ALASKA 1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	- 3.3	81	30	4.1
1000	31	45			10	4.9
950	31	450	- 4.6	77	51	6.4
900	31	874	- 7.4	79	60	4.7
850	31	1,318	- 9.7	76	57	5.1
800	31	1,784	-12.1	67	53	5.2
750	31	2,271	-15.1	64	34	5.1
700	31	2,794	-18.2	60	55	4.3
650	31	3,340	-21.5	58	54	5.8
600	31	3,929	-25.3	60	63	7.0
550	31	4,551	-29.6	58	67	7.6
500	31	5,230	-34.2	58	70	8.2
450	31	5,957	-39.2	52	68	8.7
400	31	6,758	-44.7		71	7.6
350	31	7,641	-50.5		80	8.2
300	31	8,633	-55.3		65	7.6
250	31	9,798	-53.7		354	.8
200	31	11,243	-50.9		284	6.4
175	30	12,113	-50.9		270	7.8
150	30	13,116	-51.0		270	9.9
125	30	14,301	-51.5		263	13.2
100	30	15,748	-52.1		265	15.7
80	30	17,190	-53.1		265	18.8
70	30	18,048	-53.7		267	19.6
60	30	19,039	-54.4		265	20.8
50	29	20,214	-54.8		267	22.9
40	29	21,640	-54.5		267	25.8
30	28	23,474	-55.6		270	28.4
25	28	24,636	-55.5		266	32.6
20	26	26,044	-55.2		271	36.1
15	20	27,835	-55.3		269	44.9
10	9	30,339	-54.6			

* NORTH PLATTE, NEBR. 918 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	848	2.3	81	330	4.9
1000	31	142				
950	31	563				
900	31	1,003	7.8	57	313	8.0
850	31	1,478	9.7	40	314	12.0
800	31	1,979	7.2	39	313	13.8
750	31	2,505	4.4	38	303	14.8
700	31	3,066	1.2	39	300	17.1
650	31	3,656	- 2.3	39	296	18.6
600	31	4,290	- 6.4	40	290	22.0
550	31	4,961	-10.8	42	284	25.1
500	31	5,691	-15.7	42	279	27.4
450	31	6,471	-21.4	37	277	30.3
400	31	7,335	-27.8	35	282	34.0
350	31	8,280	-35.1	35	277	39.2
300	31	9,338	-42.8	23	276	43.1
250	31	10,548	-50.0		275	49.3
200	31	11,983	-56.5		275	52.6
175	31	12,826	-58.5		278	52.6
150	31	13,792	-60.3		277	48.2
125	31	14,925	-61.4		280	40.0
100	31	16,302	-62.9		281	32.6
80	30	17,675	-62.0		284	24.3
70	29	18,501	-60.9		285	19.2
60	29	19,463	-59.7		279	15.5
50	28	20,604	-58.0		279	12.6
40	28	22,016	-55.6		263	11.5
30	28	23,859	-53.2		263	11.3
25	27	25,040	-51.5		261	11.1
20	26	26,505	-49.5		255	12.8
15	26	28,395	-47.9		259	14.2
10	24	31,086	-44.8		268	20.4
7	19	33,467	-42.9		267	26.0
5	8	35,771	-39.6			

* OAKLAND, CALIF. 1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	6	13.2	[illegible]	300	3.1
1000	31	143	14.6	68	311	2.7
950	31	579	15.2	52	351	4.7
900	31	1,035	15.0	36	356	7.0
850	31	1,518	13.6	26	334	6.2
800	31	2,026	11.5	23	322	5.2
750	31	2,560	8.7	21	324	6.4
700	31	3,129	5.6	21	326	7.8
650	31	3,729	2.0	21	317	9.3
600	31	4,373	- 2.1	23	317	11.1
550	31	5,050	- 6.7	23	320	12.8
500	31	5,796	-12.2	24	318	14.4
450	31	6,583	-18.4	26	313	15.9
400	31	7,462	-25.0	28	306	16.1
350	31	8,418	-32.6	29	309	19.4
300	31	9,485	-41.0	24	308	22.0
250	31	10,700	-50.0		307	24.7
200	31	12,129	-58.0		297	27.4
175	31	12,966	-60.4		291	28.4
150	31	13,921	-62.3		283	28.2
125	31	15,041	-64.1		278	26.6
100	31	16,401	-65.7		279	21.8
80	31	17,759	-64.3		280	16.5
70	31	18,576	-63.3		286	15.0
60	31	19,527	-61.7		290	11.5
50	30	20,657	-59.9		296	7.6
40	30	22,055	-57.9		296	7.4
30	28	23,884	-53.8		287	9.9
25	28	25,058	-52.3		272	9.1
20	26	26,511	-50.5		269	7.8
15	25	28,398	-48.3		265	11.5
10	23	31,082	-46.1		275	17.7
7	17	33,456	-43.2		267	22.9
5	9	35,724	-40.8			

OKLAHOMA CITY, OKLA. 971 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	392	10.6	69	213	1.2
1000	31	145				
950	31	576	13.4	51	205	4.7
900	31	1,030	12.8	45	237	9.5
850	31	1,509	11.6	43	256	8.5
800	31	2,015	9.3	38	269	10.1
750	31	2,542	6.9	35	262	11.7
700	31	3,111	3.9	34	266	12.8
650	31	3,706	.9	30	266	13.6
600	31	4,349	- 2.7	29	267	15.2
550	31	5,027	- 6.7	27	276	19.8
500	31	5,772	-11.5	24	275	26.0
450	31	6,563	-17.0	27	274	30.5
400	31	7,445	-23.7	29	275	35.5
350	31	8,406	-31.0	33	271	42.5
300	31	9,481	-38.9	32	269	50.9
250	31	10,710	-47.2		271	60.4
200	31	12,158	-55.7		270	68.0
175	31	13,001	-59.2		268	66.6
150	31	13,957	-63.1		269	62.2
125	31	15,069	-66.6		271	48.[illegible]
100	31	16,410	-68.1		271	36.3
80	30	17,754	-66.0		276	17.9
70	30	18,567	-63.7		265	12.6
60	28	19,517	-60.8		260	11.1
50	28	20,659	-58.0		231	5.4
40	28	22,072	-55.6		247	3.5
30	27	23,916	-52.8		187	1.0
25	26	25,091	-51.7		109	1.2
20	26	26,545	-49.3		66	4.9
15	25	28,445	-46.9		82	5.2
10	14	31,191	-42.8		303	1.9
7	8	33,578	-40.2			

OMAHA, NEBR. 967 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	403	6.9	75	217	3.5
1000	31	125				
950	31	549	10.1	60	234	7.0
900	31	1,001	10.4	50	264	16.9
850	31	1,475	8.4	44	276	16.9
800	31	1,974	6.0	40	292	16.7
750	31	2,498	3.2	34	291	17.5
700	31	3,057	.4	31	290	22.0
650	31	3,641	- 2.6	33	284	26.4
600	31	4,279	- 6.1	32	283	29.5
550	31	4,947	-10.6	32	281	32.2
500	31	5,680	-15.6	32	282	35.9
450	31	6,458	-21.0	33	280	37.9
400	31	7,326	-27.1	31	281	40.4
350	31	8,275	-34.3	33	280	47.6
300	31	9,336	-42.2	20	284	46.8
250	31	10,545	-49.6		282	53.0
200	31	11,986	-55.8		278	59.4
175	31	12,833	-57.3		278	59.4
150	31	13,803	-59.0		279	54.8
125	31	14,942	-60.9		278	46.8
100	31	16,325	-61.6		277	37.1
80	31	17,710	-60.6		277	25.6
70	31	18,541	-60.1		278	21.4
60	31	19,505	-58.4		276	15.5
50	30	20,656	-56.7		264	12.2
40	30	22,076	-54.9		264	12.8
30	30	23,927	-52.2		265	14.2
25	28	25,112	-51.2		264	12.6
20	28	26,568	-49.9		275	12.4
15	26	28,455	-48.3		282	15.0
10	23	31,134	-46.3		277	21.6
7	18	33,539	-44.3		269	33.8
5	6	35,763	-42.4			

PAGO PAGO, AMERICAN SAMOA + 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	28.5	77	103	9.1
1000	31	108	26.9	74	101	9.1
950	31	560	22.8	76	78	8.2
900	31	1,030	19.6	76	66	8.9
850	31	1,521	17.1	70	58	8.9
800	31	2,038	14.7	64	50	7.8
750	31	2,585	12.2	58	29	6.2
700	31	3,159	9.3	54	13	5.2
650	31	3,771	6.1	47	3	4.7
600	31	4,423	2.7	42	354	4.3
550	31	5,118	- 1.2	38	318	4.9
500	31	5,877	- 5.4	31	283	5.4
450	31	6,695	-10.6	29	281	10.1
400	31	7,594	-16.4	29	278	12.6
350	31	8,585	-23.3	28	270	14.4
300	31	9,695	-31.5	25	248	19.8
250	31	10,959	-41.5		243	24.9
200	31	12,436	-52.9		250	27.2
175	31	13,265	-59.4		253	29.5
150	31	14,234	-66.5		254	26.4
125	31	15,319	-73.2		258	21.0
100	31	16,611	-76.8		261	11.5
80	31	17,908	-71.3		302	3.9
70	31	18,704	-67.3		335	1.2
60	31	19,644	-63.0		321	1.4
50	31	20,776	-59.4		296	1.7
40	31	22,184	-56.3		33	3.5
30	30	24,028	-51.8		20	4.3
25	29	25,215	-49.4		61	5.2
20	29	26,687	-46.5		82	9.9
15	28	28,615	-42.7		85	14.8
10	22	31,381	-37.7		90	22.9
7	15	33,844	-33.4			

* PEORIA, ILL. 993 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	200	5.7	76	208	4.1
1000	31	140				
950	31	567	8.7	57	252	11.1
900	31	1,010	7.0	54	275	14.2
850	31	1,478	5.4	50	286	15.7
800	31	1,972	3.7	47	281	17.5
750	31	2,495	1.6	44	279	21.6
700	31	3,048	- .9	41	276	24.9
650	31	3,635	- 3.8	38	279	28.0
600	31	4,265	- 7.4	38	280	29.3
550	31	4,934	-11.6	37	280	33.4
500	31	5,661	-16.3	34	280	36.7
450	31	6,442	-21.6	34	278	36.9
400	31	7,301	-28.0	38	275	42.2
350	31	8,248	-34.8	38	275	49.7
300	31	9,307	-42.3	38	272	55.0
250	31	10,520	-49.5		272	61.8
200	31	11,961	-55.3		277	65.3
175	31	12,809	-57.4		275	62.9
150	31	13,779	-59.2		275	56.1
125	31	14,917	-60.9		274	47.6
100	31	16,303	-61.6		273	34.4
80	31	17,686	-60.7		268	26.4
70	31	18,518	-59.4		275	21.0
60	31	19,486	-57.8		270	15.0
50	31	20,641	-55.8		261	11.1
40	31	22,065	-54.3		263	10.3
30	29	23,915	-52.0		269	7.8
25	28	25,099	-50.8		275	7.0
20	27	26,555	-49.5		286	6.4
15	27	28,447	-47.7		302	6.4
10	25	31,129	-45.2		298	11.5
7	23	33,526	-42.6		280	18.3
5	12	35,813	-38.7			

* PITTSBURGH, PA. 976 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	359	5.7	79	241	2.9
1000	31	155				
950	31	577	7.8	64	247	7.8
900	31	1,022	6.1	59	271	14.0
850	31	1,488	3.9	59	273	15.2
800	31	1,980	2.7	53	266	13.1
750	31	2,501	1.0	43	264	20.6
700	31	3,054	- .9	37	265	25.3
650	31	3,640	- 4.2	33	265	29.5
600	31	4,270	- 7.4	36	266	35.7
550	31	4,938	-11.2	35	265	37.9
500	31	5,669	-15.6	34	269	41.4
450	31	6,450	-21.0	33	269	44.5
400	31	7,315	-27.2	32	267	45.5
350	31	8,264	-34.2	29	270	52.3
300	31	9,325	-41.8	28	270	55.0
250	31	10,540	-49.0		271	61.6
200	31	11,982	-55.1		272	64.5
175	31	12,832	-56.9		275	62.2
150	30	13,803	-58.8		273	55.0
125	30	14,942	-60.8		271	43.9
100	30	16,326	-61.2		270	35.9
80	30	17,715	-59.9		265	24.3
70	30	18,549	-58.9		265	20.6
60	30	19,52[illegible]	-57.1		263	16.1
50	30	20,679	-55.4		267	11.5
40	30	22,106	-54.1		266	9.3
30	30	23,958	-52.6		291	5.8
25	30	25,139	-51.0		310	5.8
20	29	26,598	-49.6		328	5.4
15	25	28,500	-47.4		328	8.4
10	18	31,1[illegible]2	-45.1		306	13.6
7	15	33,598	-41.2		263	19.4
5	[illegible]	[illegible]	-37.6			

PONAPE, CAROLINE IS. + 1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	39	28.5	80	150	1.2
1000	31	79	28.1	79	166	1.7
950	31	531	24.3	75	140	2.7
900	31	1,007	21.2	73	124	3.7
850	31	1,501	18.5	68	113	4.7
800	31	2,020	15.8	65	110	4.9
750	31	2,565	13.1	62	104	6.6
700	31	3,145	10.1	57	102	8.2
650	31	3,756	6.8	56	107	8.7
600	31	4,413	3.2	55	102	7.8
550	31	5,111	- .5	51	91	7.6
500	31	5,872	- 4.6	49	95	7.8
450	31	6,690	- 9.2	43	102	8.2
400	31	7,599	-14.6	39	97	7.0
350	31	8,597	-21.4	34	98	7.4
300	31	9,715	-29.8	30	92	6.6
250	31	10,987	-40.0	32	79	8.2
200	31	12,470	-52.4		75	9.5
175	31	13,318	-59.6		72	9.7
150	31	14,265	-67.4		71	9.3
125	31	15,342	-75.0		69	12.2
100	31	16,618	-79.7		80	19.2
80	31	17,905	-71.9		87	12.0
70	31	18,700	-67.4		102	3.7
60	30	19,638	-63.3		266	2.3
50	29	20,764	-60.1		276	8.2
40	29	22,168	-56.3		267	10.1
30	29	24,007	-53.7		260	9.3
25	27	25,161	-51.7		261	10.5
20	27	26,637	-48.8		259	6.6
15	22	28,528	-45.7		133	5.4
10	17	31,250	-40.7		94	21.8
7	7	33,702	-37.6			

PORTLAND, ME. 1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	20	4.2	86	282	3.3
1000	31	130	7.5	69	263	5.6
950	31	554	7.7	58	273	10.5
900	31	998	5.5	55	273	14.0
850	31	1,464	4.2	49	272	18.5
800	31	1,956	2.5	4[illegible]	271	20.6
750	31	2,474	.4	47	265	24.1
700	31	3,029	- 1.7	45	260	27.6
650	31	3,610	- 4.8	46	256	30.3
600	31	4,242	- 8.7	46	258	34.4
550	31	4,905	-12.6	42	259	38.9
500	31	5,634	-17.2	40	260	42.7
450	31	6,409	-22.4	39	257	45.5
400	31	7,272	-28.7	40	257	48.6
350	31	8,216	-35.4	38	257	54.0
300	31	9,273	-42.7	42	256	59.1
250	31	10,486	-49.7		257	63.3
200	31	11,927	-54.6		262	61.0
175	31	12,772	-55.0		260	59.8
150	30	13,753	-56.6		259	55.4
125	30	14,905	-58.0		260	44.9
100	[illegible]	16,312	-58.4		259	35.5
80	30	17,718	-57.1		259	25.1
70	30	18,563	-56.3		260	20.2
60	30	19,543	-55.8		262	16.5
50	30	20,707	-54.5		261	14.6
40	30	22,138	-53.4		270	12.2
30	29	23,985	-52.9		284	10.5
25	27	25,162	-52.2		306	8.5
20	27	26,609	-50.6		301	10.1
15	25	28,481	-48.7		301	14.2
10	16	31,142	-45.9		295	18.1
7	9	33,508	-42.6			

QUILLAYUTE, WASH. 1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	58	7.7	95	137	1.4
1000	31	152	9.0	88	126	2.9
950	31	577	8.0	74	209	5.8
900	31	1,021	5.9	70	226	9.7
850	31	1,468	3.7	71	234	13.2
800	31	1,979	1.9	64	247	15.7
750	31	2,496	- .6	51	251	18.6
700	31	3,047	- 3.2	45	254	22.5
650	31	3,626	- 6.3	45	264	27.6
600	31	4,252	-10.0	44	266	31.5
550	31	4,914	-14.0	42	265	34.6
500	31	5,636	-18.7	42	268	38.9
450	31	6,408	-24.0	45	270	42.3
400	31	7,265	-29.7	39	274	49.1
350	31	8,204	-36.5	44	271	53.8
300	31	9,255	-44.0		272	57.1
250	31	10,458	-51.8		267	55.8
200	31	11,879	-58.6		271	52.6
175	30	12,728	-59.8		268	51.3
150	28	13,685	-60.2		266	44.3
125	27	14,810	-60.7		265	42.0
100	27	16,201	-60.1		266	35.2
80	27	17,596	-59.3		271	29.9
70	27	18,432	-58.8		275	24.9
60	27	19,403	-58.0		272	20.0
50	26	20,550	-57.6		265	22.5
40	25	21,967	-56.7		262	22.5
30	25	23,796	-55.5		273	15.7
25	23	24,964	-55.0		268	14.6
20	23	26,394	-53.6		272	14.8
15	21	28,267	-52.4		278	16.9
10	14	30,905	-50.3		276	20.6
7	11	33,255	-47.6		264	29.5

RAPID CITY, S. DAK. 904 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	966	5.2	61	303	7.2
1000	31	131				
950	31	554				
900	31	998			296	7.2
850	31	1,473	8.6	40	314	15.9
800	31	1,972	5.9	40	313	17.9
750	31	2,492	2.4	41	313	18.5
700	31	3,051	- 1.0	43	307	21.2
650	31	3,631	- 4.5	46	301	22.5
600	31	4,265	- 8.2	41	297	24.7
550	31	4,927	-12.5	38	292	28.7
500	31	5,657	-17.2	35	290	32.1
450	31	6,432	-22.7	40	287	35.2
400	31	7,292	-29.1	38	285	35.2
350	31	8,232	-36.6	35	284	38.3
300	31	9,282	-44.6		284	41.8
250	31	10,483	-51.7		284	43.7
200	31	11,913	-56.6		282	48.6
175	31	12,757	-57.9		282	47.2
150	31	13,725	-58.9		278	45.3
125	31	14,865	-60.3		279	42.9
100	31	16,255	-60.5		277	32.8
80	31	17,643	-60.6		280	25.1
70	30	18,475	-59.0		282	20.0
60	29	19,442	-58.7		276	17.1
50	29	20,591	-57.5		276	15.2
40	29	22,005	-56.1		263	12.6
30	27	23,846	-53.5		265	13.6
25	25	25,019	-52.5		266	15.9
20	21	26,475	-51.1		268	18.8
15	15	28,363	-49.6			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST. CLOUD, MINN.
974 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	316	3.8	79	261	3.1
1000	31	100				
950	31	523	6.7	66	276	7.0
900	31	963	6.2	59	266	13.6
850	31	1,431	5.0	53	292	15.7
800	31	1,925	2.7	51	295	17.1
750	31	2,445	.1	48	291	19.4
700	31	2,995	- 3.0	46	292	23.1
650	31	3,574	- 6.2	44	292	26.0
600	31	4,202	- 9.7	43	292	28.7
550	31	4,865	-13.8	39	293	33.6
500	31	5,588	-18.4	43	292	37.7
450	31	6,359	-24.1	45	293	39.2
400	31	7,215	-30.1	42	292	41.8
350	31	8,152	-37.1	44	292	43.5
300	31	9,201	-44.4		290	45.3
250	31	10,402	-51.7		288	49.7
200	31	11,832	-55.7		283	53.6
175	31	12,681	-56.1		282	51.5
150	31	13,660	-56.3		281	48.2
125	31	14,814	-57.6		281	40.4
100	31	16,221	-57.9		273	32.4
80	31	17,626	-57.7		279	24.7
70	31	18,469	-57.1		280	20.2
60	31	19,444	-56.6		279	18.6
50	31	20,602	-55.4		274	15.5
40	31	22,026	-54.3		272	15.5
30	30	23,677	-52.2		264	15.0
25	27	25,066	-51.1		265	15.9
20	26	26,522	-49.9		270	20.4
15	21	28,419	-48.1		272	27.2
10	14	31,102	-45.5			
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ST. PAUL IS., ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	10	[illegible]	74	304	9.5
1000	30	66			330	10.5
950	30	473	- 1.5	82	304	14.6
900	30	904	- 5.4	91	306	14.8
850	30	1,351	- 8.0	81	308	16.1
800	30	1,820	-10.9	76	310	17.5
750	30	2,310	-13.8	67	310	20.2
700	30	2,835	-16.4	64	311	21.0
650	30	[illegible]	-19.2	59	307	23.3
600	30	3,952	-22.5	59	306	25.1
550	30	4,611	-26.5	59	303	28.2
500	30	5,299	-31.2	56	305	31.7
450	30	6,030	-36.3	48	303	30.1
400	30	6,846	-41.9	41	300	30.1
350	30	7,739	-47.6		299	30.1
300	30	8,747	-52.0		297	29.1
250	30	9,924	-52.3		290	30.1
200	30	11,374	-50.2		274	28.2
175	30	12,247	-49.5		282	28.7
150	30	13,254	-50.3		282	27.4
125	30	14,442	-50.9		280	25.3
100	30	15,893	-51.2		279	24.5
80	29	17,340	-51.9		273	23.5
70	29	18,204	-52.3		274	23.9
60	29	19,198	-52.8		272	24.7
50	29	20,375	-52.8		268	25.3
40	28	21,818	-52.9		270	25.8
30	26	23,660	-52.7		270	31.5
25	24	24,813	-52.5		270	32.1
20	23	26,257	-52.1		270	35.7
15	20	28,114	-51.7		271	43.1
10	10	30,715	-51.9			
7						
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SALEM, OREG.
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	[illegible]	95	178	2.7
1000	31	166	9.4	88	178	1.9
950	31	590	9.7	70	229	4.1
900	31	1,041	8.9	64	243	7.6
850	31	1,514	7.3	57	251	10.7
800	31	2,011	5.5	51	264	13.0
750	31	2,535	[illegible]	49	263	16.1
700	31	3,092	[illegible]	42	272	18.3
650	31	3,677	- 3.6	39	273	21.4
600	31	4,310	- 7.3	34	275	25.1
550	31	4,975	-11.2	34	277	28.6
500	31	5,709	-16.0	40	279	32.8
450	31	6,489	-21.5	40	279	35.7
400	31	7,353	-27.6	37	282	39.2
350	31	8,300	-34.6	37	281	42.2
300	31	9,358	-42.7	36	282	40.2
250	31	10,565	-51.2		282	39.2
200	31	11,988	-58.2		[illegible]	41.8
175	31	12,825	-60.4		279	41.0
150	31	13,751	-61.7		274	39.8
125	31	[illegible]	-62.6		276	35.5
100	31	16,283	-62.2		277	29.7
80	31	17,667	-60.4		275	21.4
70	31	18,495	-60.2		275	[illegible]
60	31	19,460	-59.5		280	15.3
50	31	20,603	-58.5		283	11.8
40	30	[illegible]	-56.9		272	11.3
30	29	23,844	[illegible]		276	13.0
25	29	25,012	-53.6		281	16.7
20	28	26,454	-52.1		273	17.1
15	25	28,327	-49.8		274	[illegible]
10	17	30,967	[illegible]		269	25.3
7	6	33,288	-46.8			
5						

SALT LAKE CITY, UTAH
875 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,288	4.8	71	[illegible]	3.3
1000	31	178				
950	31	606				
900	31	1,056				
850	31	1,522	9.6	44	171	4.5
800	31	2,024	7.5	44	220	4.7
750	31	2,555	[illegible]	[illegible]	265	7.4
700	31	3,112	[illegible]	[illegible]	283	9.7
650	31	3,703	- 2.5	[illegible]	291	13.8
600	31	4,335	- 6.2	39	293	15.7
550	31	[illegible]	-10.2	35	289	16.9
500	31	5,739	-15.3	37	286	18.8
450	31	[illegible]	-20.8	37	291	21.2
400	31	7,389	-27.1	36	296	24.5
350	31	8,337	-34.1	38	301	24.1
300	31	9,398	-42.4	27	297	27.0
250	31	10,608	-50.8		294	29.7
200	31	12,040	-56.7		286	35.4
175	31	12,881	-59.4		287	36.9
150	31	13,843	-60.6		278	36.9
125	30	14,975	-63.3		276	33.4
100	30	16,341	-64.4		274	26.2
80	30	17,708	-63.1		282	21.4
70	30	18,531	-61.9		284	17.1
60	[illegible]	19,486	-60.9		282	10.7
50	30	20,624	-59.1		284	10.3
40	29	[illegible]	-56.7		280	8.5
30	29	23,863	-53.5		266	8.7
25	29	25,039	-52.3		268	11.8
20	28	26,484	-50.8		267	14.2
15	26	28,370	-48.5		265	18.1
10	18	31,042	-46.6			
7						
5						

[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	124	15.1	77	[illegible]	1.7
1000	31	118				2.5
950	31	[illegible]	18.0	59	24	2.1
900	31	1,019	17.2	[illegible]	27	3.5
850	31	[illegible]	15.4	38	14	2.5
800	31	2,016	12.3	36	1	3.1
750	31	2,551	[illegible]	34	17	2.5
700	31	3,124	6.6	31		2.7
650	31	3,722	2.9	31	334	3.3
600	31	4,373	- 1.0	25	[illegible]	5.5
550	31	5,050	- 5.4	24	269	7.6
500	31	5,803	-10.6	23	272	10.3
450	31	6,597	-16.5	23	271	12.4
400	31	7,480	-23.5	28	269	[illegible]
350	31	[illegible]	[illegible]	32	269	14.6
300	31	9,518	[illegible]	30	[illegible]	[illegible]
250	31	10,749	-46.3		250	[illegible]
200	31	12,205	-54.5		258	33.6
175	31	13,052	-58.5		256	[illegible]
150	31	14,013	-61.8		257	33.8
125	31	15,133	-65.0		[illegible]	30.5
100	31	16,485	-67.0		[illegible]	19.0
80	31	17,832	-66.8		260	9.7
70	31	18,641	-65.2		[illegible]	[illegible]
60	31	19,584	-62.5		[illegible]	4.1
50	31	20,717	-59.2		[illegible]	1.9
40	31	22,125	-56.1		291	2.7
30	31	23,967	-53.0		229	.8
25	31	25,146	-51.4		[illegible]	.8
20	31	26,600	-49.6		17	2.1
15	31	28,494	-47.3		[illegible]	1.7
10	29	31,190	-44.0		304	4.7
7	27	33,586	[illegible]		276	11.1
5	20	35,883	-39.0			

* SAN JUAN, P. R.
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	24.9	89	153	2.7
1000	31	118	24.8	35	117	5.2
950	31	564	22.4	80	96	10.1
900	31	1,039	19.7	74	94	10.9
850	31	1,530	16.8	73	93	9.5
800	31	2,045	14.1	66	96	8.5
750	31	2,583	11.5	57	97	7.0
700	31	3,163	8.4	[illegible]	106	6.0
650	31	3,764	4.7	48	104	5.4
600	31	4,419	.8	45	122	4.9
550	31	5,104	- 3.3	40	130	5.1
500	31	5,861	- 8.0	40	127	5.8
450	31	6,666	-13.1	36	122	5.8
400	31	7,560	-19.3	34	112	5.8
350	31	8,540	-26.0	31	57	3.9
300	31	9,637	-34.3	28	26	7.2
250	31	10,867	-43.9		10	10.9
200	31	12,350	-54.6		348	15.7
175	31	13,192	-60.6		342	14.2
150	31	14,139	-66.2		343	12.0
125	31	15,229	-71.6		345	9.9
100	31	16,535	-74.0		5	7.4
80	31	17,841	-71.3		62	6.8
70	31	18,635	-68.4		74	7.6
60	31	19,568	-64.1		71	8.7
50	31	20,693	-60.5		69	10.5
40	31	22,097	-56.6		75	13.8
30	29	23,936	-52.6		96	15.0
25	29	25,118	-50.6		101	15.7
20	28	26,581	-47.5		99	17.7
15	26	28,503	-43.2		99	17.3
10	13	31,272	-38.4		104	16.5
7	7	33,753	-35.3			
5						

SAN NICOLAS, CALIF.
994 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	174	15.4	73	311	5.6
1000	31	126				
950	31	565	18.3	47	352	5.6
900	31	1,028	18.0	34	2	3.9
850	31	1,515	15.6	32	18	2.9
800	31	2,026	12.8	32	24	3.1
750	31	2,565	9.7	33	29	5.2
700	31	3,134	6.2	31	31	5.6
650	31	3,737	2.2	30	17	4.9
600	31	4,378	- 1.9	26	344	4.5
550	31	5,065	- 6.3	21	329	6.4
500	31	5,802	-11.8	22	309	6.8
450	31	6,600	-17.6	26	305	8.5
400	31	7,472	-23.5	25	300	9.9
350	31	[illegible]	-31.4	30	298	11.8
300	31	9,507	-39.2	29	300	14.4
250	31	10,736	-47.1	29	285	19.4
200	31	12,186	[illegible]	29	270	25.3
175	31	13,032	-58.8	28	270	26.8
150	31	13,991	-62.5	26	264	26.2
125	31	15,106	-65.5		261	24.5
100	30	16,457	-67.5		268	17.9
80	30	17,804	-66.4		273	9.9
70	29	18,618	-64.8		[illegible]	7.2
60	29	19,564	-62.6		306	4.1
50	29	20,695	-59.8		339	2.5
40	29	22,102	-55.8		295	2.1
30	29	23,945	-53.0		58	1.2
25	28	25,126	-51.3		153	2.1
20	28	26,582	-49.2		54	2.9
15	27	28,481	-46.7		316	2.7
10	25	31,183	-42.9		283	8.2
7	16	33,607	-40.2		278	10.5
5	9	35,973	-36.5			

* SAULT STE. MARIE, MICH.
985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	221	4.2	87	166	1.6
1000	31	95				
950	31	513	4.7	80	236	8.5
900	31	954	3.2	78	274	15.2
850	31	1,416	1.1	77	278	18.1
800	31	1,903	- .8	68	279	19.2
750	31	2,415	- 3.4	66	276	20.2
700	31	2,960	- 6.0	61	275	22.7
650	31	3,533	- 8.9	56	276	26.0
600	31	4,153	-12.5	51	[illegible]	28.7
550	31	4,810	-16.4	49	282	31.5
500	31	[illegible]	-21.1	49	[illegible]	32.8
450	31	6,256	-26.4	45	[illegible]	36.1
400	31	7,133	-32.4	46	284	40.4
350	31	8,062	-38.5	39	282	43.3
300	31	9,107	-44.9		281	47.0
250	31	10,309	-50.3		282	49.0
200	31	11,755	-52.7		275	51.7
175	31	[illegible]	-53.4		275	49.9
150	31	13,605	-53.9		274	46.0
125	31	14,772	-55.1		274	38.5
100	31	16,192	-55.7		271	31.5
80	31	17,614	-55.5		272	24.9
70	31	18,464	-55.2		269	20.8
60	31	19,449	-55.1		268	19.2
50	31	20,614	-54.2		263	18.8
40	31	22,048	-53.5		270	16.5
30	[illegible]	[illegible]	-52.2		265	18.3
25	26	25,078	-51.5		274	18.3
20	26	[illegible]	[illegible]		[illegible]	19.2
15	[illegible]	[illegible]	[illegible]		276	23.7
10	22	[illegible]	-47.3		285	27.0
7	16	[illegible]	[illegible]		[illegible]	27.4
5	7	35,615	-42.5			

SHEMYA, ALASKA
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	38	5.2	82	299	4.7
1000	31	133	4.3	82	331	6.2
950	31	547	1.3	86	322	7.6
900	31	981	- 1.9	90	313	9.1
850	31	1,434	- 3.8	79	[illegible]	12.4
800	31	1,912	- 5.3	63	305	13.0
750	31	2,415	- 7.1	52	306	14.2
700	31	2,953	- 9.7	54	306	16.1
650	31	3,516	-13.3	54	305	18.6
600	31	4,127	-17.3	49	302	22.1
550	31	4,769	-21.7	48	299	22.5
500	31	5,469	-26.3	41	299	27.4
450	31	6,217	-31.6	39	295	29.3
400	31	7,046	-37.4	41	296	32.1
350	31	7,957	-43.5		294	37.7
300	31	8,979	-49.7		292	44.1
250	31	10,157	[illegible]		[illegible]	42.3
200	31	11,582	-54.9		278	38.7
175	31	12,437	-54.0		278	[illegible]
150	31	13,427	-53.5		281	37.3
125	31	14,600	-53.4		282	36.9
100	30	16,031	-53.1		283	31.3
80	30	17,469	-53.5		285	29.5
70	30	18,326	-53.7		283	31.5
60	[illegible]	19,313	-53.3		[illegible]	[illegible]
50	29	20,486	-53.5		284	28.2
40	29	21,922	-53.2		289	23.5
30	26	[illegible]	-52.7		289	24.1
25	25	24,954	-52.1		292	24.9
20	22	26,393	-51.8		[illegible]	22.9
15	15	28,277	-50.0		[illegible]	[illegible]
10	8	30,909	-51.1			
7						
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* SHREVEPORT, LA.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	12.5	[illegible]	[illegible]	2.1
1000	31	154	14.4	73	62	[illegible]
950	31	596	14.5	64	157	1.6
900	31	1,045	12.6	60	294	2.9
850	31	1,525	11.6	[illegible]	290	5.4
800	31	2,031	10.2	41	289	8.4
750	31	2,567	8.0	37	282	9.7
700	31	3,134	[illegible]	39	[illegible]	11.7
650	31	3,742	2.2	37	276	14.8
600	31	4,378	- 1.3		271	17.3
550	31	5,067	- 5.2	29	274	20.0
500	31	5,809	-10.4	29	274	22.3
450	31	6,613	-15.8	27	[illegible]	26.2
400	31	7,492	-22.0	26	273	30.7
350	31	8,461	-29.1	27	273	34.6
300	31	9,545	-37.1	23	272	37.5
250	31	10,781	-45.9		272	45.3
200	31	12,235	[illegible]		274	52.8
175	31	13,078	-60.0		274	53.6
150	31	14,030	-64.5		271	51.1
125	31	15,132	-68.8		273	43.5
100	31	16,457	-71.1		274	30.3
80	31	17,784	[illegible]		273	15.5
70	31	18,590	-65.4		274	[illegible]
60	30	19,536	-60.9		266	[illegible]
50	30	20,674	-58.6		244	3.7
40	30	[illegible]	-56.1		56	3.3
30	30	23,921	[illegible]		72	7.8
25	30	25,096	-52.0		76	9.7
20	29	[illegible]	-49.5		73	9.7
15	26	28,441	[illegible]			9.1
10	24	31,165	-42.0		54	5.4
7	19	33,584	-38.8		[illegible]	6.4
5	8	35,841	-36.7			

SPOKANE, WASH.
934 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	717	4.4	74	166	4.9
1000	31	156				
950	31	578				
900	31	1,023	7.7	60	213	8.9
850	31	1,493	5.8	55	240	12.2
800	31	1,987	3.0	56	248	14.2
750	31	2,502	.5	52	256	16.7
700	31	3,058	- 2.6	48	267	19.6
650	31	3,638	- 5.9	50	273	22.5
600	31	4,267	- 9.6	54	273	28.0
550	31	4,926	-13.8	59	273	31.5
500	31	5,652	-18.5	56	274	35.0
450	31	6,422	-24.0	56	273	40.0
400	31	7,281	-29.8	52	273	43.9
350	31	8,221	-36.2	50	278	48.4
300	31	9,274	-43.6		280	51.1
250	31	10,478	-51.8		284	55.9
200	31	11,902	-57.5		282	56.9
175	31	12,742	-59.0		281	53.2
150	30	13,706	-59.2		283	47.2
125	30	14,847	-59.6		280	39.4
100	30	16,242	-59.7		279	34.0
80	30	17,642	-58.7		278	26.6
70	30	18,480	-58.5		279	22.7
60	30	19,450	-57.8		271	19.4
50	30	20,603	-57.0		277	17.3
40	30	22,017	-56.4		275	13.6
30	29	23,838	-54.5		273	14.4
25	29	25,009	-53.6		270	15.3
20	28	26,447	-53.0		275	17.7
15	25	28,317	-50.7		269	19.8
10	22	30,978	-48.6		270	25.4
7	6	33,351	-46.9			

SWAN ISLAND, W. I.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	26.3	84	69	4.1
1000	31	96	26.2	82	[illegible]	6.2
950	31	548	23.0	88	87	5.4
900	31	1,019	20.1	82	91	[illegible]
850	31	1,512	17.2	77	92	7.0
800	31	2,028	14.3	76	92	7.4
750	31	2,576	11.6	68	[illegible]	7.4
700	31	3,147	8.8	61	98	6.4
650	31	3,756	5.6	56	102	5.2
600	31	4,410	[illegible]	52	104	5.6
550	31	[illegible]	- 1.9	50	[illegible]	5.4
500	31	[illegible]	- 6.3	44	88	4.5
450	31	6,675	-11.2	40	76	5.2
400	31	7,573	-17.0	35	[illegible]	5.6
350	31	8,560	-24.0	32	[illegible]	4.9
300	31	[illegible]	[illegible]	[illegible]	34	5.8
250	31	10,924	-42.7		29	5.8
200	31	12,391	-54.5		2	5.2
175	31	13,234	-60.9		17	6.8
150	31	14,177	-67.9		25	8.4
125	31	15,257	-73.4		37	11.5
100	31	16,546	-76.9		49	14.4
80	31	17,840	-73.2		69	11.1
70	31	18,628	-69.3		77	12.0
60	31	19,560	-65.0		81	13.0
50	30	20,684	-60.2		91	11.7
40	29	22,087	-56.4		95	10.5
30	29	23,929	-52.6		83	14.4
25	28	25,111	-50.6		89	16.9
20	22	26,575	-48.1		54	13.4
15	14	[illegible]	-43.0		87	17.1
10	6	31,205	-39.7			
7						

TAMPA, FLA.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	[illegible]	92	57	4.3
1000	31	[illegible]	[illegible]	[illegible]	[illegible]	6.4
950	31	580	19.7	76	86	7.6
900	31	[illegible]	17.5	70	[illegible]	4.7
850	31	1,528	15.4	[illegible]	112	3.1
800	31	2,040	13.1	53	115	1.0
750	31	2,585	10.4	[illegible]	227	[illegible]
700	31	3,152	7.2	46	258	2.9
650	31	3,760	[illegible]	37	[illegible]	[illegible]
600	31	4,408	1.1	[illegible]	257	[illegible]
550	31	[illegible]	- 3.1	33	268	7.2
500	31	[illegible]	- 7.3	23	281	[illegible]
450	31	[illegible]	-12.6	[illegible]	[illegible]	12.0
400	31	7,554	-18.9	[illegible]	274	16.3
350	31	8,535	[illegible]	27	[illegible]	20.6
300	31	9,635	-33.6	27	267	25.4
250	31	10,888	-43.3		270	29.9
200	31	12,355	-54.3		276	32.8
175	31	13,200	-59.8		281	34.0
150	30	14,148	-64.9		[illegible]	29.7
125	30	15,245	-69.9		[illegible]	[illegible]
100	30	16,559	-73.4		[illegible]	17.9
80	30	17,873	-69.0		[illegible]	5.6
70	30	18,676	-66.2		[illegible]	1.2
60	30	19,618	-62.8		94	5.8
50	30	20,749	-59.5		[illegible]	[illegible]
40	30	22,157	-56.2		76	10.7
30	[illegible]	23,998	[illegible]		74	11.1
25	29	25,176	-51.1		84	9.5
20	26	26,641	-48.6		78	7.6
15	11	[illegible]	-45.5			
10						
7						

TOPEKA, KANS.
985 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	269	7.3	78	205	3.9
1000	31	141				
950	31	568	11.8	54	[illegible]	9.7
900	31	1,020	11.1	49	252	13.0
850	31	1,497	9.8	43	274	14.0
800	31	1,999	7.3	39	[illegible]	13.6
750	31	2,524	4.6	39	286	16.7
700	31	3,087	2.2	35	[illegible]	18.8
650	31	3,676	- .9	34	279	21.0
600	31	4,317	- 4.9	34	280	24.5
550	31	4,989	- 9.2	31	[illegible]	26.8
500	31	5,728	-14.1	31	278	31.5
450	31	6,509	-19.7	31	281	36.1
400	31	7,384	-26.0	34	283	38.1
350	31	8,337	-33.0	35	282	43.7
300	31	9,404	-40.7	30	283	50.3
250	31	10,623	-49.0		282	56.1
200	31	12,063	-55.7		278	65.1
175	31	12,909	-58.2		277	62.5
150	31	13,873	-60.7		276	55.4
125	31	15,001	-63.0		275	[illegible]
100	31	16,370	-63.5		280	33.2
80	31	17,742	-62.6		280	22.9
70	31	18,567	-61.3		279	15.7
60	30	19,528	-59.4		276	12.0
50	30	20,676	-57.0		272	9.5
40	29	22,095	-54.4		262	7.8
30	29	23,949	-51.9		260	[illegible]
25	29	25,133	-50.8		262	6.2
20	[illegible]	26,590	-49.4		285	6.0
15	24	28,492	-47.3		288	7.8
10	9	[illegible]	-46.1			
7						

+ TRUK, CAROLINE IS.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	78	[illegible]	[illegible]
1000	31	[illegible]	27.7	75	[illegible]	.6
950	31	544	[illegible]	74	[illegible]	1.6
900	31	1,018	21.0	72	171	2.5
850	31	1,512	[illegible]	67	129	3.9
800	31	2,030	15.7	61	108	3.9
750	31	2,579	12.9	56	[illegible]	[illegible]
700	31	3,154	9.9	52	99	6.6
650	31	3,769	[illegible]	50	[illegible]	8.0
600	31	4,421	[illegible]	48	[illegible]	[illegible]
550	31	5,115	- .5	45	97	10.3
500	31	5,878	- 4.9	39	[illegible]	9.5
450	31	6,697	- 9.6	35	[illegible]	10.9
400	31	7,602	-15.2	[illegible]	99	8.5
350	31	8,598	-22.0	30	99	[illegible]
300	31	9,714	-30.2	27	91	9.1
250	31	10,985	-40.5	33	86	8.0
200	31	12,466	-52.7		81	9.7
175	31	13,314	-59.9		75	12.0
150	31	14,259	-67.8		[illegible]	15.0
125	31	15,333	[illegible]		74	18.5
100	30	16,604	-79.1		63	22.5
80	30	17,892	-72.4		86	13.8
70	29	18,684	-67.5		[illegible]	6.2
60	29	19,623	-62.9			1.2
50	[illegible]	20,754	-60.0		256	5.2
40	27	22,159	-56.8		267	8.4
30	21	24,002	-53.5		271	5.8
25	17	25,175	-50.8		248	2.7
20	10	26,633	-46.7			
15						
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* T[illegible] ARIZ.
[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	789	1[illegible].7	5[illegible]	14[illegible]	6.4
1000	3[illegible]	1[illegible]				
950	31	56[illegible]				
900	3[illegible]	1,[illegible]9	18.8	39	[illegible]1	7.8
850	31	1,5[illegible]	17.	37	[illegible]	6.6
800	31	2,[illegible]2	13.6	38	164	6.2
750	31	[illegible],553	9.9	39	138	7.6
700	31	3,1[illegible]	6.5	36	206	7.4
650	31	3,731	3.0	2[illegible]	240	9.1
600	31	4,3[illegible]	- [illegible]	23	24[illegible]	11.7
550	31	[illegible],06[illegible]	- 4.7	21	249	14.[illegible]
500	31	5,814	-10.	22	[illegible]3	16.5
450	3[illegible]	6,[illegible]4	-15.[illegible]	[illegible]3	[illegible]3	20.6
400	31	7,4[illegible]5	-22.[illegible]	25	[illegible]1	25.3
350	31	8,461	-29.6	29	[illegible]	28.[illegible]
300	31	[illegible],543	-37.[illegible]	28	251	35.
250	31	10,777	-46.2		[illegible]	43.3
200	31	12,23[illegible]	-55.[illegible]		[illegible]	49.
175	3[illegible]	13,[illegible]75	-59.4		[illegible]	48.[illegible]
150	3[illegible]	14,[illegible]1	-63.		[illegible]1	44.1
125	3[illegible]	[illegible],138	-67.[illegible]		[illegible]	33.4
100	3[illegible]	15,[illegible]74	-67.		[illegible]	22.
80	3[illegible]	17,[illegible]7	-6[illegible].		276	10.9
70	3[illegible]	1[illegible]	-6[illegible]		[illegible]7	5.[illegible]
60	[illegible]9	1[illegible]	-[illegible]		[illegible]	4.[illegible]
50	[illegible]9	[illegible]	-[illegible]		[illegible]	4.1
40	[illegible]	2[illegible]	-56.		[illegible]	2.7
30	[illegible]	[illegible]7	-54.			4.1
25	[illegible]7	[illegible]	-52.4		[illegible]	6.
20	[illegible]7	[illegible]	-[illegible]		74	4.[illegible]
15	[illegible]	[illegible]6	-43.[illegible]		67	5.[illegible]
10	[illegible]	31,[illegible]	-43.		[illegible]	2.[illegible]
7	[illegible]	[illegible]	-4[illegible]		[illegible]	3.[illegible]
5	7	3[illegible]	-[illegible]7.			

* [illegible] CALIF.
1[illegible]4 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	3[illegible]	1[illegible]	13.2	73	55	[illegible]
1000	3[illegible]	1[illegible]	14.[illegible]	[illegible]5	44	1.[illegible]
950	30	571	17.[illegible]	51	20	7.[illegible]
900	3[illegible]	[illegible],[illegible]29	16.9	38	22	5.8
850	3[illegible]	[illegible],515	15.[illegible]	32	[illegible]1	6.[illegible]
800	3[illegible]	[illegible]	12.[illegible]	31	19	5.6
750	30	[illegible],5[illegible]7	9.[illegible]	3[illegible]	17	5.[illegible]
700	3[illegible]	[illegible],13[illegible]	[illegible].7	31	27	4.7
650	30	3,72[illegible]	2.	33	7	5.4
600	30	4,375	- 1.[illegible]	3[illegible]	[illegible]	[illegible]
550	30	[illegible]	- 6.[illegible]	24	343	[illegible].7
500	30	5,7[illegible]	-11.7	26	[illegible]	[illegible].7
450	30	6,[illegible]	-17.[illegible]	27	341	10.[illegible]
400	3[illegible]	7,[illegible]7	-24.[illegible]	30	[illegible]	11.1
350	30	[illegible]	-31.9	29	330	14.2
300	30	9,497	-4[illegible].	26	321	17.1
250	30	10,7[illegible]	-48.4		312	21.[illegible]
200	3[illegible]	12,164	-56.2		294	23.3
175	30	[illegible]	-59.[illegible]		[illegible]	21.4
150	3[illegible]	[illegible]	-62.[illegible]		[illegible]	22.7
125	30	15,[illegible]	-64.6		275	21.4
100	30	16,4[illegible]	-67.1		274	18.[illegible]
80	[illegible]	17,7[illegible]	-65.[illegible]		[illegible]	12.4
70	[illegible]	18,[illegible]	-64.4		[illegible]	[illegible].1
60	30	[illegible]	-62.		[illegible]	5.4
50	3[illegible]	[illegible]	-60.[illegible]		314	3.[illegible]
40	30	[illegible]	-57.[illegible]		[illegible]	5.[illegible]
30	3[illegible]	23,911	-53.[illegible]		[illegible]	[illegible]
25	3[illegible]	[illegible]7	-52.2		267	3.9
20	[illegible]8	26,5[illegible]	-50.[illegible]		[illegible]	2.[illegible]
15	[illegible]4	[illegible]	-48.[illegible]		[illegible]	[illegible]
10	[illegible]	[illegible]	-4[illegible].		[illegible]1	[illegible]
7	[illegible]	[illegible]	-43.[illegible]		[illegible]7	11.[illegible]
5						

VICTORIA, TEXAS
101[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	33	16.7	[illegible]3	1[illegible]	5.4
1000	31	14[illegible]	18.7	76	[illegible]	7.[illegible]
950	31	578	17.[illegible]	73	[illegible]	4.[illegible]
900	31	1,045	15.[illegible]	[illegible]5	[illegible]	1.[illegible]
850	31	[illegible]	14.[illegible]	57	280	1.9
800	31	[illegible],040	12.[illegible]	55	31[illegible]	3.3
750	31	[illegible],576	9.[illegible]	46	308	4.5
700	31	3,151	7.1	44	[illegible]	6.4
650	31	3,748	3.[illegible]	44	289	7.2
600	31	4,4[illegible]	.1	38	274	[illegible].5
550	31	[illegible]	- 4.[illegible]	32	[illegible]	10.1
500	31	5,841	- 8.[illegible]	29	277	12.[illegible]
450	31	6,642	-14.1	27	276	14.6
400	31	7,534	-[illegible]	28	270	16.3
350	31	[illegible],509	-27.[illegible]	28	269	21.6
300	31	[illegible],601	-35.[illegible]	[illegible]8	269	26.[illegible]
250	31	10,848	-44.[illegible]		27[illegible]	32.6
200	30	12,307	-54.3		272	39.0
175	30	[illegible],152	-59.8		271	40.4
150	3[illegible]	14,102	-[illegible]		[illegible]	38.3
125	30	15,[illegible]9	-70.2		267	33.6
100	3[illegible]	16,509	-74.1		271	21.2
80	[illegible]	17,819	-70.		[illegible]	7.
70	3[illegible]	18,619	-66.[illegible]		280	3.3
60	[illegible]9	19,559	-63.		146	[illegible].9
50	29	20,689	-59.7		112	5.1
40	29	[illegible],092	-56.9		80	9.1
30	28	23,924	-54.1		[illegible]6	1[illegible]
25	[illegible]8	[illegible],100	-51.6		[illegible]1	11.5
20	28	26,555	-48.9		79	10.7
15	[illegible]7	[illegible],456	-45.[illegible]		50	7.6
10	[illegible]2	31,188	-40.7		[illegible]	2.9
7	19	33,623	-3[illegible]			
5						

* WAKE IS., PACIFIC AREA
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	[illegible]7.7	7[illegible]	[illegible]	[illegible]
1000	31	112	26.7	81	76	11.1
950	31	56[illegible]	22.8	86	91	13.8
900	31	[illegible],035	19.[illegible]	81	[illegible]1	12.6
850	31	1,528	17.[illegible]	73	97	9.5
800	31	[illegible],045	15.[illegible]	63	101	7.4
750	31	[illegible],567	12.[illegible]	55	1[illegible]1	5.8
700	31	3,167	10.1	43	85	6.6
650	31	3,776	7.1	32	[illegible]3	7.[illegible]
600	31	4,434	3.[illegible]	32	7[illegible]	7.[illegible]
550	31	5,132	- 1.[illegible]	[illegible]9	7[illegible]	[illegible].3
500	31	5,889	- 5.6	28	71	11.5
450	31	6,703	-10.9	27	69	13.4
400	31	7,603	-16.8	24	[illegible]1	1[illegible]
350	31	[illegible],592	-23.7	[illegible]	60	11.[illegible]
300	31	9,700	-31.[illegible]	33	[illegible]6	9.1
250	31	10,961	-42.1		14	10.7
200	31	12,431	-53.[illegible]		12	10.9
175	31	13,276	-60.[illegible]		[illegible]	9.9
150	31	14,221	-67.2		4	[illegible].7
125	31	15,303	-73.4		28	9.1
100	31	16,591	-77.8		54	10.5
80	27	17,879	-73.7		81	12.[illegible]
70	26	18,662	-69.[illegible]		[illegible]4	14.2
60	25	19,593	-64.7		86	15.5
50	25	[illegible],715	-60.[illegible]		[illegible]8	17.[illegible]
40	25	22,110	-58.1		[illegible]7	18.1
30	25	[illegible],938	-54.[illegible]		79	19.2
25	25	25,114	-51.[illegible]		[illegible]8	19.6
20	25	[illegible],572	-48.[illegible]		[illegible]	22.3
15	25	28,475	-45.5		[illegible]9	26.6
10	24	31,214	-39.2		[illegible]	26.[illegible]
7	11	33,668	-37.[illegible]			
5						

* WALLOPS IS. VA. NASA
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	10.9	83	310	2.9
1000	30	159	13.[illegible]	65	[illegible]	3.[illegible]
950	30	591	[illegible]1.6	55	[illegible]	6.6
900	30	1,041	9.3	53	281	8.[illegible]
850	30	[illegible],514	8.1	4[illegible]	276	11.[illegible]
800	30	[illegible],013	6.5	41	267	13.[illegible]
750	30	[illegible],540	4.4	39	264	16.1
700	30	3,101	2.0	38	263	19.2
650	30	3,694	- .9	35	266	22.7
600	3[illegible]	4,332	- 4.5	37	265	25.[illegible]
550	30	5,007	- 8.5	36	[illegible]	29.[illegible]
500	30	5,746	-13.1	32	264	34.[illegible]
450	30	6,537	-18.4	36	263	40.6
400	30	7,410	-24.7	39	262	42.[illegible]
350	30	8,369	-31.8	37	[illegible]61	44.9
300	30	[illegible],441	-39.7	30	262	[illegible]
250	30	1[illegible],664	-48.[illegible]		263	57.5
200	3[illegible]	12,113	-54.7		265	60.8
175	29	12,962	-57.9		266	62.2
150	29	13,927	-60.6		[illegible]70	57.[illegible]
125	28	15,059	-62.5		[illegible]71	47.[illegible]
100	28	16,427	-64.[illegible]		266	33.[illegible]
80	28	17,7[illegible]7	-62.3		[illegible]65	22.1
70	28	18,624	-60.3		268	16.5
60	28	19,5[illegible]	-[illegible]		[illegible]63	12.6
50	28	[illegible],740	-[illegible].4		[illegible]	7.[illegible]
40	28	22,160	-55.[illegible]		296	5.1
30	28	[illegible]	-53.[illegible]		22	4.5
25	28	[illegible],183	-51.7		37	5.6
20	28	26,635	-50.[illegible]		32	5.8
15	25	[illegible],522	-47.[illegible]		3	5.1
10	22	31,[illegible]	-43.4		[illegible]95	[illegible].7
7	15	33,646	-40.3		284	17.7
5						

WASHI[illegible]T[illegible], D. C.
10[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]5	6.[illegible]	[illegible]	[illegible]1	1.7
1000	3[illegible]	15[illegible]			[illegible]1	[illegible]
950	31	587	10.[illegible]	58	[illegible]07	7.4
900	31	[illegible],[illegible]32	7.8	6[illegible]	279	10.1
850	31	1,5[illegible]	6.7	53	[illegible]7[illegible]	14.[illegible]
800	31	1,999	5.5	47	269	17.5
750	31	2,527	4.	4[illegible]	26[illegible]	19.6
700	31	3,[illegible]83	1.[illegible]	36	26[illegible]	22.3
650	31	3,673	- 1.[illegible]	38	267	25.1
600	31	4,[illegible]8	- [illegible]	39	[illegible]64	29.7
550	3[illegible]	4,[illegible]	- 9.[illegible]	3[illegible]	[illegible]63	33.
500	31	[illegible],715	-14.[illegible]	4[illegible]	[illegible]64	36.9
450	3[illegible]	[illegible]	-1[illegible].7	37	[illegible]	41.
400	[illegible]1	7,[illegible]71	-[illegible]	3[illegible]	[illegible]	43.[illegible]
350	3[illegible]	[illegible],[illegible]24	-3[illegible].	3[illegible]	[illegible]	49.
300	31	[illegible]	-4[illegible].	3[illegible]	[illegible]	55.[illegible]
250	31	1[illegible],[illegible]61	-48.[illegible]		[illegible]4	61.8
200	[illegible]	1[illegible],[illegible]5	-[illegible]4.		[illegible]	65.[illegible]
175	[illegible]	[illegible]	-[illegible]7.		[illegible]7	63.7
150	[illegible]1	[illegible],[illegible]71	-[illegible]		[illegible]	56.[illegible]
125	[illegible]	[illegible]	-[illegible]		[illegible]	45.[illegible]
100	[illegible]	[illegible]	-[illegible]		[illegible]	37.7
80		[illegible]	-[illegible]		[illegible]	25.[illegible]
70	[illegible]	1[illegible]	-[illegible]		[illegible]	17.[illegible]
60	[illegible]	1[illegible]	-[illegible]7.			12.[illegible]
50	[illegible]9	[illegible],71[illegible]	-[illegible]		[illegible]	8.9
40	[illegible]	[illegible]	-[illegible]4.[illegible]		[illegible]7	4.[illegible]
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	[illegible]	[illegible]	-51.		[illegible]5	3.[illegible]
20	[illegible]4	[illegible]	-4[illegible]		[illegible]4	3.3
15	15	[illegible]	-47.[illegible]			
10						
7						

WINNE[illegible]CCA, NEV.
[illegible]7[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,310	[illegible]	51	171	1.[illegible]
1000	31	[illegible]				
950	31	[illegible]				
900	31	1,061				
850	31	1,5[illegible]4	9.[illegible]	38	1[illegible]	1.4
800	31	2,[illegible]7	8.[illegible]	35	275	2.5
750	31	2,555	5.2	34	[illegible]	7.[illegible]
700	31	3,[illegible]8	1.7	36	[illegible]84	8.5
650	31	3,708	- 1.[illegible]	36	[illegible]86	11.8
600	31	4,345	- 4.[illegible]	33	[illegible]	13.6
550	31	[illegible]	- 9.1	33	302	16.5
500	31	5,7[illegible]	-1[illegible]	35	302	20.[illegible]
450	31	6,5[illegible]	-19.7	35	[illegible]	21.2
400	31	7,412	-26.1	36	[illegible]	21.6
350	31	[illegible]	-33.[illegible]	[illegible]	301	22.7
300	31	[illegible]	-41.2	31	299	28.6
250	31	[illegible]	-49.7		[illegible]	31.9
200	31	1[illegible],[illegible]77	-57.[illegible]		296	32.[illegible]
175	31	1[illegible],916	-59.7		291	32.6
150	31	13,876	-61.		[illegible]	31.9
125	31	15,[illegible]	-62.[illegible]		[illegible]	31.3
100	31	16,373	-63.[illegible]		279	27.
80	31	17,747	-62.4		281	19.2
70	31	18,572	-61.6		280	16.9
60	3[illegible]	19,[illegible]	-59.		287	1[illegible]
50	[illegible]	[illegible],[illegible]71	-[illegible]4		[illegible]	[illegible].1
40	29	[illegible]	-56.4		[illegible]1	10.[illegible]
30	28	[illegible]	-53.1		[illegible]	1[illegible].5
25	[illegible]8	[illegible]	-52.1		268	10.[illegible]
20	[illegible]5	26,555	-49.[illegible]		[illegible]	15.[illegible]
15	11	[illegible]	-47.4			

WINSLOW, ARIZ.
853 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,492	6.[illegible]	67	1[illegible]7	[illegible].5
1000	31	166				
950	31	596				
900	31	1,050				
850	31	1,523			[illegible]00	1.9
800	31	[illegible],027	10.6	44	261	3.9
750	31	2,560	7.6	45	[illegible]34	4.5
700	31	3,128	4.[illegible]	45	[illegible]	5.1
650	31	3,722	.8	40	253	6.8
600	31	4,366	- 2.9	35	260	9.5
550	31	[illegible],043	- 6.6	31	271	15.7
500	31	[illegible],7[illegible]	-11.[illegible]	[illegible]5	[illegible]68	19.[illegible]
450	31	6,579	-17.[illegible]	28	[illegible]8	22.1
400	31	7,4[illegible]	-24.[illegible]	32	[illegible]	27.4
350	31	[illegible],420	-31.[illegible]	33	265	30.[illegible]
300	31	9,494	-39.6	3[illegible]	260	38.1
250	31	10,718	-47.[illegible]		260	45.3
200	31	12,165	-55.6		258	51.7
175	31	[illegible]	-59.[illegible]		[illegible]65	48.[illegible]
150	31	1[illegible]	-62.[illegible]		[illegible]	40.2
125	31	15,079	-65.[illegible]		267	34.4
100	31	16,426	-67.5		[illegible]74	26.[illegible]
80	31	17,7[illegible]7	-66.[illegible]		[illegible]	14.[illegible]
70	31	1[illegible],5[illegible]	-64.[illegible]		[illegible]4	[illegible].3
60	3[illegible]	19,5[illegible]4	-62.[illegible]		295	7.2
50	[illegible]8	20,[illegible]5	-59.[illegible]		282	6.[illegible]
40	27	22,064	-56.4		287	4.5
30	[illegible]	23,[illegible]3	-53.[illegible]		[illegible]	2.9
25	26	25,[illegible]	-[illegible]1.[illegible]		[illegible]	[illegible].1
20	25	26,5[illegible]6	-50.1		268	2.7
15	[illegible]3	[illegible],417	-48.		289	2.1
10	22	31,11[illegible]	-44.7		[illegible]91	6.8
7	8	[illegible],477	-42.			

YAKUTAT, ALASKA
1001 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	12	1.4	93	106	[illegible].9
1000	31	21			116	4.7
950	31	437	2.2	81	134	7.2
900	31	870	- .6	82	147	8.0
850	31	1,325	- 3.8	84	153	10.3
800	31	1,801	- 6.7	79	168	9.3
750	31	[illegible],305	- 9.6	75	172	11.3
700	31	2,8[illegible]3	-13.1	71	178	14.4
650	31	3,395	-16.9	67	18[illegible]	15.0
600	31	[illegible]	-20.7	66	[illegible]	15.5
550	31	4,628	-25.[illegible]	64	206	17.3
500	31	5,315	-[illegible]9.[illegible]	63	213	20.[illegible]
450	31	6,057	-34.6	67	[illegible]3	25.[illegible]
400	31	6,874	-39.[illegible]	65	[illegible]32	27.8
350	3[illegible]	7,763	-46.[illegible]	58	235	31.5
300	30	[illegible],775	-51.4		239	34.[illegible]
250	30	9,954	-52.8		242	33.6
200	30	11,398	-51.6		[illegible]	33.4
175	30	1[illegible],265	-51.[illegible]		[illegible]1	32.1
150	30	13,265	-51.[illegible]		[illegible]50	33.3
125	3[illegible]	[illegible],445	-[illegible]		252	31.1
100	3[illegible]	15,[illegible]	-52.[illegible]		[illegible]	29.9
80	30	17,324	-53.6		251	31.[illegible]
70	3[illegible]	18,180	-54.[illegible]		255	29.9
60	29	19,172	-54.4		257	28.2
50	29	[illegible],337	-55.		[illegible]54	28.6
40	27	[illegible],747	-[illegible]		[illegible]	31.1
30	[illegible]6	[illegible],579	-55.8		[illegible]	35.5
25	23	[illegible],709	-55.9		261	3[illegible].6
20	22	[illegible]	-55.[illegible]		[illegible]	44.[illegible]
15	19	27,928	-55.[illegible]		[illegible]69	50.1
10	10	30,5[illegible]2	-55.1			
7	5	3[illegible],683	-52.[illegible]			

+ YAP, CAROLINE IS.
10[illegible]7 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	17	29.3	78	35[illegible]	.4
1000	31	83	28.[illegible]	75	[illegible]	.8
950	31	530	24.2	72	45	1.[illegible]
900	31	1,010	21.3	66	44	2.5
850	31	1,504	18.5	63	66	3.1
800	31	2,023	15.9	58	[illegible]	4.1
750	31	2,567	13.2	52	94	5.2
700	31	3,148	10.3	46	92	6.6
650	31	3,758	6.9	43	92	7.8
600	31	4,416	3.2	39	95	9.[illegible]
550	31	5,109	- .9	38	92	10.1
500	31	[illegible],872	- 5.1	34	[illegible]3	[illegible].1
450	31	6,688	- 9.8	30	89	8.4
400	31	7,594	-15.5	27	91	[illegible].9
350	31	[illegible],5[illegible]	-22.1	23	94	8.7
300	31	9,704	-30.5	22	107	8.9
250	31	10,973	-4[illegible].7	23	106	[illegible]
200	31	12,452	-53.2		103	10.9
175	31	13,298	-60.4		99	13.8
150	31	14,241	-68.1		[illegible]3	17.7
125	31	15,314	-75.8		[illegible]6	22.9
100	31	16,586	-79.4		88	24.5
80	31	17,875	-72.5		[illegible]	14.4
70	31	1[illegible],067	-68.1		76	10.9
60	31	1[illegible],602	-63.9		[illegible]	7.2
50	30	[illegible],731	-60.1		[illegible]5	[illegible]
40	30	22,135	-56.7		35	.6
30	28	23,972	-53.3		51	1.6
25	25	25,147	-50.7		111	4.1
20	22	26,610	-47.7		103	11.8
15	14	[illegible],521	-44.[illegible]		[illegible]	19.6
10	9	31,[illegible]4	-38.[illegible]			

Y[illegible]CCA F[illegible]T, NEV.
[illegible]

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	[illegible]	[illegible],[illegible]76	[illegible]	[illegible]3	1[illegible]	1.7
1000	3	[illegible]				
950	3[illegible]	[illegible]				
900	3[illegible]	1,[illegible]4[illegible]				
850	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	[illegible]	1.[illegible]	[illegible]		[illegible]
750	3	[illegible],5[illegible]	7.[illegible]	[illegible]	[illegible]	2.1
700	[illegible]	[illegible]	4.[illegible]	[illegible]	[illegible]	2.[illegible]
650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.[illegible]
600	[illegible]	4,[illegible]	- 3.7	[illegible]	[illegible]	9.1
550	[illegible]	[illegible]7	- 6.	31	[illegible]	12.4
500	30	[illegible],77[illegible]	-1[illegible].	3[illegible]	[illegible]	13.[illegible]
450	3[illegible]	6,[illegible]	-[illegible]8.7	3[illegible]	[illegible]	15.3
400	3[illegible]	7,43[illegible]	-[illegible]	3[illegible]	[illegible]	17.3
350	3[illegible]	[illegible]	-3[illegible].7	35	[illegible]1	17.7
300	3[illegible]	[illegible],462	-4[illegible]	[illegible]5	[illegible]	19.4
250	30	1[illegible],[illegible]82	-4[illegible].6		[illegible]	21.[illegible]
200	30	1[illegible],1[illegible]6	-5[illegible]		[illegible]	28.9
175	[illegible]9	[illegible]	-[illegible]		[illegible]76	33.[illegible]
150	[illegible]	[illegible]	-61.		[illegible]	31.7
125	[illegible]9	[illegible],[illegible]57	-63.[illegible]		[illegible]	27.6
100	[illegible]9	[illegible],4[illegible]	-[illegible]		[illegible]74	24.[illegible]
80	[illegible]	17,777	-[illegible]4.[illegible]		[illegible]	19.[illegible]
70	28	18,5[illegible]5	-[illegible]		[illegible]	14.[illegible]
60	[illegible]8	1[illegible],[illegible]46	-[illegible]1.[illegible]		[illegible]	11.[illegible]
50	[illegible]7	20,[illegible]84	-5[illegible]		[illegible]	7.4
40	[illegible]6	[illegible]88	-56.7		[illegible]7	5.8
30	[illegible]6	[illegible]	-[illegible].4		[illegible]	7.4
25	[illegible]4	[illegible]	-51.7		[illegible]65	9.[illegible]
20	[illegible]3	[illegible]	-5[illegible].		2[illegible]	7.2
15	[illegible]	[illegible],47[illegible]	-47.[illegible]			

Y[illegible], ARIZ.
998 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	[illegible]1	1[illegible]	[illegible]7.7	4	[illegible]	1.4
1000	[illegible]	[illegible]11				
950	[illegible]1	5[illegible]5	[illegible]	3[illegible]	[illegible]41	4.7
900	[illegible]	1,[illegible]4	[illegible]	3[illegible]	[illegible]	3.7
850	[illegible]1	1,514	[illegible]	34	[illegible]	2.9
800	[illegible]1	[illegible]	1[illegible].	3[illegible]	[illegible]4	2.5
750	[illegible]	2,559	[illegible]	[illegible]4	1[illegible]7	1.9
700	[illegible]1	3,134	6.[illegible]	[illegible]	[illegible]14	1.2
650	[illegible]1	3,732	3.[illegible]	[illegible]4	[illegible]	3.9
600	[illegible]1	4,382	- .[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]1	[illegible],062	- [illegible]	[illegible]4	[illegible]	9.9
500	[illegible]	5,813	-[illegible]	[illegible]4	[illegible]51	12.8
450	[illegible]1	[illegible]	-1[illegible]	[illegible]4	[illegible]	16.3
400	[illegible]1	7,487	-[illegible]	[illegible]7	[illegible]	17.1
350	2[illegible]	[illegible],45[illegible]	-[illegible]	33	[illegible]	18.8
300	[illegible]	9,526	-38.7	[illegible]	[illegible]43	22.7
250	[illegible]8	10,750	-46.5		247	30.3
200	[illegible]6	12,201	-55.6		[illegible]59	37.1
175	[illegible]5	13,038	-[illegible]		[illegible]64	39.6
150	[illegible]3	[illegible]	-[illegible]		[illegible]71	42.3
125	[illegible]	15,110	-[illegible].6			

Note: All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i. e., elevation angles less than 6° above the horizon, or any obstruction above the horizon

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

R More than half of the observations are from statistical values. Equipped with lithium chloride hygristor.

‡ Upper Air program transferred to Yucca Flat, Nev., October 10, 1966.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. OCTOBER 1966

Sun's zenith distance

ALBUQUERQUE, N. MEX.

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Oct.									
1	----	----	----	----	----	1.08	----	----	----
2	----	----	----	----	----	----	----	0.92	----
3	0.98	1.11	1.20	1.32	----	----	----	----	----
4	----	----	----	----	1.34	----	----	----	----
5	----	----	----	----	----	----	----	.86	0.75
6	----	----	----	----	1.39	1.33	1.17	1.06	.96
7	.83	.96	1.08	1.24	1.40	----	----	----	----
8	.86	.98	1.09	1.26	1.37	1.26	1.10	.98	.85
9	.98	1.09	1.19	1.36	1.48	1.35	1.17	1.07	.95
10	.93	1.05	1.15	1.31	1.42	1.33	1.19	1.08	.95
11	.88	----	----	----	1.36	----	----	----	----
12	.99	1.11	1.20	1.34	1.48	1.36	1.19	1.09	.98
13	1.00	1.13	1.21	1.37	1.48	1.35	1.25	1.13	.97
14	1.04	1.13	1.21	1.32	1.49	1.38	1.28	1.11	.99
15	1.04	1.16	1.24	1.38	1.49	1.33	1.14	1.02	.84
16	.88	1.01	1.12	1.30	1.43	1.25	----	----	----
17	(.75)	(.89)	1.04	1.22	1.43	1.33	1.21	1.14	1.02
18	1.04	1.15	----	----	----	----	----	----	----
19	.99	1.12	1.22	1.38	1.49	1.39	1.20	1.09	.95
21	1.02	1.15	1.23	----	----	----	----	----	----
22	----	----	----	----	----	1.31	1.18	1.06	.91
23	1.08	1.24	1.28	1.42	1.51	1.38	1.19	1.06	.94
24	----	1.14	1.24	1.38	1.46	1.39	1.23	1.14	1.04
25	1.02	1.14	1.25	1.40	1.47	1.37	1.21	1.08	.97
26	1.03	1.15	1.27	1.40	1.46	1.36	1.24	1.11	1.02
27	1.05	1.13	1.24	1.37	1.49	1.32	1.23	1.12	.98
28	1.01	1.13	1.25	1.25	----	----	----	----	----
29	----	1.03	----	1.27	----	1.32	----	----	.90
30	.91	1.01	1.17	1.23	1.39	1.31	1.16	1.02	.89
31	1.01	1.12	1.24	1.29	1.40	1.33	.96	.88	.86
Averages	0.98	1.10	1.20	1.32	1.44	1.33	1.18	1.05	0.94

BLUE HILL OBS., MASS.

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Oct.									
2	0.87	1.01	1.11	1.24	1.41	1.27	1.10	0.96	0.88
3	.87	.98	1.10	1.23	1.32	1.16	.99	.82	.67
6	.88	1.00	1.12	1.32	1.40	1.25	1.12	.99	.91
7	.89	.96	1.07	1.23	1.36	1.21	1.01	.87	.76
8	.72	.82	.94	1.13	1.29	1.13	.95	.83	.67
9	.75	.83	.96	1.13	1.28	1.10	.83	.69	.52
11	.82	.93	1.01	1.18	1.28	1.04	----	----	----
13	.88	.96	1.07	1.18	----	----	----	----	----
18	.91	1.01	1.12	1.30	1.35	----	----	----	----
21	.94	1.01	1.13	1.28	1.33	1.28	1.08	.96	.87
22	.87	.96	1.06	1.23	1.30	----	----	----	----
26	.82	.91	1.03	1.22	1.25	1.17	.96	.86	.77
27	.94	1.04	1.16	1.28	1.29	1.23	1.05	.91	.82
28	.96	1.04	1.17	1.29	1.30	1.16	.93	.77	.67
29	.77	.87	1.06	----	----	----	----	----	----
30	----	----	----	----	1.36	1.32	1.17	1.04	.95
31	.90	1.01	1.12	----	----	----	----	----	----
Averages	0.86	0.96	1.08	1.23	1.32	1.19	1.02	0.88	0.77

MAUNA LOA OBS., HAWAII

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Oct.									
1	1.15	1.28	1.33	1.45	1.57	----	----	----	----
2	----	----	----	----	1.57	1.40	1.29	1.19	1.11
3	1.19	1.26	1.35	1.45	----	----	----	----	----
4	1.12	1.21	1.32	1.43	----	----	----	----	----
5	1.10	1.18	1.28	1.40	----	----	----	----	----
6	1.11	1.20	1.30	1.42	----	----	----	----	----
20	1.05	1.13	1.24	1.36	----	----	----	----	----
23	----	----	----	----	----	----	----	1.22	1.13
25	1.08	1.18	1.29	1.43	1.57	1.43	1.30	1.20	1.12
26	1.07	1.17	1.28	1.42	1.55	1.38	1.23	1.14	1.05
27	1.10	1.19	1.29	1.42	1.53	----	----	----	----
28	1.15	1.24	1.37	1.50	1.57	1.39	1.28	1.17	1.09
31	----	----	----	----	1.53	1.38	1.26	1.15	1.29
Averages	1.11	1.20	1.31	1.43	1.56	1.40	1.27	1.18	1.13

MADISON, WIS.

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Oct.									
6	S 0.89	S 0.98	S 1.09	S 1.23	S 1.31	S 1.17	S 1.00	S 0.68	S 0.49
7	S .73	S .91	S .98	S 1.18	S 1.24	S 1.11	S .88	S .72	S .61
10	----	S .87	S 1.06	S 1.22	----	----	----	----	----
11	S .88	S .96	S 1.05	S 1.24	S 1.32	S 1.24	S 1.11	S .98	S .88
20	M .86	M .97	M 1.09	M 1.22	M 1.27	M 1.21	M 1.03	M .88	M .71
24	S .88	S 1.00	S 1.14	S 1.27	S 1.29	S 1.29	S 1.05	S .93	S .83
25	----	----	----	----	----	----	S 1.04	S .92	S .82
26	I .73	I .83	S .98	S 1.18	S 1.09	----	----	----	----
27	S .77	----	----	----	S 1.24	S 1.19	S 1.01	S .85	S .76
29	S .97	S 1.09	S 1.20	----	----	----	----	----	----
31	S .81	S .92	S 1.07	----	----	----	----	----	----
Averages	0.84	0.95	1.07	1.22	1.25	1.20	1.02	0.85	0.73

TUCSON, ARIZ.

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Oct.									
2	0.34	----	----	----	----	----	----	0.96	0.85
4	----	----	----	----	0.70	----	----	----	----
6	----	0.94	0.86	1.23	1.39	----	----	----	----
7	----	----	----	.96	1.31	----	----	----	.72
8	.50	.59	.72	1.00	1.31	1.16	1.01	.88	.79
9	.28	.34	.45	.70	1.26	1.18	.98	.82	.66
10	----	----	----	.27	.90	.94	.78	.66	.60
11	----	----	----	1.24	1.35	1.21	1.00	.86	.66
12	.86	.97	.89	1.23	1.44	1.20	1.06	.93	.82
13	.90	.99	.90	1.26	1.35	1.24	1.09	.97	.87
14	.92	1.03	1.15	1.31	1.45	1.32	1.11	.97	.84
15	.99	1.08	1.19	1.31	1.45	1.23	1.06	.93	.83
16	.97	1.07	1.18	1.33	1.42	1.28	1.04	.90	.78
17	.83	.97	.91	1.25	1.40	1.24	1.05	.93	.82
18	.92	1.02	1.09	1.29	1.40	1.22	1.03	.87	.73
19	.85	.96	1.09	1.30	1.45	1.32	1.13	.99	----
20	.92	1.01	----	----	----	----	----	----	----
22	.49	.56	.70	.98	1.38	1.24	1.12	1.00	.89
23	.94	1.02	1.14	1.29	1.38	1.29	1.13	1.00	.92
24	.88	.97	1.10	1.29	1.40	1.25	1.10	.96	.82
25	1.02	1.09	1.20	1.34	1.47	1.35	1.18	1.05	.95
26	1.00	1.09	1.19	1.42	1.45	1.30	1.12	.99	.88
27	.88	.99	1.09	1.32	1.43	----	----	----	----
31	----	----	----	----	1.32	1.20	1.04	.88	.79
Averages	0.81	0.93	0.99	1.17	1.34	1.23	1.06	0.92	0.80

OMAHA, NEBR.

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Oct.									
1	HS0.80	HS0.88	HS0.98	HS1.16	HS1.28	----	----	----	----
4	----	----	HS1.16	HS1.26	----	----	----	----	----
5	HS .97	HS1.05	HS1.17	HS1.31	HS1.39	HS1.29	HS1.12	HS0.98	HS0.88
6	HM .87	HM .90	HM1.02	HM1.21	HS1.33	HS1.15	HS1.10	HS .86	†
7	----	----	HM1.00	HM1.15	HM1.22	HS1.10	HS .92	HS .82	HS .66
8	HM .60	HM .71	HM .88	HM1.07	HM1.19	HS1.17	HS .94	HS .84	HS .70
9	----	HS .86	HS .98	HS1.12	----	----	----	----	----
10	HS .88	HS .96	HS1.10	HS1.23	HS1.38	HS1.28	HS1.10	HS .98	HS .86
11	----	HS .96	HS1.08	HS1.20	HS1.25	HM1.11	HM .91	----	----
16	----	----	----	----	HS1.31	HS1.21	HS1.07	.86	.79
17	HS .82	HS .92	HS1.06	HS1.23	----	----	----	----	----
20	HS .87	HS .97	HS1.10	HS1.24	HS1.31	----	----	----	----
21	----	----	----	----	----	HS1.16	HS .95	HS .81	----
22	HS .91	HS1.01	HS1.16	HS1.30	HS1.37	HS1.34	HS1.14	HS1.02	----
25	HS .88	HS .98	HS1.11	----	----	----	----	----	----
26	----	----	HS1.14	HS1.26	HM1.25	HM1.20	HM .97	HM .86	----
27	HS .94	HS1.05	HS1.16	HS1.29	HM1.32	HM1.24	HM1.07	HM .94	----
Averages	0.85	0.94	1.05	1.22	1.35	1.20	1.02	0.90	0.78

GUAM, M. I.

Date	A. M.				*	P. M			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92

Instruments inoperable October 1-13
No observations October 14-31 due to cloudiness

S Slight haze - indeterminable
M Moderate haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon
HS Slight haze
HM Moderate hzae
( ) Clouds present
† Surface obstruction

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

OCTOBER 1966

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	362	---	463	474	250	---	---	---	537	---	---	520	---	530	526	497	507	514	502	374	445	402	479	467	476	463	454	403	430	432	431	456
AMES IOWA	---	---	---	---	---	462	441	---	---	---	---	---	---	---	---	---	---	---	---	---	---	450	355	437	415	404	407	382	288	299	205	---
ANNETTE ALASKA	329	160	106	83	74	28	100	218	114	153	148	251	55	168	13	103	74	53	130	77	69	20	37	---	---	190	150	24	34	98	24	106
APALACHICOLA FLORIDA	---	444	362	381	337	334	226	251	231	230	498	444	175	379	368	457	432	390	369	439	207	374	433	219	143	299	382	437	430	432	359	349
ARGONNE NAT. LAB.	342	395	331	395	395	379	372	271	279	366	375	160	189	25	59	273	344	126	172	329	303	329	320	322	299	286	289	274	282	242	261	283
ATLANTA GEORGIA	134	538	519	452	462	507	530	513	141	364	439	426	243	337	160	---	405	24	142	407	276	204	71	79	226	118	370	383	387	349	179	313
ASTORIA OREGON	121	397	387	377	174	92	207	371	346	337	240	204	317	147	307	88	287	290	56	69	88	65	116	182	86	128	177	232	50	171	251	205
BARROW ALASKA	44	24	18	37	34	37	42	30	36	59	20	---	13	30	30	24	25	24	36	29	37	29	20	28	16*	62	43	48	49	7	10	31*
BETHEL ALASKA	38	79	107	57	130	156	42	122	129	50	31	88	134	137	193	132	123	139	151	149	97	135	39	158	157	135	123	105	102	83	84	110
BISMARCK N.DAK.	344	178	130	336	378	368	359	274	304	363	348	301	39	215	335*	290	249	304	205	281	158	308	306	264	279	283	200	170	207	220	40	259*
BLUE HILL MASS.	24	458	433	265	220	423	423	402	392	156	328	294	333	274	317	64	206	331	30	170	358	340	268	253	236	321	323	314	287	297	240	283
BOISE IDAHO	403	279	434	422	414	408	363	351	412	395	368	277	260	383	301	370	333	357	---	214	347	108	180	322	317	203	228	282	292	243	290	319
BOSTON MASSACHUSETTS	17	442	398	201	197	413	408	383	374	183	305	305	342	230	247	67	185	308	18	220	---	---	---	---	---	308	294	309	271	299	---	269
BROWNSVILLE TEXAS	139	431	458	574	294	123	568	394	276	257	396	504	494	406	168	432	473	428	497	545	531	533	498	325	454	512	500	488	461	384	468	420
CANTON ISLAND P.I.	670	604	662	680	658	660	651	568	672	673	605	676	676	673	575	668	679	682	689*	676	669	662	673	557	688	689	633	502	689	683	687	652*
CAPE HATTERAS N.C.	442	456	399	417	363	490	496	482	425	374	490	454	424	336	180	396	272	82	181	417	372	279	234	366	176	29	46	276	367	342	341	336
CARIBOU MAINE	142	314	399	85	254	178	83	144	118	129	306	36	210	---	295	21	144	141	79	41	303	262	102	88	252	266	130	56	53	252	223	170
CHARLESTON S.C.	389	580	248	415	446	359	536	343	365	346	544	526	244	454	466	377	344	232	243	510	391	281	387	433	223	256	401	440	397	296	330	381
CLEVELAND OHIO	269	369	405	225	170	342	395	363	314	379	296	365	271	253	76	39	148	32	39	343	334	222	334	308	308	110	215	258	150	189	189	249
COLUMBIA MISSOURI	432	419	377	307	425	479	461	170	377	462	450	211	301	265	136	146	240	71	411	422	391	326	359	395	385	379	377	355	363	357	105	334
DAVIS CALIFORNIA	409	424	445	434	440	449	366	438	415	421	417	356	430	432	402	420	410	380	283	330	331	376	377	373	335	343	359	338	328	323	329	384
DODGE CITY KANSAS	508	489	482	298	483	471	445	431	456	466	440	441	447	178	462	436	62	249	452	360	408	369	389	395	399	403	398	379	258	377	177	387
E. LANSING MICHIGAN	---	---	343	250	368	421	417	383	299	349	264	383	100	187	77	137	211	92	170	361	339	285	338	341	293	332	327	298	251	306	286	283
EL CENTRO CALIF. NPF	397	414	376	227	353	394	388	378	387	316	377	380	381	400	390	386	384	378	365	295	319	349	346	347	342	337	263	192	307	267	328	347
EL PASO TEXAS	590	584	583	510	178	216	287	519	558	539	496	554	556	556	549	504	545	537	528	497	518	480	504	510	501	491	488	492	466	289	471	487
ELY NEVADA	467	354	495	473	444	296	457	453	---	445	385	327	257	442	410	434	422	418	391	146	331	260	386	---	---	---	---	---	---	---	---	386
EPPLEY NEWPORT R.I.	230*	426	415	353	122	406	411	388	384	132*	373	270	322	327	208	78	185	326	45	321	353	337	264	171	142	---	319	322	287	273	221	280*
FAIRBANKS ALASKA	98	108	94	129	144	130	102	158	99	81	117	106	82	65	63	63	89	58	83	65	138	40	128	82	71	71	92	107	96	63	21	92
FLAMING GORGE UTAH	412	92	151	425	396	302	384	391	399	392	213	183	68	311	182	239	363	360	359	271	252	255	310	328	326	315	280	280	307	248	297	293
FORT WORTH TEXAS	570	538	296	107	310	478	---	469	489	458	394	218	435	222	515	459	75	321	498	478*	400	340	431	449	444	456	428	415	404	---	---	396*
FRESNO CALIFORNIA	425	436	401	406	411	426	342	404	401	397	386	399	397	388	399	379	379	378	349	102	357	357	346	350	356	288	291	319	316	313	309	362
GAINESVILLE FLORIDA	318	312	285	345	381	400	376	383	312	278	492	431	200	373	401	442	388	431	283	464	378	150	375	338	305	271	455	456	432	420	412	364
GLASGOW MONTANA	253	114	271	387	375	369	316	140	356	333	317	170	74	321	313	321	294	331	267	142	90	303	247	212	281	240	241	236	224	261	144	256
GRAND JUNCTION COLO.	466	237	258	477	453	369	277	484	489	481	173	426	225	442	360	411	431	437	445	---	395	408	399	402	402	392	363	325	356	354	374	384
GREAT FALLS MONTANA	130	78	367	341	339	337	228	260	318	233	176	46	29	279	198	208	188	237	225	237	191	113	168	126	---	205	188	135	134	174	102	200
GREENSBORO N.C.	90	502	452	437	353	541	451	448	362	343	452	434	417	310	343	310	302	59	142	413	338	51	279	84	46	153	366	354	347	364	330	318
INDIANAPOLIS INDIANA	334	487	441	428	472	425	467	203	205	465	456	404	222	143	148	157	395	40	114	411	378	198	403	386	381	357	368	357	282	351	219	326
ITHACA NEW YORK	74	275	358	129	122	263	353	350	331	217	147	62	259	217	177	40	82	97	19	82	298	277	173	293	275	276	276	265	64	218	56	198
LAKE CHARLES LA.	471	541	456	453	425	524	520	227	225	286	333	72	383	388	400	498	158	103	491	491	293	355	432	292	465	457	451	425	428	414	349	381
LAKELAND FLORIDA	514	471	459	369	389	459	326	383	396	257	483	478	351	532	519	518	452	460	488	532	258	133	404	435	427	250	442	474	469	472	380	419
LANDER WYOMING	438	175	276	467	445	430	429	408	444	427	367	277	110	455	446	443	402	422	412	363	401	297	376	386	391	---	353	314	342	217	92	360
LARAMIE WYOMING	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LAS VEGAS NEVADA	313	522	214	277	507	503	496	509	498	462	481	484	487	484	446	475	467	455	413	319	448	433	420	410	418	396	358	343	351	390	394	425
LITTLE ROCK ARKANSAS	510	530	355	45	---	---	---	---	---	475	459	451	87	166	477	473	190	203	343	448	355	117	107	312	418	408	379	375	359	364	335	336
LOS ANGELES, CALIF.	481	347	295	431	---	222	363	350	347	134	392	279	431	432	458	448	458	450	433	332	356	375	384	392	408	376	283	248	351	397	385	368
MADISON WISCONSIN	369	383	248	376	361	423	400	371	---	401	409	138	102	80	69	231	366	121	361	358	223	350	273	352	326	321	318	308	288	212	179	291
MANHATTAN KANSAS	445	422	410	379	421	411	389	383	342	403	382	311	333	358	410	389	128	40	375	362	353	332	335	303	341	340	332	292	270	318	78	335
MATANUSKA ALASKA	---	26	84	174	108	99	95	23	---	183	186	48	73	89	53	68	77	147	107	85	117	68	146	152	136	57	98	42	37	92	13	92
MEDFORD OREGON	412	459	459	445	442	412	418	422	385	408	255	186	357	334	359	361	357	359	192	185	308	123	249	274	246	292	294	276	253	283	293	326
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MIDLAND TEXAS	548	531	331	65	151	142	215	507	513	504	399	489	498	511	513	434	494	489	491	391	462	398	459	472	446	446	451	451	434	277	436	418
NASHVILLE TENNESSEE	403	512	502	197	516	511	490	345	159	499	479	462	435	204	187	452	301	76	127	417	418	257	143	258	408	406	382	379	354	382	321	354
NEW YORK N.Y.U	22	476	363	183	206	447	415	405	379	133	338	277	327	267	333	206	113	246	19	330	352	331	241	198	143	314	271	272	267	329	299	274
NORTH OMAHA NEBRASKA	485	467	211	484	487	458	440	423	382	461	433	325	277	200	160	428	373	62	---	394	386	---	374	296	362	---	363	329	210	271	219	349
OAK RIDGE TENNESSEE	245	450	480	403	495	501	478	436	56	466	474	433	429	413	53	427	418	24	121	397	397	335	264	258	307	360	352	349	341	357	332	350

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

U Indicates Urban sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

OCTOBER 1966

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OKLAHOMA CITY OKLA.	451	424	398	174	269	306	341	---	---	---	---	299	363	337	420	377	42	240	410	387	362	324	261	363	361	347	346	339	321	314	307	329
PAGE ARIZONA	317	427	179	264	346	402	364	402	403	394	373	385	360	401	351	346	385	378	373	325	291	334	---	---	321	---	300	231	---	302	292	342
PHOENIX ARIZONA	419	346	340	330	436	422	328	427	427	397	413	408	411	438	420	418	409	406	399	290	308	390	388	386	379*	376	349	295	324	323	350	379*
PORTLAND MAINE	58	398	408	164	347	397	306	368	356	101	344	291	367	255	279	38	259	321	32	127	343	311	214	173	309	336	336	309	222	364	227	270
PROSSER WASHINGTON	122	284	377	377	353	339	338	383	---	347	148	162	330	268	---	---	257	290	109	114	167	243	121	252	232	126	147	225	83	185	201	235
RAPID CITY S.DAK.	354	175	158	247	367	353	338	330	357	353	300	326	104	123	356	316	210	285	307	197	221	252	209	255	283	283	267	178	264	112	181	260
RENO NEVADA	425	437	444	434	433	409	389	403	406	371	358	386	410	399	385	383	379	377	182	287	290	221	345	340	338	252	258	315	322	313	305	355
RICHLAND 25 NW WASH.	149	272	381	371	366	332	349	375	347	346	182	168	339	263	298	219	268	295	92	191	269	210	190	256	253	113	174	235	81	181	228	251
RIVERSIDE CALIFORNIA	452	292	299	272	310	425	357	425	432	46	106	327	372	481	461	468	462	453	445	326	380	389	413	416	411	371	324	312	369	383	389	367
RUSTON LOUISIANA	488	463	436	314	403	447	443	364	304	381	441	281	178	176	403	433	195	108	216	341	340	279	263	187	385	376	368	329	345	352	320	334
SAINT CLOUD MINN.	316	171	38	178	419	408	401	353	261	208	393	208	78	43	124	279	281	280	350	333	168	252	343	341	323*	303*	266	131	286	70	79	248*
SALT LAKE CITY	492	---	476	484	467	411	459	449	466	447	380	---	---	437	414	434	410	407	406	98	260	185	376	384	374	330	289	323	346	291	348	380
SAN ANTONIO TEXAS	561	550	66	385	204	430	516	514	392	408	244	315	314	222	515	361	99	462	512	513	463	465	363	371	489	478	472	451	437	377	442	400
SANTA MARIA CALIF.	422	113	154	385	316	382	380	428	414	156	116	402	416	406	417	412	410	402	371	229	393	384	371	363	362	323	317	318	341	349	353	342
SAULT STE MARIE MICH	279	333	169	130	209	398	381	256	229	272	80	170	307	99	40	183	168	79	35	316	256	---	284	115	153	286	275	149	206	102	76	201
SEATTLE TACOMA WASH.	122	381	372	375	283	---	133	325	354	242	112	80	303	202	131	113	256	327	35	90	80	85	99	253	214	129	202	235	63	87	207	196
SPOKANE WASHINGTON	110	293	406	387	380	366	321	388	366	316	191	291	333	306	298	167	308	255	93	188	239	50	151	292	271	189	203	189	126	224	207	255
STATE COLLEGE PENN.	55	373	437	314	257	426	445	419	378	379	300	360	336	371	231	37	88	64	97	198	372	363	196	357	351	339	339	327	175	349	270	290
STERLING VIRGINA	34	492	470	443	296	463	469	462	320	406	451	450	391	335	248	398	257	148	47	455	500	500	289	224	66	---	---	---	---	---	---	---
STILLWATER OKLAHOMA	---	---	---	---	---	---	---	---	---	---	---	---	---	359	441	397	41	184	416	399	383	285	363	377	386	359	372	357	334	344	245	345
SWAN ISLAND W.I.	679	662	623	670	615	446	221	588	664	594	605	539	479	527	367	514	579	498	321	359	414	479	447	279	330	397	413	294	260	8	354	459
TAMPA FLORIDA	531	429	487	393	417	431	---	---	349	119	487	477	298	485	419	491	463	485	---	512	423	144	390	409	471	324	458	478	464	470	327	415
TUCSON ARIZONA	442	428	394	279	378	454	464	481	483	459	476	478	466	491	473	475	470	457	465	358	425	442	440	441	435	446	439	369	362	334	416	433
WAKE ISLAND,PACIFIC	392	450	298	397	316	360*	439	404	487	476	468	396	460	347	416	284	330	441	452	454	423	326	390	424	431	445	441	454	198	290	367	395*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values in parentheses are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

OCTOBER 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	†	115	90	90	61	83	22	89	---

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. **The value represents the total incoming minus the total outgoing radiation of all wave lengths.**

* Recorder inoperative October 1-24, 1966

† Incomplete

These data are of an experimental nature and are published as received from the Huntley, Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

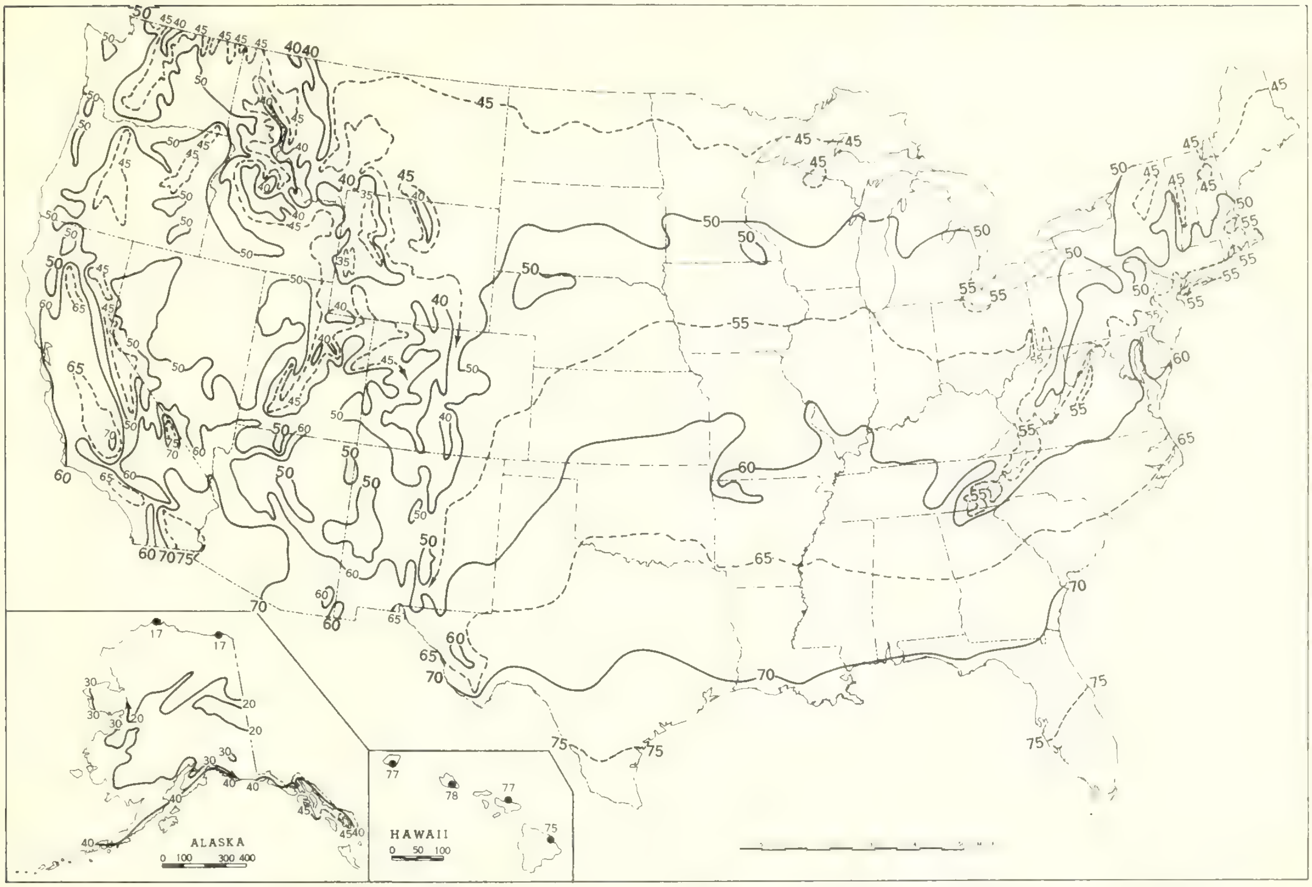
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

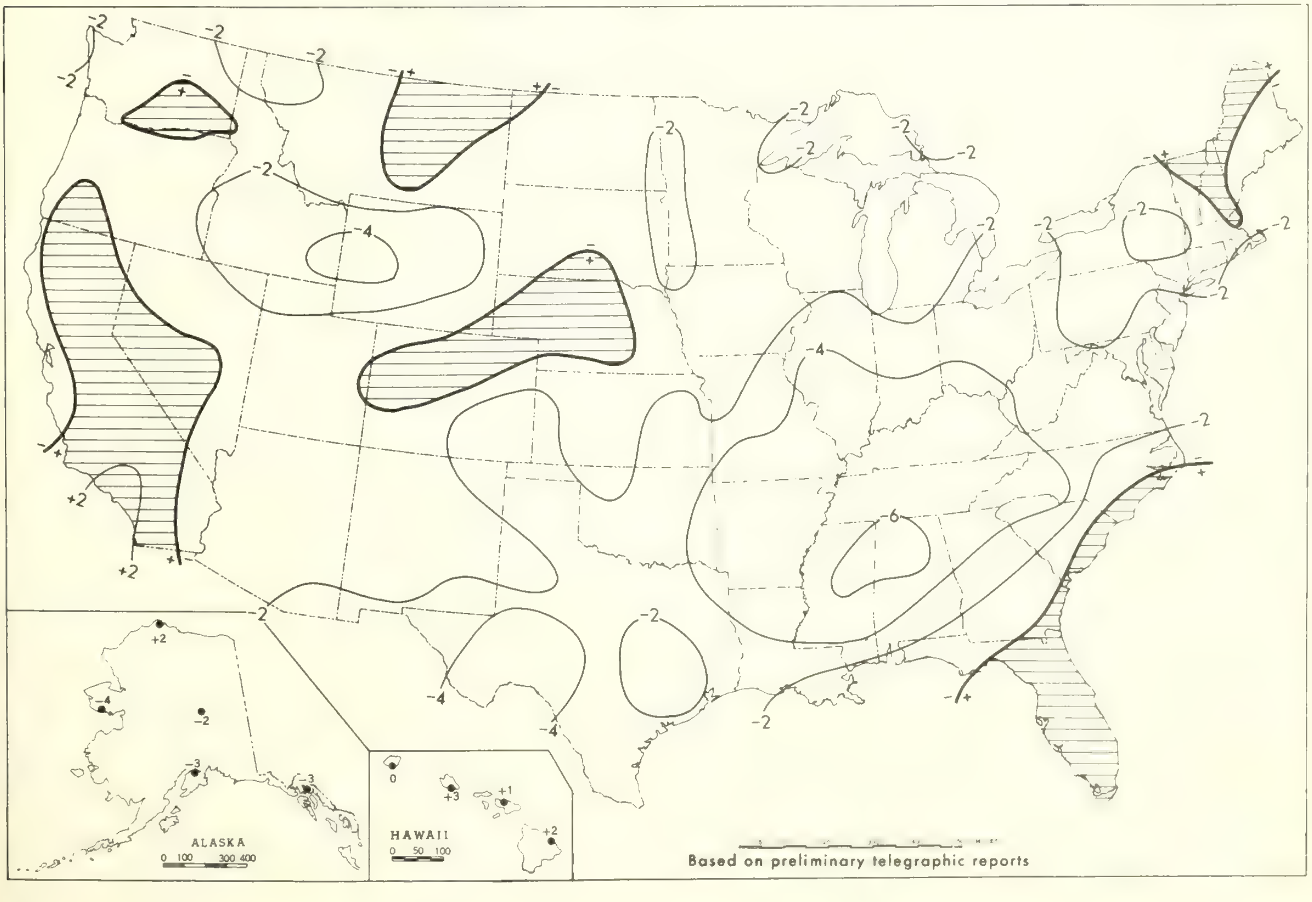
Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i. e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e. g., 350 milli-atmo-cm ozone implies an ozone layer 0.350 centimeter thick. The code λ s designates the type of measurement made.

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), October

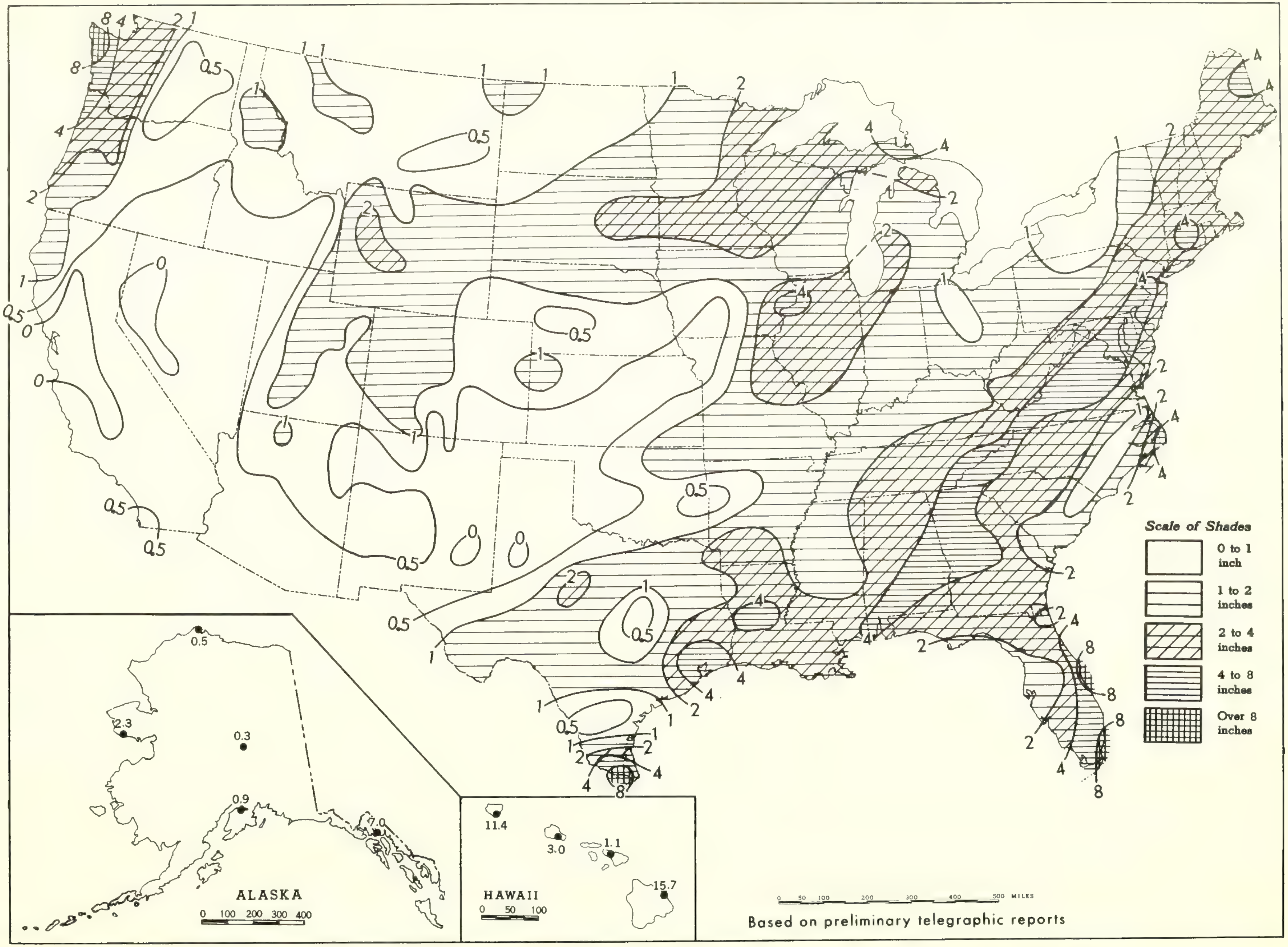


B. Temperature Departure from 30 - Year Mean (°F 1931-60), October 1966.



Based on preliminary telegraphic reports

Chart II. Total Precipitation (Inches), October 1966.



Based on preliminary telegraphic reports

Chart III. Percentage of Normal Precipitation, October 1966.

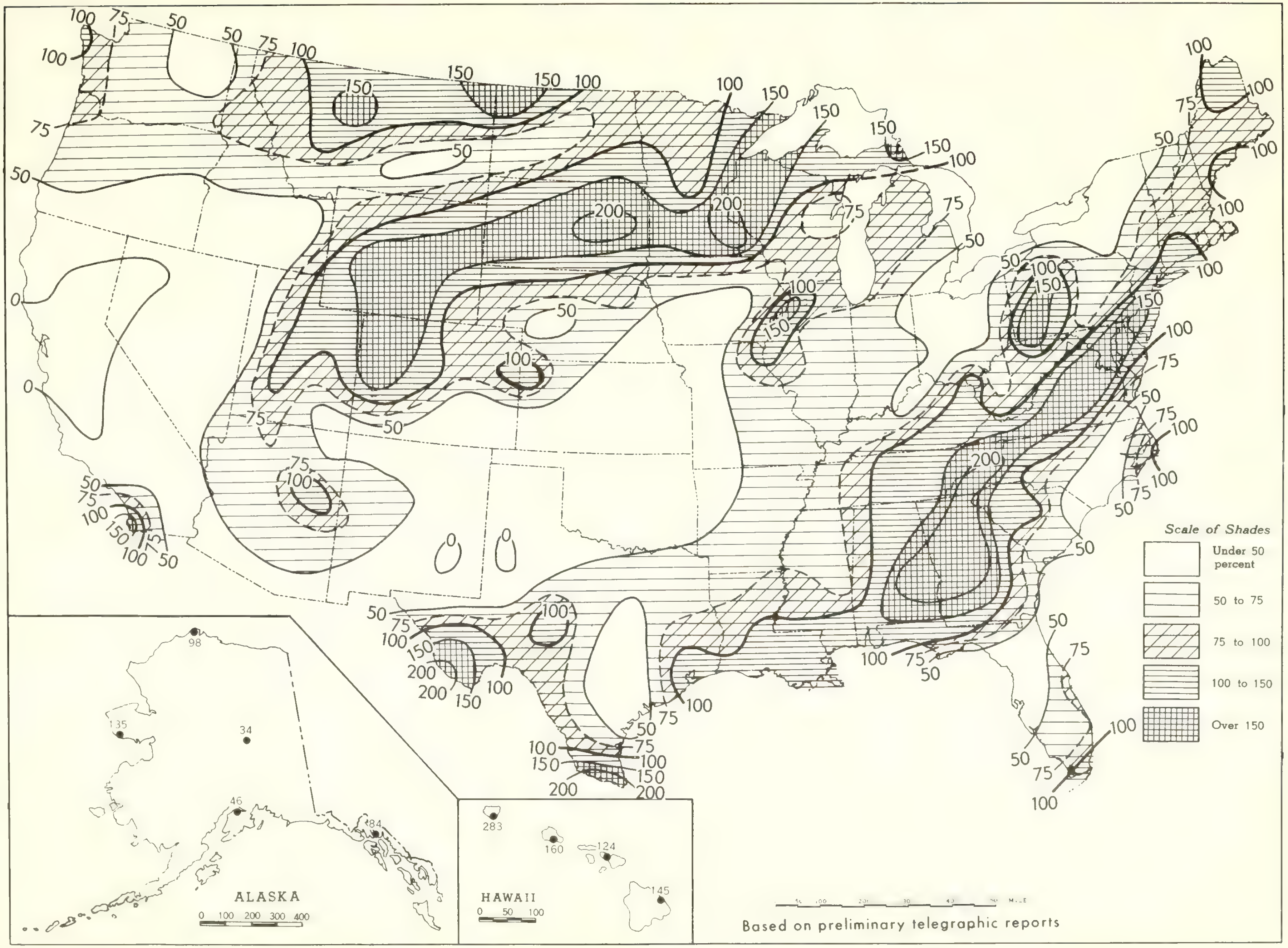
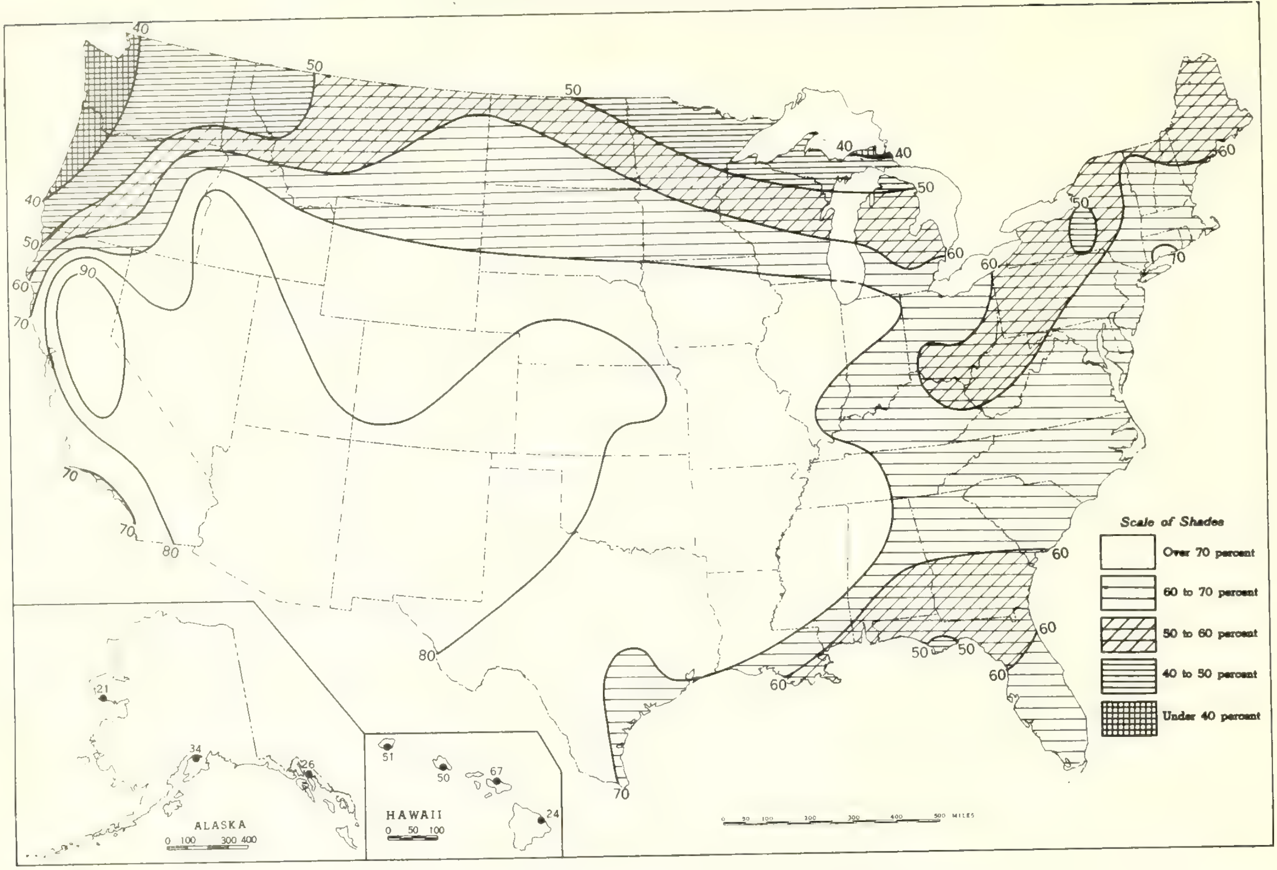
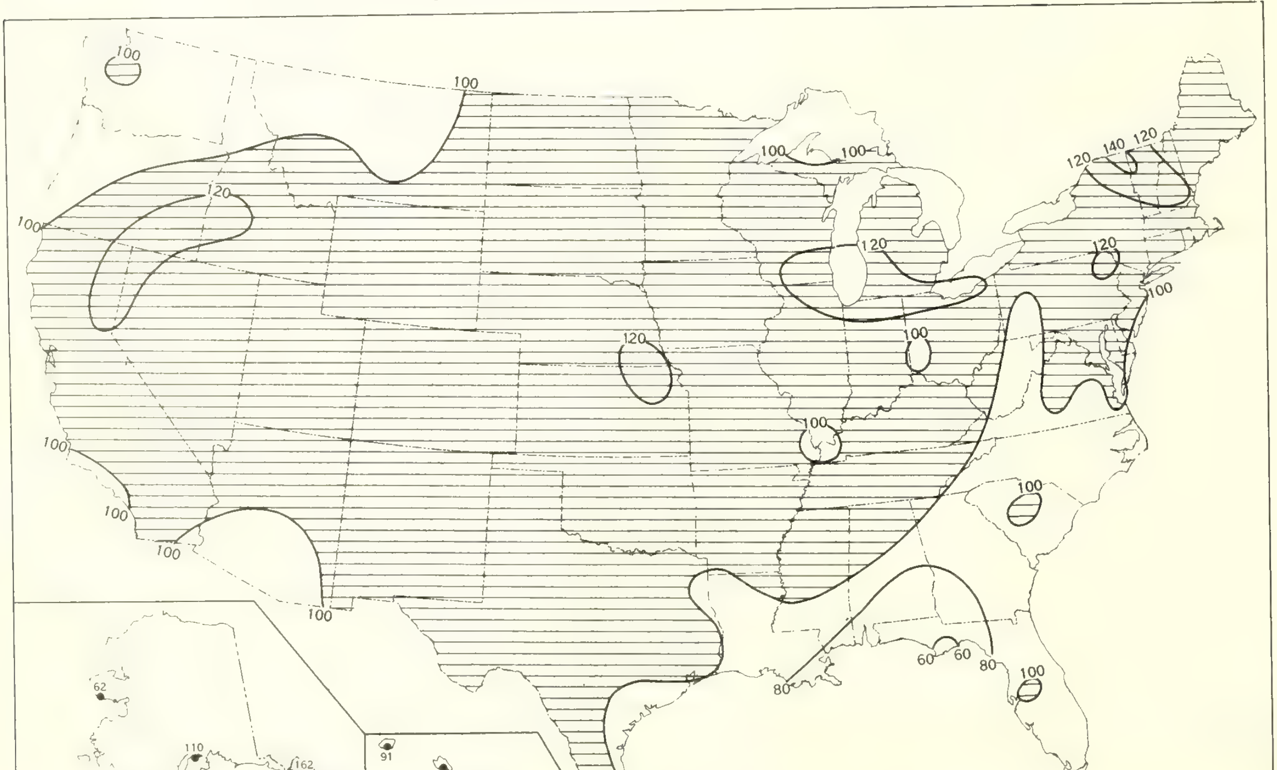


Chart VI. A. Percentage of Possible Sunshine, October 1966.

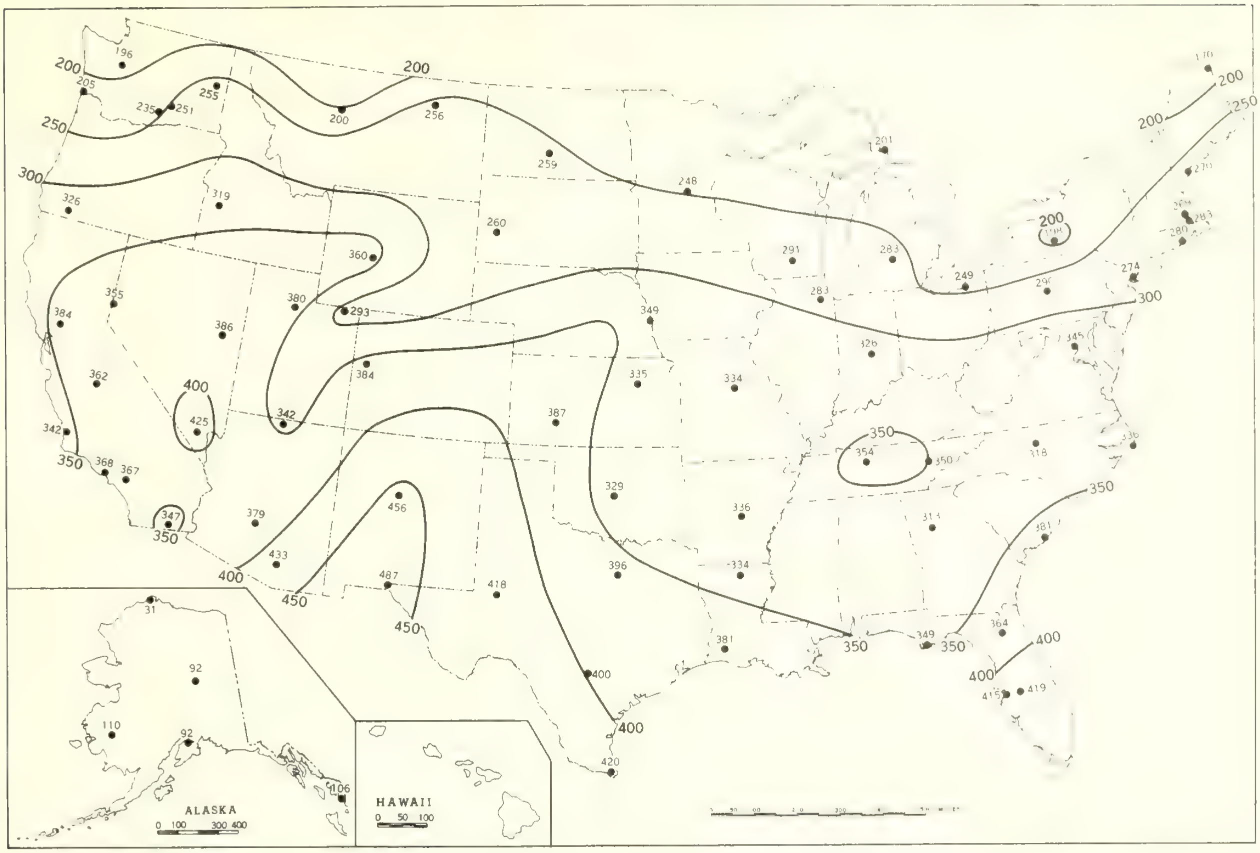


B. Percentage of Mean Monthly Sunshine, October 1966.

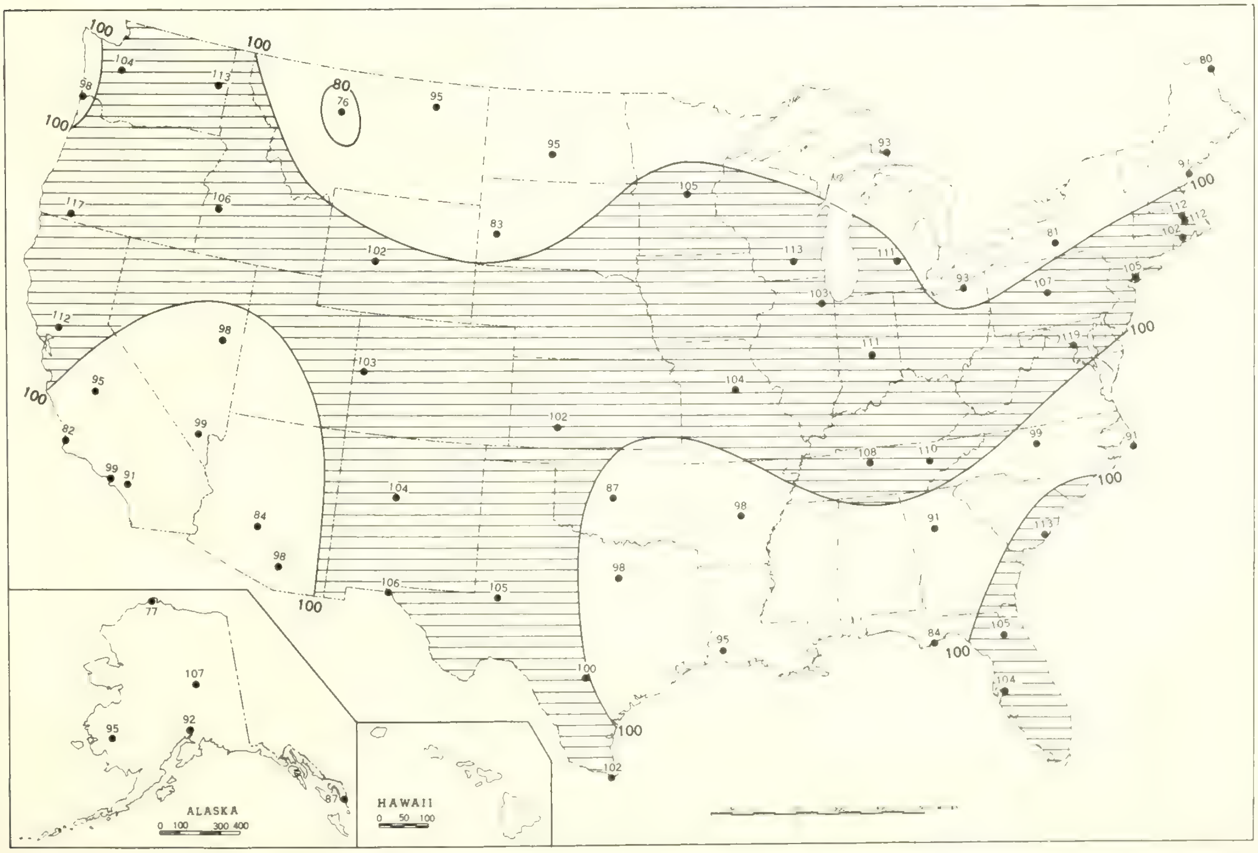


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, October 1966.

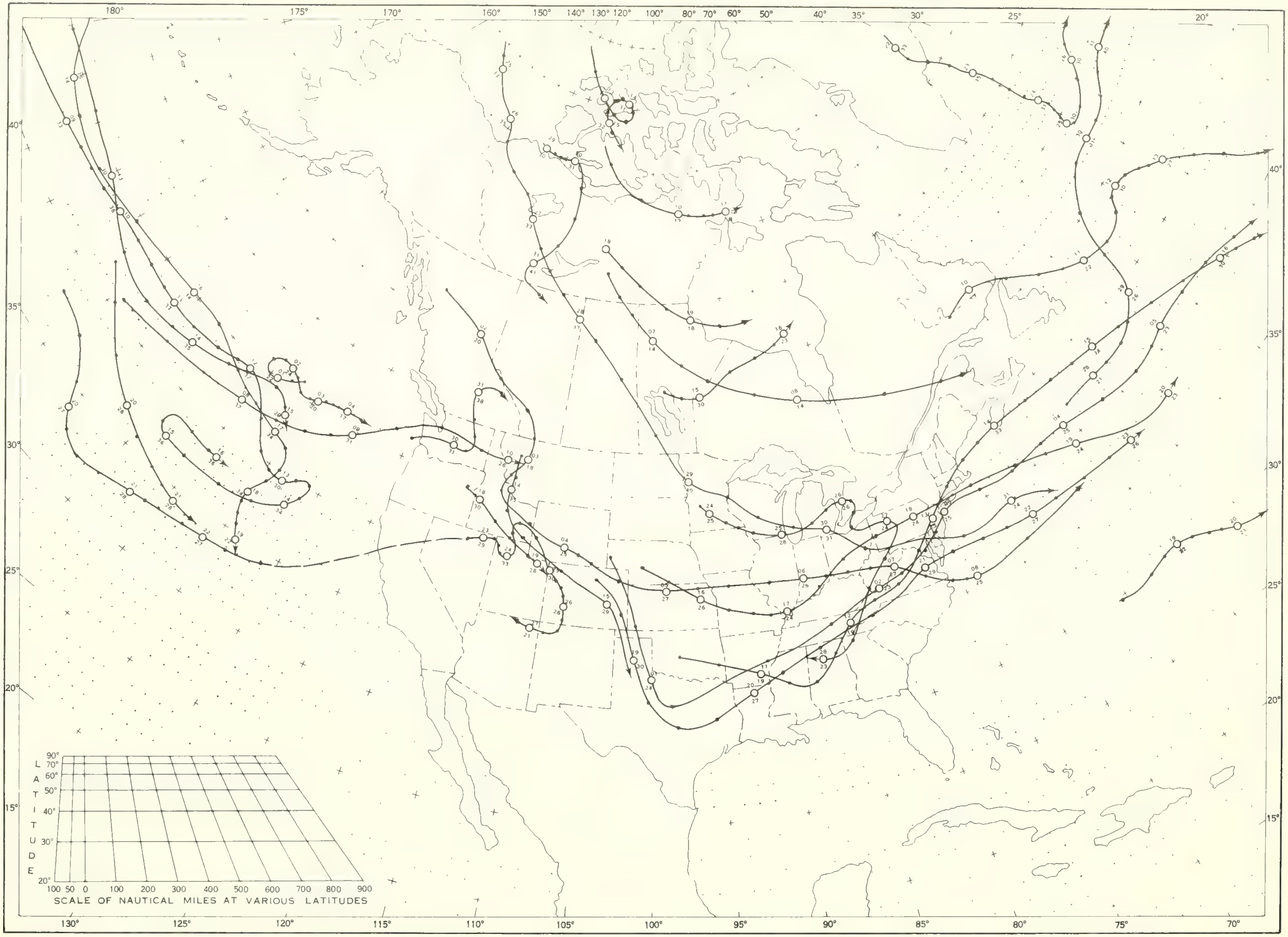


B. Percentage of Mean Daily Solar Radiation, October 1966.



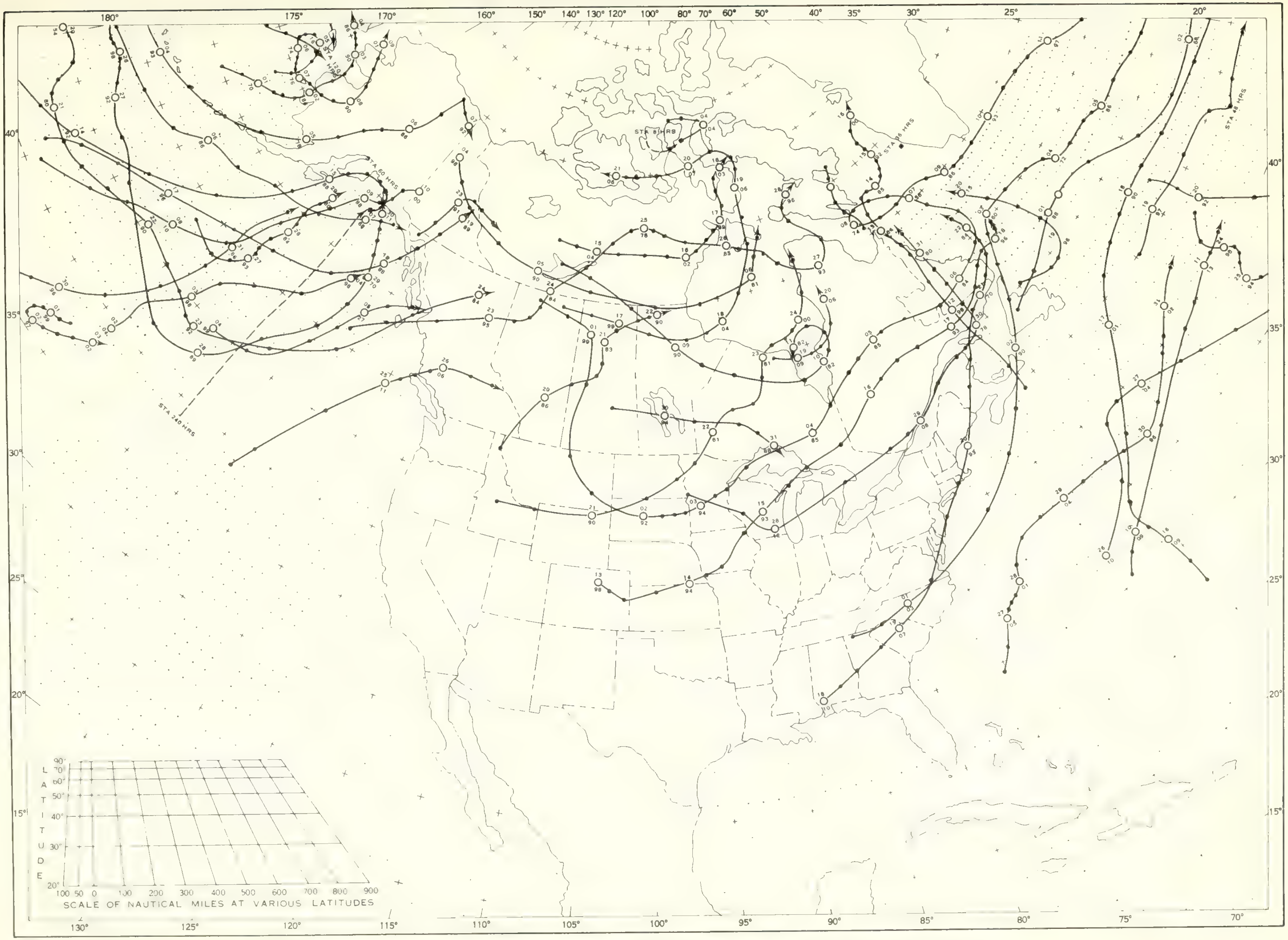
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm.$^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, October 1966.



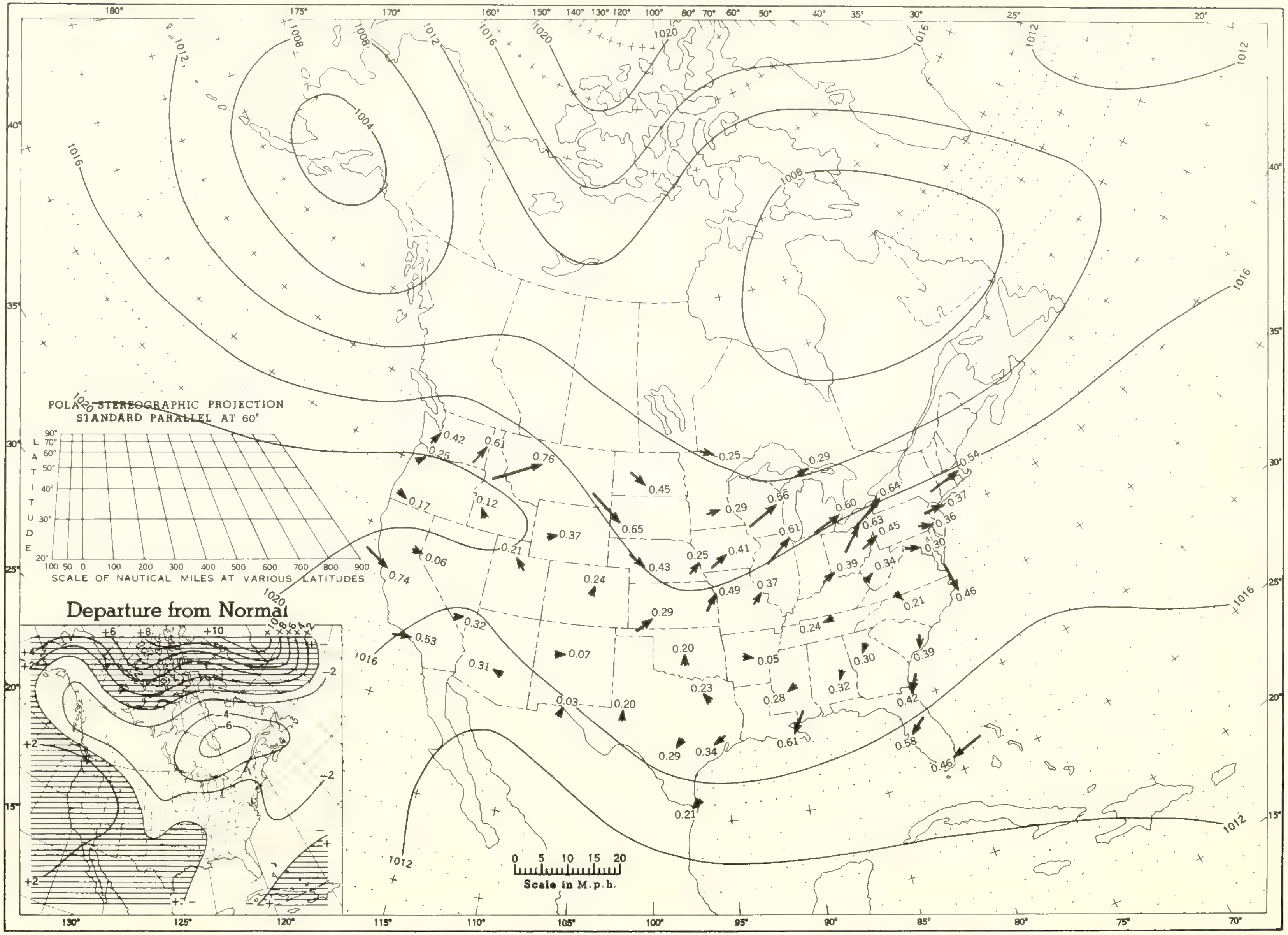
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, October 1966.



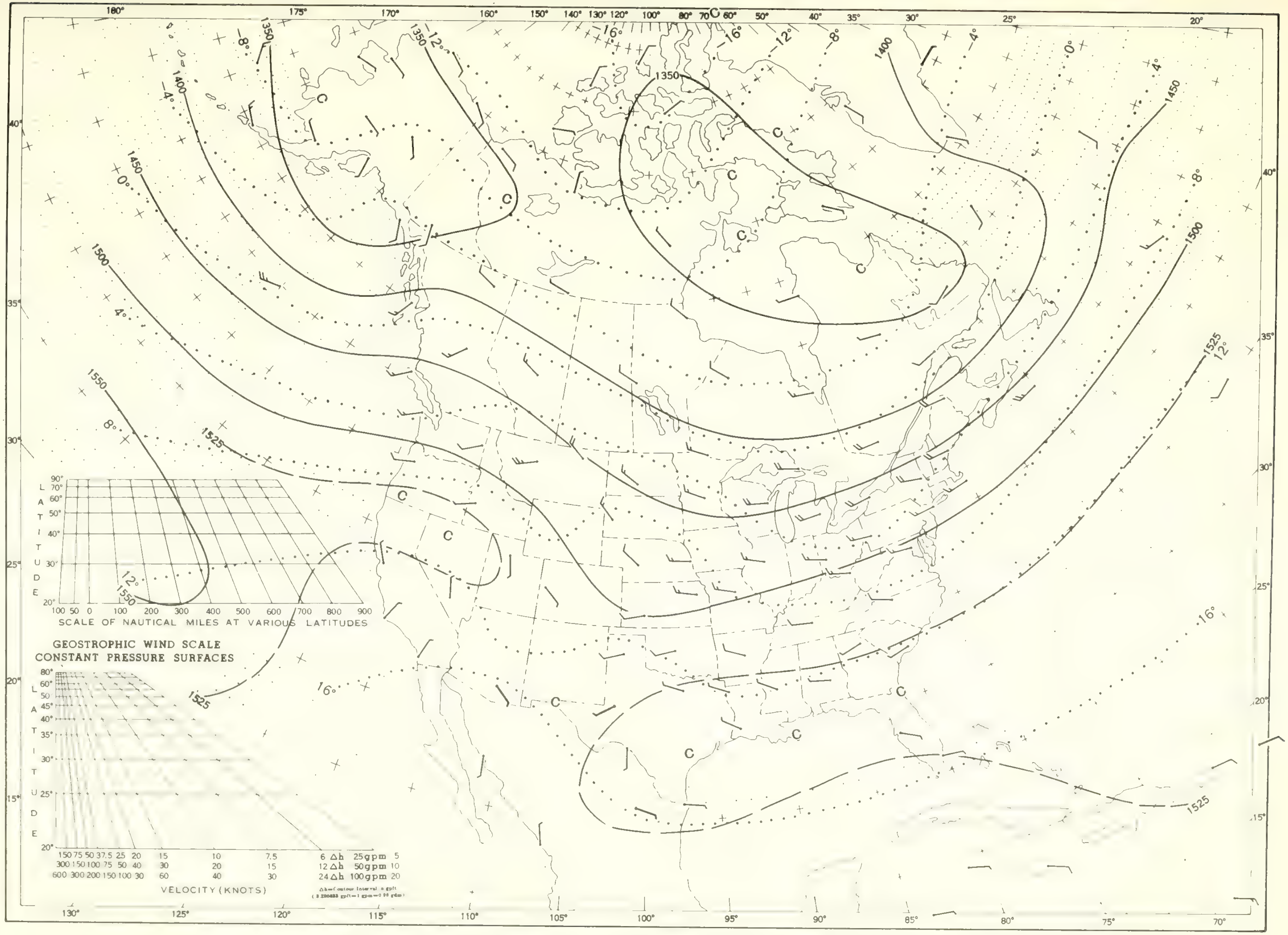
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, October 1966. Inset: Departure of Average Pressure (mb) from Normal, October 1966.



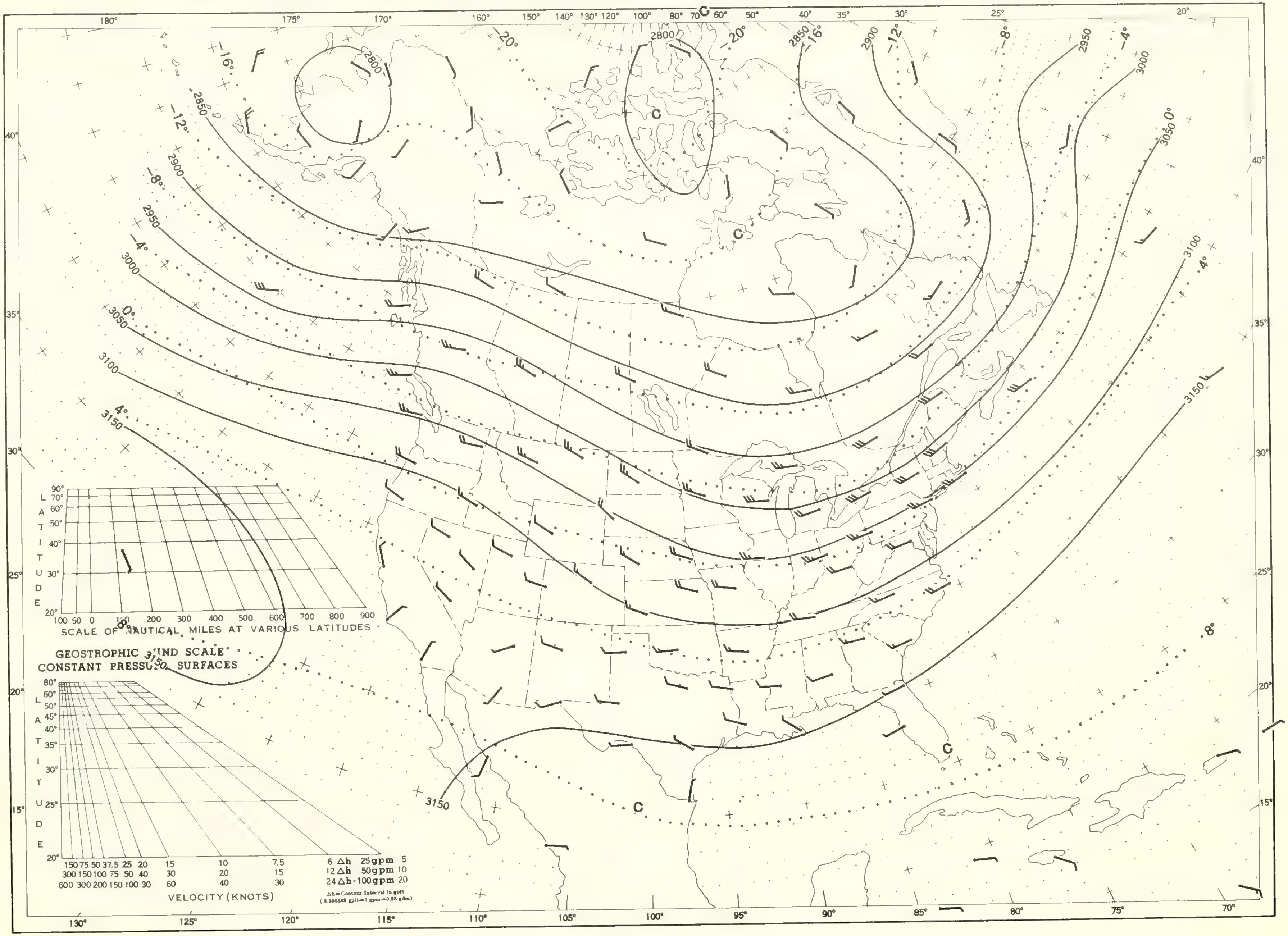
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, October 1966. Average Height and Temperature, and Resultant Winds.



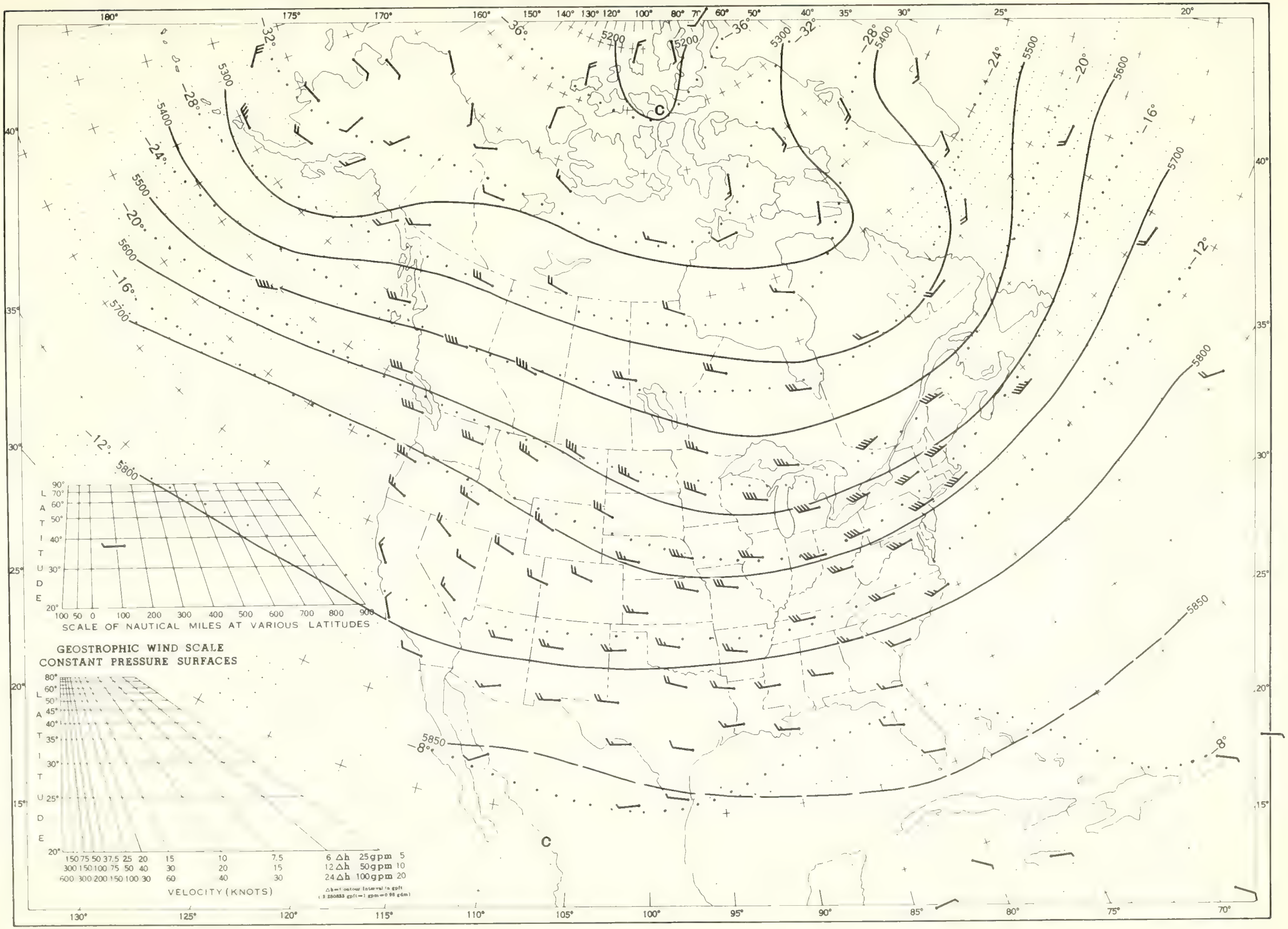
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, October 1966. Average Height and Temperature, and Resultant Winds.



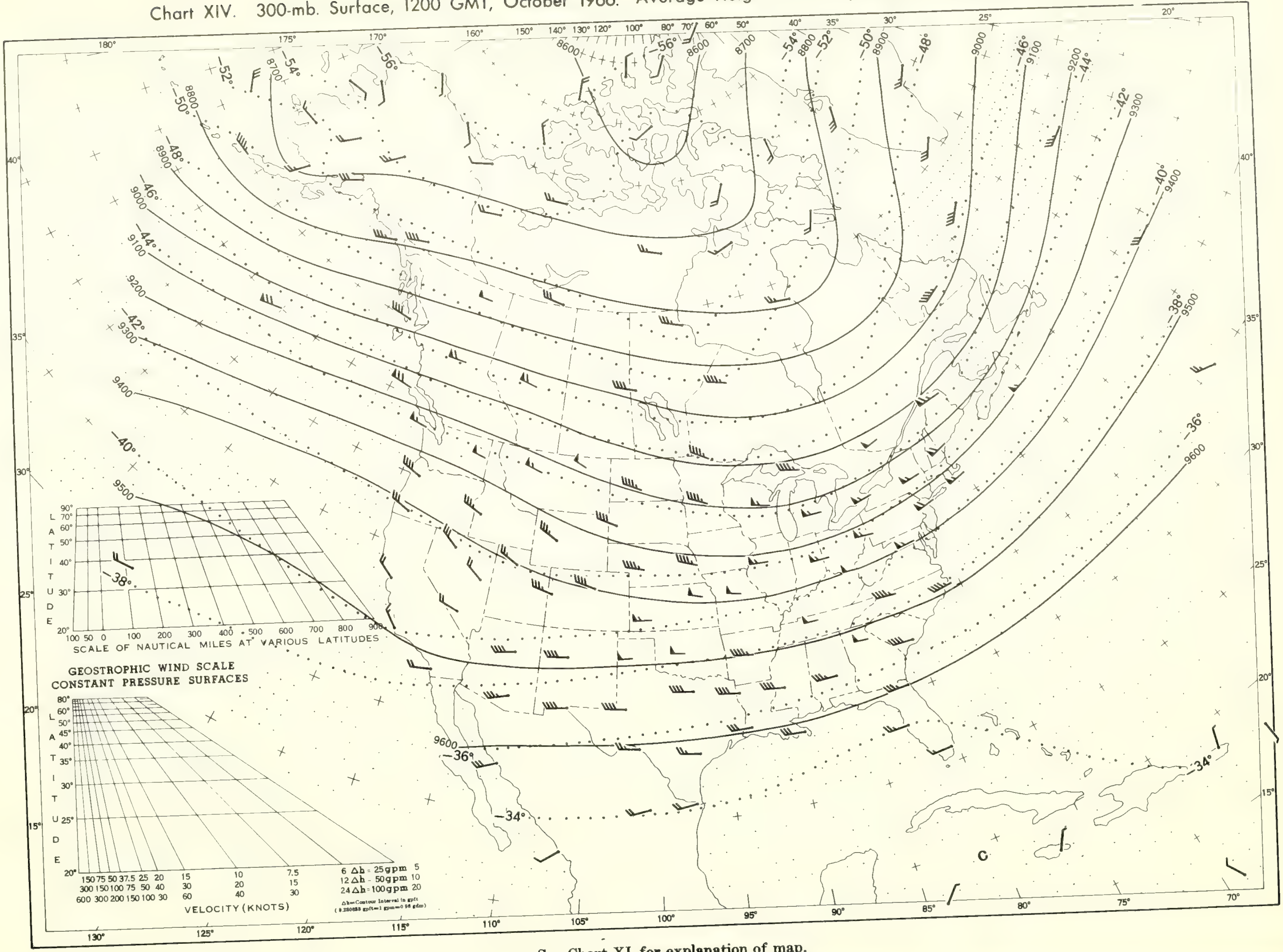
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, October 1966. Average Height and Temperature, and Resultant Winds.



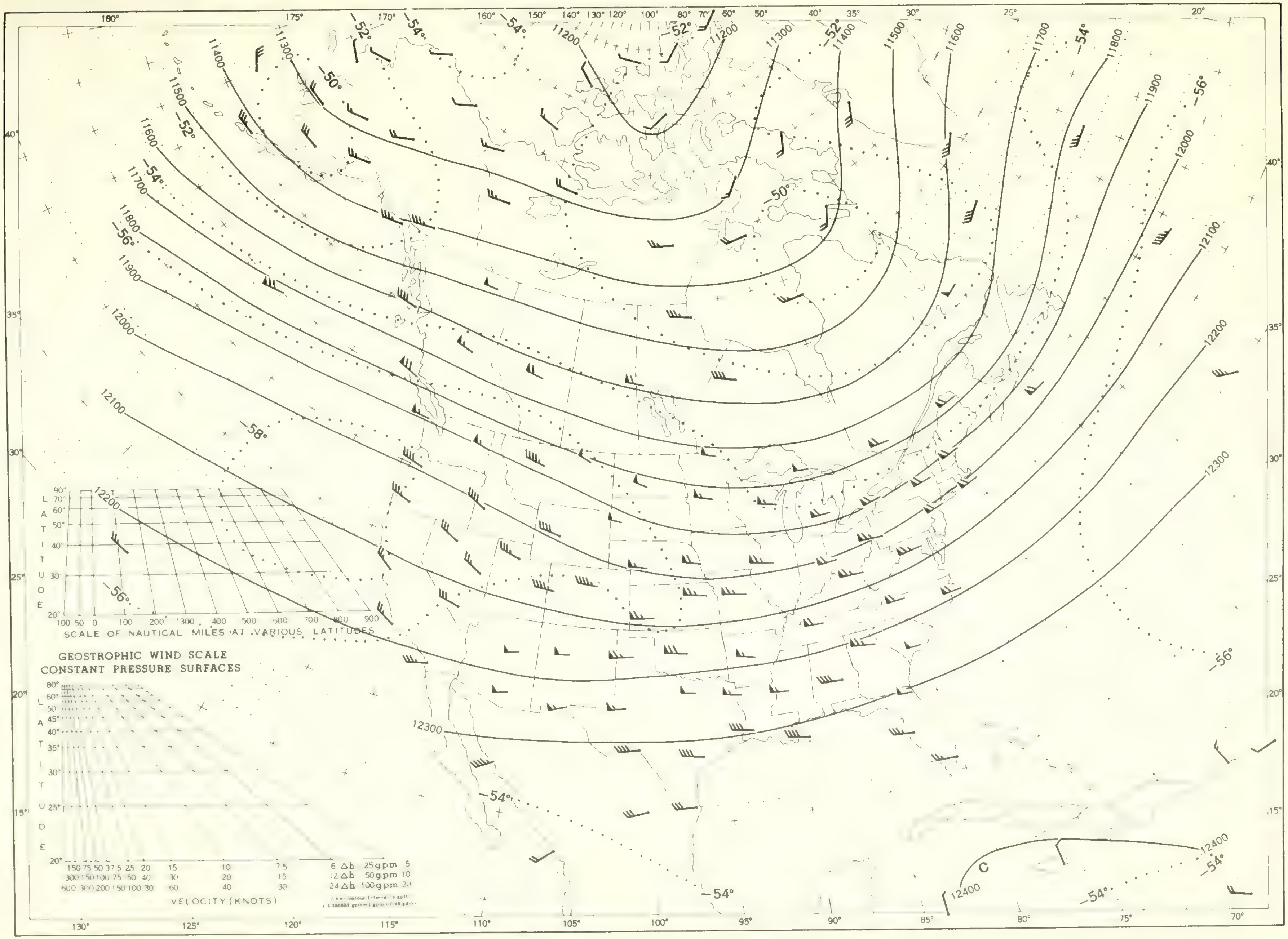
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, October 1966. Average Height and Temperature, and Resultant Winds.



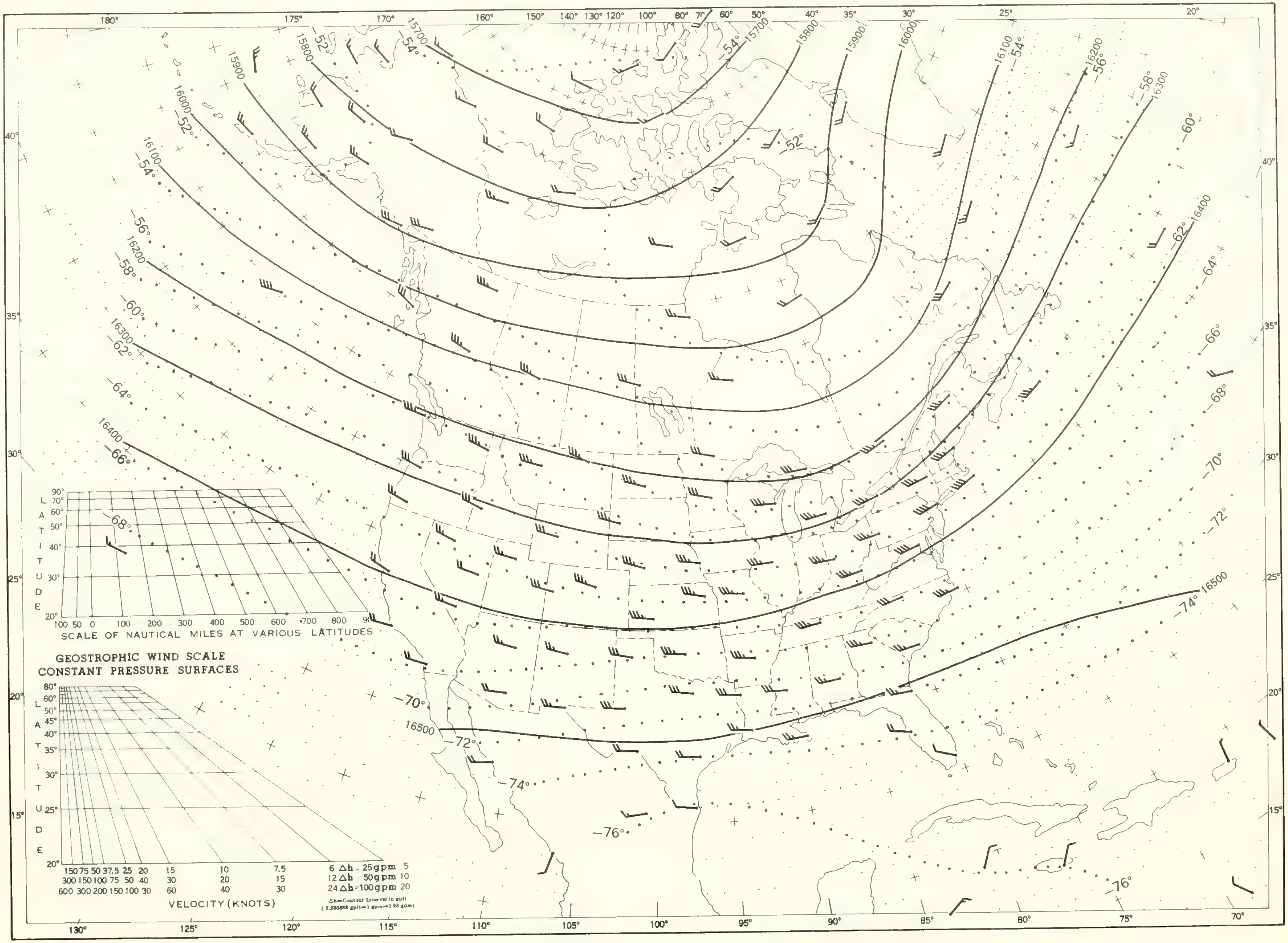
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, October 1966. Average Height and Temperature, and Resultant Winds.



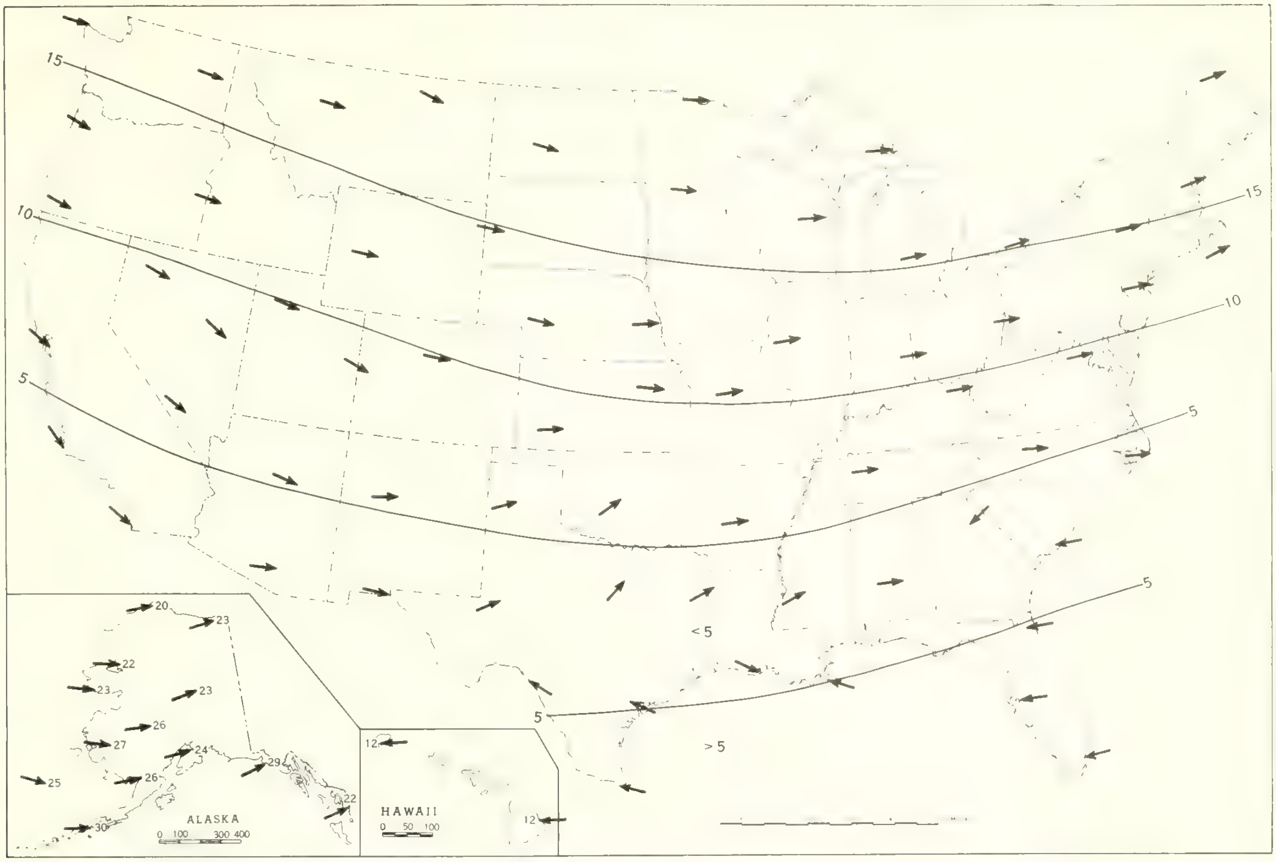
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, October 1966. Average Height and Temperature, and Resultant Winds.

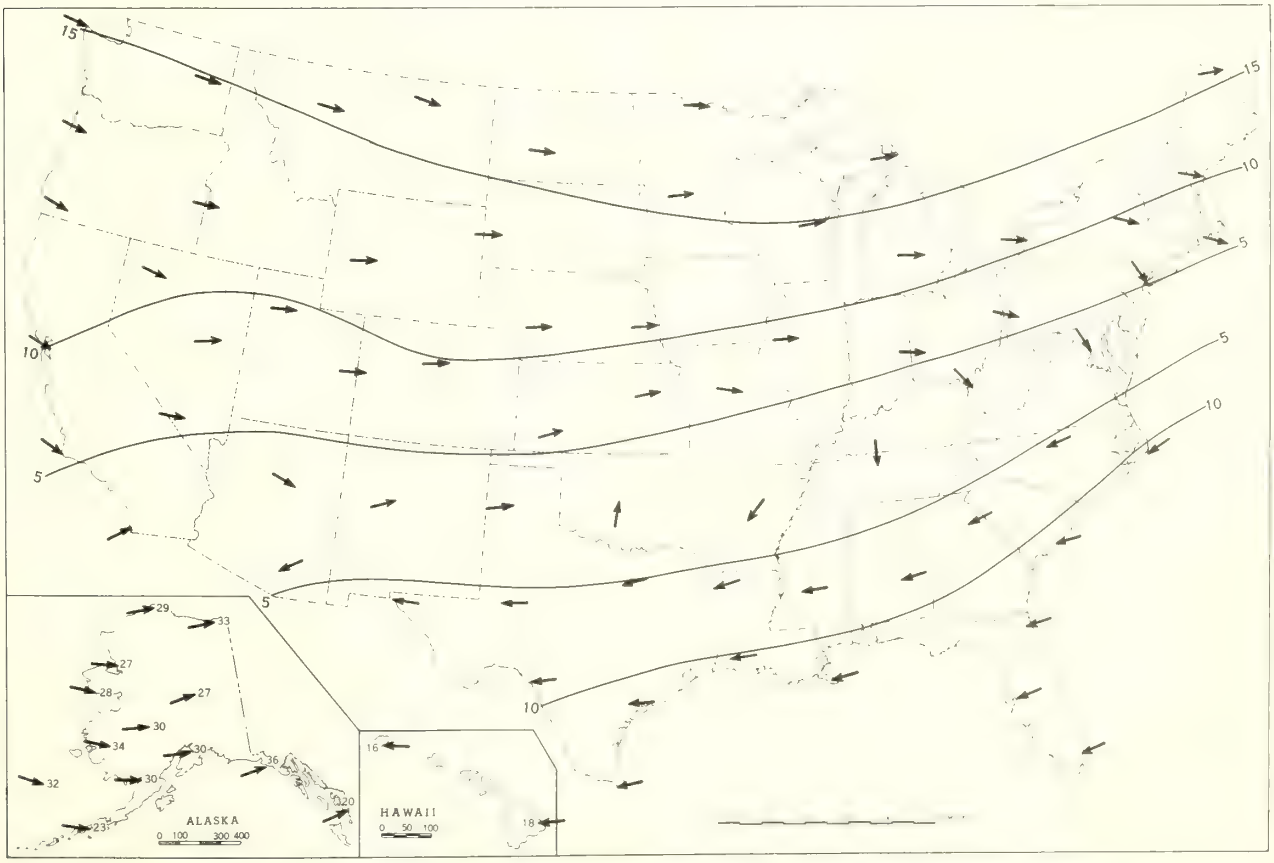


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, October 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, October 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA Asheville, N. C. -- [illegible]

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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

ENVIRONMENTAL DATA SERVICE

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

LEMSON UNIV
MAY
S. C. TECH. & AGR. DIV.

NOVEMBER 1966

Volume 17 No. 11

ASHEVILLE: 1967

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 11 NOVEMBER 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Mild most areas.
2. Cold spells beginning and end of month east of Rockies.
3. Heavy precipitation much of Far West and Great Lakes region.
4. Very dry in Great Plains and along Gulf and south Atlantic coasts.
5. Heat wave southern California coast beginning of month.
6. Early midwestern snowstorm 1st-3d.
7. Heavy rains in Hawaii.
8. Heavy snowfall many northern areas.

TEMPERATURE.--Temperatures for November averaged below normal from the upper Great Lakes to the Rockies, and near to mostly above normal elsewhere. The month was as much as 8° below normal in the Dakotas where temperatures were below normal nearly all month. In scattered areas elsewhere across the Country monthly averages ranged up to 6° or more above normal. East of the Rockies cold waves occurred at the beginning and end of the month but the rest of the month was abnormally warm. West of the Rockies the first and last weeks were unusually warm with the second and third within a few degrees of normal. Extreme temperatures for the month in the 48 States ranged from -29° near Jordan, Mont., to 101° at 4 stations in California.

A cold wave east of the Rockies at the beginning of the month brought record low temperatures for so early in the season to the Midwest and South. Subzero temperatures were recorded as far south as Iowa and Nebraska and freezing extended southward to central Florida and almost to the southern tip of Texas. New Orleans, La., recorded 28° on the 3d, the lowest November reading there since 1871. In contrast, on the first day of the month temperatures at many stations rose to record high levels for November and for so late in the season along the southern half of the California coast, where Santa Ana conditions prevailed. Among these were San Francisco, 86°, Los Angeles, 101°, and San Diego, 97°.

The second week was extremely cold in the northern Great Plains where record low temperatures for so early in the season were recorded at numerous stations including Bismarck, N. Dak., -13° on the 11th and Minneapolis, Minn., -4° on the 12th. At the same time warm winds from the Gulf brought unseasonably high temperatures to the South and East, and temperatures were about normal in the Far West.

The third week was warmer than normal everywhere in the 48 States except in parts of the Northeast. In the central Rockies and lower Great Plains the week was 9° to 12° warmer than normal. The fourth week was abnormally mild except in California and some adjoining sections of nearby States and in the Florida Peninsula. St. Louis, Mo., recorded 74° on the 24th, the highest on record there for that date, while 64° at Helena, Mont., on the 20th was the highest for the date in 86 years. New York City's Central Park observed a record date high of 64° on the 25th.

PRECIPITATION.-- Precipitation was abnormally heavy in the Great Lakes region and Ohio Valley, eastern New England, Montana, northern Arizona, and the Pacific States. In the Great Plains, and Gulf and south Atlantic coastal areas, precipitation amounts for November were less than half of normal.

Most of the heavy precipitation in the Great Lakes area fell during the passage of strong storm systems near the beginning and end of the month, and particularly the latter, when more than 2 inches fell at a number of stations. Grand Rapids, Mich., reported 7.81 inches for the month; Columbia City, Ind., 8.48; Clinton, Ill., 5.72; and Chardon, Ohio, 7.28 inches. The Great Lakes storm at the beginning of the month also produced over 2 inches of moisture in New England, the heaviest of the month in that region. Monthly totals exceeded 8 inches at a number of stations in Maine, New Hampshire, and Massachusetts.

In the Far West monthly precipitation totals ranged up to 30.26 inches at Honeydew, Calif.; 19.58 at Brookings, Oreg.; and 19.40 inches at Spruce, Wash. Most of this heavy precipitation fell during intermittent periods of onshore winds caused by low pressure systems in the nearby Pacific, some of which moved inland. Mount Shasta, Calif., measured 11.32 inches for the month, the third greatest total for November there since 1888, ending the period of deficient precipitation that had existed since February 1966. At Red Bluff, Calif., 7.42 inches of rain fell during the month, the third greatest for a November of record, and the most since 1904. This ended the worst drought in the area since the beginning of records in 1872.

The month was extremely dry in the southern Great Plains. At San Antonio, Tex., only a trace was observed during November for the first time since 1903, and 153 other stations in the State recorded none at all. The period January through November was the driest of record at Concordia, Kans., since 1885 and at Topeka, Kans., since 1778. In Colorado, New Mexico, and most of the central and southern Great Plains, soil moisture conditions were becoming critical at the end of the month and small grain conditions were declining. Ranges in these areas continued dry and short.

A Kona storm brought 8.84 inches of rain to Honolulu, Hawaii, during the first 8 days of the month. These storms are unusual this time of the year.

SNOWFALL.--A notable snowstorm for so early in the season occurred on the 2d and 3d in a belt that extended from the lower Great Lakes to the central Gulf coast. Mobile, Ala., reported snow pellets on the 2d, the earliest snowfall there on record. Huntsville, Ala., recorded 4 inches; Nashville, Tenn., 7.2; Louisville, Ky., 13.1; Columbus, Ohio, 10.4; and Grand Rapids, Mich., 7.6 inches -- record amounts for so early in the season at all 5 stations. Up to 15 inches were reported in central Kentucky. In south Buffalo, N. Y., and nearby suburbs accumulations ranged up to 2 feet although only about

6 inches fell at the Airport; this snow all melted by the 8th.

Generous snowfall occurred in California's Sierras and from the Cascades to the western slopes of the Rockies during the first 2 weeks of December, with lighter amounts in these areas the 3d week and in the Sierras the last week. Winslow, Ariz., measured 4.8 inches on the 8th and 9th, a record 24-hour amount for November. Some heavy snow fell in the northern Rockies and areas eastward at the end of the month. Alpena, Mich., received 16.1 inches of snow on 28-29th, a record for 24 hours, and east of Cleveland, Ohio, 8 to 12 inches of snow fell on the 28th and 29th.

Monthly totals, as usual, were greatest in the Cascade-Sierra Nevada Mountains where some stations reported over 50 inches. In Upper Michigan, Marquette reported 28 inches, about 12 inches more than the usual fall for November, and Muskegon, Mich., had 20.3 inches - the second greatest November total of record.

DESTRUCTIVE STORMS AND UNUSUAL PHENOMENA.--Thundersqualls and a few tornadoes occurred in the South during the second week. On the 7th a small tornado was reported about 4 miles east and northeast of the Los Angeles International Airport, and while there were no casualties there was considerable damage. During a cold front passage on the 1st, small tornadoes were reported near Raleigh, N. C., and Richmond, Va.

During the fourth week a polar High lingered over the Atlantic coast and smog developed in several cities. Air pollution reached dangerous levels in New York City, as a low level inversion formed in the stagnant air. The threat continued for several days until showers and eastward movement of the High cleared the air by the 27th.

During the closing days of the month hurricane force winds over Lake Huron destroyed an ore carrier with loss of all the crew except one.

CONDENSED CLIMATOLOGICAL SUMMARY

NOVEMBER 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	Gilbertown	85	9	Russellville 2	16	4+	Atmore 1SW	8.28	Jasper 4N	1.25
Alaska	Data will be delayed									
Arizona	2 Stations	95	1	Holbrook	[illegible]	10	Junipine	3.96	7 Stations	.00
Arkansas	do	83	18+	Gilbert	8	3	Monticello	4.18	Morobay Lock & Dam 8	1.05
California	4 Stations	101	1	White Mountain 1	-14	24	Honeydew 2WSW	30.26	3 Stations	.00
Colorado	do	78	15	Fraser	-11	27	Wolf Creek Pass 4W	3.75	17 Stations	.00
Connecticut	Hartford WBAP	70	10	Coventry	9	21	Wolcott Reservoir	5.82	Hartford Brainard Fld.	2.57
Delaware	Lewes 1SW	77	10	Georgetown 5SW	21	23	Wilmington Porter Resvr	2.29	Bridgeville 1NW	.87
Florida	4 Stations	89	18+	2 Stations	22	4	Milton Exp Station	4.05	Starke	.00
Georgia	3 Stations	84	12+	Blue Ridge	16	4	Fort Gaines	6.10	Savannah WBAP	.15
Hawaii	Data will be delayed									
Idaho	Glenns Ferry	73	20	3 Stations	-3	27+	Burke 2ENE	8.40	Chilly Barton Flat	D .18
Illinois	Rushville	78	7	Aledo	12	3	Clinton 1SSW	5.72	Illinois City Dam 16	.76
Indiana	Evansville	76	8+	Brookville 1S	7	4	Columbia City 1S	8.48	Cypress Dam 48	2.03
Iowa	3 Stations	76	7	Esterville	-6	12	De Witt	2.30	Centerville 4SSW	.00
Kansas	4 Stations	84	9+	2 Stations	7	3+	Olathe 3E	1.70	21 Stations	.00
Kentucky	3 Stations	76	8	Owenton 2S	12	4	Mammoth Cave Park	5.80	Benton 2	1.76
Louisiana	Bastrop	88	[illegible]	2 Stations	18	4+	De Ridder	[illegible].48	New Orleans WB New Fed	.38
Maine	Saco	68	11	Van Buren 2	-2	22	Bingham Wyman Dam	8.19	St Francis	D2.37
Maryland	Prince Frederick	79	10	Savage River Dam	12	22+	Bittinger 2NW	4.03	Easton Police Barracks	.62
Massachusetts	Sandwich	72	11	Birch Hill Dam	9	22	South Wellfleet	8.24	Adams	2.37
Michigan	Grosse Pointe Farms	70	23	Champion Van Riper Pk	-3	13	Grand Rapids WBAP Kent	7.81	Eagle Harbor Coast Gd	.42
Minnesota	Preston	61	16	2 Stations	-21	12	Babbitt 2SE	2.57	2 Stations	T
Mississippi	5 Stations	85	19+	Houston 2NE	14	3	Brookhaven	7.45	Scott	.74
Missouri	Hermitage	82	[illegible]	Caplinger Mills	9	3	Bunker	6.13	Lucerne	.00
Montana	5 Stations	67	20+	Jordan 22E Van Norman	-29	11	Heron 2NW	6.92	Scobey	.05
Nebraska	Curtis	77	6	Harrisburg 10NW	-7	9	Kimball	.78	4 Stations	.00
Nevada	Pahrump	88	1	Currie Highway Sta	-5	25	Glenbrook	2.45	Sunnyside	.00
New Hampshire	Nashua 2NNW	70	10	Mount Washington	-2	15	Pinkham Notch	10.77	Hanover	1.79
New Jersey	Elizabeth	75	3	High Point Park	11	20	Mahwah	6.44	Belle Plain St Forest	1.15
New Mexico	Portales	86	17	Eagle Nest	-11	2	Reserve Ranger Station	1.54	32 Stations	.00
New York	NY Westerleigh Stat Is	73	10	Arcade	5	30	Westfield 3SW	7.78	Tupper Lake Sunmount	1.07
North Carolina	2 Stations	82	12+	3 Stations	10	30+	Highlands 2S	8.10	Greenville	.51
North Dakota	Mott	57	21	Medora	-19	11	Selfridge	1.10	Sykeston	.00
Ohio	3 Stations	74	10+	Greenville Sewage Pl	11	4	Chardon	7.28	Springfield Sewage Pl	2.69
Oklahoma	9 Stations	85	9+	Fort Supply Dam	11	2	Wagoner	4.07	9 Stations	.00
Oregon	3 Stations	79	1	Round Grove	-1	23	Brookings	19.58	McDermitt 26N	.54
Pennsylvania	2 Stations	73	28+	Clermont 4NW	5	20	Franklin	6.66	West Grove 1SE	2.08
Puerto Rico	do	94	20+	Cayeyie, P.R.	52	28	Saint Just, P.R.	12.57	Mayaguez Airport, P.R.	.42
Rhode Island	Kingston	69	11	Kingston	14	21	Greenville	5.32	Block Island WBAP	2.89
South Carolina	2 Stations	84	11+	Caesars Head	19	4	Caesars Head	8.77	Branchville 6S	.08
South Dakota	3 Stations	77	21	Belle Fourche 29NNW	-23	9	Zeona 2ESE	1.74	2 Stations	.03
Tennessee	Waverley	80	[illegible]	Woodbury 1NW	8	4	Gatlinburg 2SW	6.53	do	1.57
Texas	Kaffie Ranch	98	12	Lipscomb	11	2	Bon Wier 2E	7.03	153 Stations	.00
Utah	Saint George	80	1	Hardware Ranch	-4	9	Alta	4.84	Hanksville	T
Vermont	Rutland	70	10	Mount Mansfield	2	20	Mount Mansfield	5.71	Burlington WBAP	1.41
Virginia	Holland 1E	80	11	Lincoln	9	30	Big Meadows	5.64	Cheriton	.40
Washington	2 Stations	71	2+	Mount Spokane Summitt	8	10	Spruce	19.40	Wenatchee	1.36
West Virginia	Charleston WBAP	79	9	Bayard	6	22	New Martinsville	5.64	Brushy Run	1.85
Wisconsin	2 Stations	71	7	Grantsburg 1E	-14	12	Burlington	4.20	Cashton 2S	T
Wyoming	Yoder	73	16	Lamar Ranger Station	-22	9	Moran 5WNW	2.84	Jay Em 2S	.03

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
ALABAMA	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
BIRMINGHAM	620	999.3	1021.9	66	42	54.1	0.8	77	26+	25	4+	0	5	43	69	2.28	-1.25	1.29	9	1	T	T	1.4	24	32	W	10	11	4	15	5.8	64
HUNTSVILLE	600	998.3	1021.5	64	41	52.4	1.6	75	18+	23	4	0	5	42	69	1.72	-1.93	0.52	9	1	4.0	4	0.9	21	25	27	27	9	5	16	6.2	
MOBILE	211	1013.9	1021.7	72	50	60.7	1.8	81	11+	26	3	0	2	49	70	1.35	-2.00	0.79	8	2	T	0	1.2	7	29	34	28	15	4	11	4.7	
MONTGOMERY	194	1014.6	1022.0	68	46	56.6	2.4	78	19+	27	4+	0	4	45	72	4.65	1.63	3.02	7	2	T	0	0.3	29	25	S	10	14	5	11	4.9	61
ALASKA												b																				
ANCHORAGE PRK STRIP	85			26	13	19.3	-2.9	39	2	-4	14	0	29			0.83	-0.20	0.25	12		10.6	8										
ANCHORAGE	114	1008.8	1013.7	24	11	17.5		39	1	-7	14	0	30	13	83	1.11		0.35	14	0	13.5	10	1.7	3	24	18	2	5	10	15	6.9	48
ANNETTE	110	1006.8	1010.8	43	34	38.6	-1.8	52	4	27	29+	0	12	32	77	6.17	-8.48	1.16	18	0	8.7	1	2.4	6	29	16	1	6	5	19	7.4	
BARROW	22	1016.3	1017.1	12	1	6.4	7.1	28	29	-15	27	0	30	3	84	0.51	0.28	0.20	7	0	6.4	9	5.6	12	54	26	17	V2	V4	V12		
BARTER ISLAND	39	1016.3	1018.3	14	1	7.4	7.2	35	29	-15	14+	0	30	-2	65	0.83	0.43	0.24	12	0	13.1	11	3.5	12	67	25	30	X5	X2	X16		
BETHEL	125	1011.2	1017.0	26	16	20.9	3.7	37	10+	-4	15	0	30	18	87	1.53	0.47	0.58	14	0	13.2	7	1.5	19	33	19	16	6	4	20	7.4	
COLD BAY	96	1014.9	1018.9	37	28	32.3	-2.1	48	5	18	28	0	22	28	84	2.80	-0.99	0.51	18	0	6.0	7	5.4	27	51	32	26	2	7	21	8.2	
FAIRBANKS	436	1000.7	1018.8	9	-8	0.6	-3.3	32	1	-34	28+	0	30	-4	78	2.06	1.46	0.49	14	0	36.6	32	1.0	34	21	26	19+	5	7	18	7.3	
JUNEAU	12	1012.2	1013.0	32	18	25.1	-9.2	49	1	-5	21	0	27	21	84	4.39	-1.67	1.12	12	0	20.0	10	5.6	9	35	11	24+	10	3	17	6.4	47
KING SALMON	43	1013.9	1016.0	27	14	20.5	-1.5	40	5	-6	28	0	29	18	89	2.17	0.71	0.49	15	0	8.1	4	0.7	36	37	16	5	6	4	20	7.4	
KOTZEBUE	10	1013.9	1014.6	20	7	13.5	6.1	36	7	-12	27+	0	30	9	80	0.64	0.28	0.12	18	0	15.4	14	10.9	12	52	11	5	4	2	24	8.3	
MC GRATH	349	1005.1	1018.4	16	1	8.8	3.5	34	22+	-31	27	0	30	4	76	0.27	-0.81	0.16	8	0	19.6	13	1.1	15	30	22	18	6	2	22	7.9	
NOME	13	1012.9	1013.7	26	9	17.1	0.6	35	16+	-19	27+	0	30	16	86	1.08	-0.08	0.38	14	0	10.7	11	3.5	11	41	11	5	5	5	20	7.5	14
ST. PAUL ISLAND	22	1015.6	1016.5	38	32	34.8	1.9	43	16+	19	27	0	15	30	81	3.44	0.94	1.27	20	0	4.0	4	5.8	22	52	17	4	3	4	23	8.3	
SHEMYA	122	1008.5	1012.3	42	32	37.4	1.6	47	5	26	5	0	12	33	82	5.40	2.68	1.17	23	0	1.1	T	10.9	20	53	15	28+	1	6	23	8.6	
YAKUTAT	28	1008.8	1009.8	34	15	24.2	-9.6	48	30	-6	19+	0	29	20	83	8.92	-7.11	2.90	15	0	28.8	12	3.9	10	33	12	3	7	4	19	7.0	
ARIZONA																																
FLAGSTAFF	6993	788.7	1019.5	55	24	39.5	3.4	69	2	9	9	0	27	24	61	2.33	1.33	1.97	4	1	11.3	6	2.7	20	23	22	8	16	9	5	3.9	
SAINT JOSEPH	817			59	33	46.1	4.7	78	22+	13	29	0	16	33	69	0.38	-0.11	0.38	2	0	0.0	0	1.9	12	40Y	WSW	8	19	8	3	3.1	83
PHOENIX	1117	976.6	1015.8	76	45	60.5	2.4	90	1	31	27	1	2	40	53	0.06	-0.56	0.06	1	0	0.0	0	4.0	15	33	SE	2	17	5	8	3.8	83
TUCSON	2584	927.5	1015.6	76	47	61.1	3.0	84	20+	32	27	0	1	34	42	0.75	0.39	0.75	2	0	4.8	2	3.0	18	24	21	22	17	7	6	3.5	
WINSLOW	4895	853.7	1020.0	63	30	46.3	5.0	73	20	17	27	0	21	27	57	T	-0.12	T	0	0	0.0	0	2.8	36	25	S	7	22	3	5	2.5	88
YUMA	194	1008.5	1015.9	78	50	64.0	2.3	94	1	37	26	1	0	35	38																	
ARKANSAS																2.73	-0.45	1.34	5	2	0.0	0	0.3	29	29	NW	27	9	5	16	6.0	57
FORT SMITH	447	1003.4	1020.3	67	42	54.3	4.3	80	8	15	3	0	6	40	65	3.08	-1.04	1.94	5	2	T	T	1.4	22	32	NW	27	8	7	15	6.4	61
LITTLE ROCK	257	1011.5	1021.4	66	44	54.8	5.3	77	9+	21	3	0	3	42	67	2.30	-2.03	1.77	4	2	0.0	0	3.2	19				10	11	9	5.3	
TEXARKANA	372	1007.8	1021.1	70	48	59.2	5.5	80	6	23	3	0	2	46	67																	
CALIFORNIA																0.88	0.39	0.71	6	1	0.0	0	1.3	2	26	4	19	7	9	14	6.3	
BAKERSFIELD	494	1000.3	1018.1	67	48	57.7	1.8	90	1	39	27+	1	0	44	66	0.27	-0.26	0.15	3		0.0	0						10	10	10	5.3	
BISHOP	4108	875.0		64	29	46.5	0.7	82	1	20	26	0	22			15.86	9.11	3.01	12		28.2	14			37	17	16	7	0	23	7.5	
BLUE CANYON	5280			51	38	44.2	-1.5	76	1	23	23+	0	8			9.86	5.25	2.62	17		0.0	0			30	SE	18+	4	5	21	7.8	42
EUREKA U	43			59	46	52.6	1.4	70	18+	34	23	0	0			1.57	0.62	0.49	8	0	0.0	0	1.2	14	20	E	28+	11	7	12	5.3	67
FRESNO	328	1006.1	1017.9	68	46	56.9	3.1	88	1	33	25	0	0	47	75	1.78	0.75	1.59	4	0	0.0	0	1.1	28	18	10	7	9	7	14	5.9	
LOS ANGELES	97	1013.9	1017.5	70	55	62.5	1.4	101	1	45	26	2	0	51	72	2.69	1.60	2.44	3	0	0.0	0	1.9	27	22Y	W	22+	10	8	12	5.7	
LONG BEACH	34	1016.6	1018.0	71	52	61.5	0.3	101	1	41	26	2	0	50	73	4.07	2.99	3.85	2		0.0	0			17	E	7	11	10	9	4.9	50
LOS ANGELES U	270			72	55	63.6	0.9	100	1	46	26	2	0			11.32	7.35	3.30	16		6.7	2										
MT SHASTA R	3544			49	34	41.4	-0.4	74	2+	19	25	0	11			3.86	2.13	1.03	9	0	0.0	0	2.7	19	26	15	28+	6	5	19	6.9	
OAKLAND	6	1017.3	1017.5	62	51	56.1	1.4	76	1	38	25	0	0	48	76	7.42	5.13	2.66	12	0	0.0	0	2.3	16	44	SE	20	6	3	21	7.6	43
RED BLUFF	342	1004.1	1016.8	65	48	56.6	2.1	91	1	35	25	1	0	42	63	5.73	4.28	1.57	10	0	0.0	0	1.9	19	33	SE	19	7	3	20	7.0	61
SACRAMENTO	17	1016.6	1017.3	64	46	54.7	1.8	84	2	33	25+	0	0	46	77	5.46	4.54	4.95	4		0.0	0			35	21	6	11	7	12	5.7	
SANDBERG R	4517			55	47	48.6	-0.4	74	2	30	23	0	1			0.82	-0.08	0.67	5	1	0.0	0	2.8	31	33	S	7	14	7	9	4.6	72
SAN DIEGO	13	1016.3	1017.4	69	55	61.9	0.1	97	1	45	25+	2	0	52	74	4.79	3.22	1.28	8	0	0.0	0	2.5	18	44	SSE	19	6	6	18	6.9	
SAN FRANCISCO	8	1016.9	1017.5	62	48	54.7	-0.1	82	1	36	25	0	0	45	72	4.80	2.80	1.09	10		0.0	0			31	SW	15					47
SAN FRANCISCO U	52			63	52	57.2	-0.2	86	1	46	25	0	0			1.58	0.47	1.36	7	0	0.0	0						6	10	14	6.5	
SANTA CATALINA	1568			64	54	58.9	-1.6	89	1	47	24+	0	0			2.04	1.02	1.01	11		0.0	0						9	8	13	5.9	
SANTA MARIA	236			67	46	56.3	0.2	92	2+	33	25	2	0			3.63	2.46	0.95	10	0	0.0	0	1.8	17	28	15	6	9	3	18	6.7	
STOCKTON	22	1016.9	1018.0	65	46	55.8	2.8	84	1	33	25+	0	0	47	76																	
COLORADO																0.10	-0.19	0.09	2		0.3	T						13	7	10	4.8	
ALAMOSA	7536	773.1		53	16	34.5	5.0	60	21+	6	27	0	30			0.16	-0.24	0.16	1	0	1.7	2	2.7	6	28	1	8	8	10	12	6.1	
COLORADO SPRINGS	6145	811.4	1018.8	54	27	40.6	3.1	66	21+	11	9	0	23	19	49																	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90° F. or above	Min. 32° F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
DENVER	5283	836.4	1016.8	57	26	41.5	3.8	70	21+	10	9	0	24	25	61	0.32	- 0.37	0.29	3	0	3.0	3	1.3	21	23	W	2	7	9	14	6.4	54
GRAND JUNCTION	4855	854.4	1019.3	55	33	43.9	5.1	67	21+	21	9	0	16	28	60	0.62	0.04	0.58	4	0	4.2	3	2.3	13	27	SW	22+	10	4	16	6.1	55
PUEBLO	4684	856.4	1017.7	60	25	42.6	2.6	73	21	15	27	0	25	21	48	T	- 0.53	T	0	0	T	T	1.0	2	35	NW	25	11	8	11	5.7	69
CONNECTICUT																																
BRIDGEPORT	7	1019.6	1020.4	53	40	46.5	2.0	64	3	25	20	0	6	39	77	3.12	- 0.90	1.38	13	0	0.0	0	2.4	28	30	11	28+	9	12	9	5.5	
HARTFORD	169	1013.5	1020.2	55	37	46.2	4.9	70	10	19	23	0	12	34	65	3.82	- 0.02	1.47	15	0	T	T	1.7	25	26	NW	19	6	10	14	6.2	51
NEW HAVEN	6	1020.3		54	39	46.2	2.8	65	11+	23	21	0	8			2.89	- 1.16	0.94	13		0.0	0			26	E	28	7	12	11	5.9	60
DELAWARE																																
WILMINGTON	78	1017.6	1020.7	56	37	46.6	1.2	69	10	24	20	0	12	37	70	1.75	- 1.78	0.63	9	0	T	T	2.2	26	27	16	3	6	13	11	5.9	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1018.3	1020.6	60	39	49.5	1.8	73	10+	28	22+	0	7	37	65	1.50	- 1.34	0.90	8	0	T	0	2.2	22	26	W	28+	6	12	12	5.9	50
FLORIDA																																
APALACHICOLA U	13			69	53	61.0	- 0.3	79	12	33	3	0	0			0.46	- 2.12	0.19	4	1	0.0	0			29	NW	2	20	4	6	3.2	86
DAYTONA BEACH	31	1019.3	1020.8	74	54	64.1	- 1.2	83	11+	33	30	0	0	52	68	1.19	- 1.14	0.43	9	0	0.0	0	4.9	36	25	36	22	10	15	5	4.8	
FORT MYERS	15	1019.3	1019.7	78	57	67.7	- 1.5	84	8	42	4	0	0	59	79	0.18	- 1.02	0.12	3	0	0.0	0	6.5	3	26	30	2	19	8	3	3.4	
JACKSONVILLE	20	1020.3	1021.3	71	50	60.4	- 1.3	84	12	31	4	0	1	49	72	0.21	- 1.48	0.12	3	0	0.0	0	4.3	35	33	W	28	13	11	6	4.5	69
KEY WEST	4	1017.6	1018.2	78	68	73.0	- 1.1	82	11+	57	4	0	0	63	72	0.71	- 2.09	0.55	4	0	0.0	0	10.3	4	30	NW	2	17	7	6	3.7	77
LAKELAND U	214			75	55	65.0	- 1.9	84	12+	40	4+	0	0			0.17	- 1.42	0.10	3		0.0	0						17	11	2	3.5	81
MIAMI	7	1018.0	1018.1	78	62	70.2	- 2.2	86	2	44	29	0	0	60	73	3.84	1.01	2.52	12	1	0.0	0	6.2	3	32	8	16	11	13	6	4.7	
ORLANDO	108	1016.3	1020.4	76	56	65.8	- 0.1	84	11+	40	29+	0	0			0.09	- 1.48	0.05	4	0	0.0	0	5.5	35	28	30	28	13	15	2	3.7	
PENSACOLA	112	1018.0	1022.1	70	50	59.8	0.3	80	11	29	3	0	2	49	75	1.52	- 1.72	0.57	8		0.0	0	2.2	4	39	NW	27	14	6	10	4.4	65
TALLAHASSEE	55	1019.3	1021.8	74	46	60.1	0.9	84	12	28	30	0	3	47	70	1.15	- 1.29	0.58	6	2	0.0	0	1.8	2	23	18	1	16	6	8	3.8	
TAMPA	19	1020.0	1020.2	77	53	65.1	- 1.7	84	13+	36	4	0	0	54	72	0.39	- 1.07	0.29	3	1	0.0	0	5.1	3	24	31	28	18	9	3	3.6	69
WEST PALM BEACH	15	1018.3	1018.8	78	61	69.6	- 2.9	84	2	39	30	0	0	58	70	2.00	- 0.86	0.80	11	0	0.0	0	6.1	4	32	2	14	11	13	6	5.0	
GEORGIA																																
ATHENS	802	991.9	1021.4	64	42	53.0	1.5	76	12	26	4	0	4	42	71	3.27	0.34	1.46	9	2	0.0	0	1.5	29	23	29	28	11	7	12	5.5	
ATLANTA	1010	984.4	1021.8	62	43	52.1	0.9	73	18+	24	4	0	5	41	70	4.82	1.86	2.80	8	1	T	0	1.0	29	34	W	28	10	6	14	5.9	53
AUGUSTA	145	1016.3	1021.6	68	39	53.7	- 0.4	82	10	27	24	0	10	41	69	0.85	- 1.33	0.35	6	0	0.0	0	2.1	29	25	28	28	10	9	11	5.0	
COLUMBUS	385			68	44	56.0	1.9	77	19+	28	4+	0	3			3.98	1.39	1.26	8		0.0	0	0.5	36	27	30	28	11	9	10	5.2	
MACON	354	1009.1	1022.3	68	42	54.9	- 0.5	79	10	27	4	0	7	42	68	2.19	- 0.26	0.62	7	0	0.0	0	1.3	33	26	W	28	13	4	13	5.1	60
ROME	637			63	38	50.6	1.4	75	18	21	4	0	10			1.93	- 1.49	0.68	7		T	0										
SAVANNAH	46	1020.0	1021.8	70	44	57.1	- 0.2	84	10	27	4	0	6	44	66	0.15	- 1.90	0.11	4	0	0.0	0	1.6	34	32	NW	28	11	11	8	4.5	70
HAWAII																																
HILO	27	1013.2	1014.5	82	69	75.6	2.4	86	2	66	28+	0	0	68	82	20.83	7.46	7.15	25	1	0.0	0	2.8	18	25	E	4	1	13	16	7.4	22
HONOLULU	7	1013.2	1013.6	84	71	77.2	1.3	87	2	66	28	0	0	68	76	9.44	7.28	5.20	10	3	0.0	0	5.6	8	29	NE	26+	5	15	10	6.3	50
KAHULUI	48	1011.2	1013.6	84	68	75.8	0.8	87	7+	62	30+	0	0	64	69	2.19	0.67	1.43	6	0	0.0	0	5.5	7	28	NE	24+	11	10	9	5.4	72
LIHUE	103	1009.1	1014.3	80	70	74.8	0.3	83	7	65	28+	0	0	69	84	8.13	3.60	2.88	23	2	0.0	0	4.7	8	24	SE	25+	4	11	15	7.1	48
IDAHO																																
BOISE	2838	917.0	1018.3	52	34	43.0	4.4	67	20+	23	9	0	13	32	70	1.60	0.40	0.53	10	0	T	T	4.1	13	45	SW	16	3	8	19	7.8	48
IDAHO FALLS 42NW R	4790			44	18	31.0	2.9	58	20+	5	24+	0	28			0.29	- 0.04	0.14	6				1.4	21	38	SSW	16					
IDAHO FALLS 46W R	4932			45	21	33.1	3.3	59	20	11	24	0	26			0.29	- 0.12	0.13	6		0.6	T										
LEWISTON	1413			51	36	43.2	3.4	62	2	27	11	0	5			1.81	0.58	0.90	14		0.3	T						1	7	22	8.4	
POCATELLO	4454	864.2	1019.2	49	27	37.7	2.7	60	20+	15	25	0	23	27	67	0.63	- 0.36	0.24	11	0	2.5	1	6.8	20	35	W	21	2	7	21	8.0	43
ILLINOIS																																
CAIRO U	314			59	42	50.6	2.7	74	8	25	3	0	4			2.14	- 1.73	0.95	6		T	T			32	NW	28	8	5	17	6.7	54
CHICAGO O HARE	658	993.2	1018.0	52	33	42.5	4.4	71	7	20	19	0	19	33	70	4.74	2.57	1.72	10	4	0.5	T	3.6	26	34	34	28	2	6	22	8.2	
CHICAGO MIDWAY	607	995.3		51	35	43.0	3.1	71	7	23	4+	0	17	33	70	5.05	2.85	2.93	9	2	1.5	1	5.0	25	36	NW	28	2	5	23	8.2	24
MOLINE	582	996.3	1018.4	50	33	41.7	2.5	74	7	18	3	0	20	32	71	1.12	- 0.83	0.47	7	5	T	T	3.9	25	35	NW	28	5	12	13	6.7	38
PEORIA	652	994.6	1018.9	52	33	42.6	2.9	74	7	19	3	0	19	32	67	2.42	0.28	1.29	8	5	T	T	3.3	24	33	NW	2	6	6	18	7.0	41
ROCKFORD	724	990.5	1018.0	48	30	39.0	1.9	70	7	16	19	0	21	31	75	3.53	1.16	1.30	8	6	T	T	3.2	27	30	34	28	6	8	16	7.0	
SPRINGFIELD	588	996.6	1019.1	53	35	44.1	2.3	73	7	20	3	0	19	35	75	3.08	0.72	1.63	9	4	0.3	T	4.2	22	34	NW	28	5	9	16	6.8	48

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
INDIANA	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
EVANSVILLE	381	1006.1	1020.5	56	36	46.4	1.6	73	8+	23	3	0	17	36	70	2.38	-0.78	1.00	9	1	2.8	2	3.2	22	29	W	27	5	7	18	7.0	44
FORT WAYNE	791	988.2	1018.6	48	33	40.3	1.4	64	9	17	4	0	16	33	78	4.85	2.30	1.39	16	2	12.0	7	4.7	24	41	N	2	4	3	23	8.0	36
INDIANAPOLIS	792	989.5	1019.2	53	35	43.8	2.9	72	9	18	4	0	15	34	71	4.72	1.63	1.65	9	1	8.3	8	3.2	24	33	NW	29	3	8	19	7.8	28
SOUTH BEND	773	989.2	1017.7	49	36	42.8	3.7	65	7	22	4	0	15	36	77	4.89	2.24	1.44	15	2	16.2	6	4.2	25	31	33	28	3	3	24	8.6	
IOWA																																
BURLINGTON	692			52	33	42.2	2.8	74	7	18	3+	0	17	33	71	0.87	-1.01		5	4	T		3.6	27	29	32	27	6	9	15	6.5	
DES MOINES	938	983.7	1019.4	49	28	38.4	1.3	74	7	11	12	0	19	30	74	0.70	-1.06	0.63	4	2	T	T	2.2	30	30	NW	27	8	9	13	6.2	46
DUBUQUE	1056	978.0		46	29	37.2	2.4	71	7	11	30	0	22			1.86	-0.73	1.45	7		T	T						6	5	19	7.4	
SIOUX CITY	1095	978.7	1019.6	47	24	35.5	-0.6	66	15	10	12	0	25	27	75	0.11	-1.05	0.04	4	0	0.2	T	2.3	33	37	NW	29	7	8	15	6.5	57
WATERLOO	868	986.1	1018.7	46	25	35.7	1.0	73	7	9	30	0	25	27	72	0.47	-1.36	0.37	3	0	T	T	2.3	31	32	34	27	5	11	14	6.6	
KANSAS																																
CONCORDIA	1470	965.1	1019.1	53	29	41.0	-0.5	72	6	11	2	0	19	29	67	0.05	-0.93	0.03	2	2	T	T	1.5	28	40	NW	26	10	8	12	5.8	60
DODGE CITY	2582	926.2	1018.6	56	30	43.1	0.3	75	6	15	2+	0	16	28	62	T	-0.64	T	0	1	T	0	2.7	27	33	N	26	7	8	15	6.2	60
GOODLAND	3650	889.6	1018.7	55	26	40.3	2.3	72	21+	14	9	0	25	26	66	0.04	-0.45	0.02	3	1	0.3	T	2.7	24	32	32	26	10	6	14	5.8	
TOPEKA	876	987.1	1019.4	57	31	44.1	1.5	76	22+	10	3	0	17	34	70	0.24	-1.26	0.16	3	2	T	T	1.8	27	38	NW	27	8	5	17	6.5	59
WICHITA	1321	970.5	1018.9	61	36	48.3	3.9	78	22+	14	2	0	14	33	60	0.09	-1.40	0.09	1	1	T	0	1.4	19	37	N	27	7	13	10	5.9	59
KENTUCKY																																
COVINGTON	869	987.8	1019.9	53	37	44.7	2.0	69	7	18	4	0	14	36	73	4.18	1.17	1.29	12	2	12.1	8	3.9	24	28	25	27+	5	5	20	7.5	
LEXINGTON	966	984.4	1020.6	54	38	45.7	1.0	70	7	21	4	0	11	36	72	4.01	0.72	1.32	11	1	8.4	5	4.6	20	25	27	10	5	5	20	7.3	
LOUISVILLE	477	1002.4	1020.2	55	39	47.2	2.5	72	8+	21	4	0	8	38	71	3.67	0.47	1.33	10	1	13.2	8	2.4	23	34	NW	10	5	7	18	7.3	42
LOUISIANA																																
ALEXANDRIA	92	1017.3	1021.5	72	46	58.7	2.1	81	18+	24	3	0	5	50	79	3.27	-1.51	1.95	5	1	0.0	0	0.3	28	26	32	2	12	8	10	5.1	
BATON ROUGE	64	1019.0	1021.6	74	50	62.0	3.1	84	11+	28	3	0	3	50	71	2.79	-1.30	1.79	7	1	0.0	0	1.3	9	25	34	1	9	12	9	5.1	
LAKE CHARLES	9	1020.7	1021.6	75	54	64.2	4.6	84	18	30	3	0	1	55	78	4.45	0.23	3.51	5	1	0.0	0	2.3	11	23	35	27	12	10	8	4.9	
NEW ORLEANS	3	1020.7	1021.5	73	50	61.6	1.6	83	10	28	3	0	2	54	80	0.72	-2.62	0.23	5	0	0.0	0	2.1	3	25	32	28+	13	8	9	4.6	
SHREVEPORT	254	1011.5	1021.0	72	49	60.4	4.7	81	8	24	3	0	3	48	70	0.97	-3.24	0.53	3	2	0.0	0	2.4	17	26	1	1	10	11	9	4.9	63
MAINE																																
CARIBOU	624	997.3		42	28	34.8	4.6	60	11+	5	22	0	17			3.60	0.56	1.59	15		7.1	6						0	8	22	8.5	
PORTLAND	47	1018.3	1020.5	49	33	41.1	3.0	64	11	15	21	0	15	35	79	5.01	0.84	2.95	16	0	0.0	0	1.0	22	33	SE	3	8	5	17	6.7	41
MARYLAND																																
BALTIMORE	148	1014.9	1020.7	58	35	46.4	0.9	72	9	23	21+	0	16	35	65	2.78	-0.35	1.42	9	0	T	T	3.0	25	30	S	28	8	10	12	5.5	56
MASSACHUSETTS																																
BLUE HILL OBS R	629			52	38	44.5	2.5	67	1	22	20	0	11			4.93	0.40	1.97	14		0.0	0			54	SSE	3					52
BOSTON	15	1019.6	1020.5	53	40	46.9	2.0	69	11	27	20	0	8	37	71	4.43	0.50	1.79	13	0	0.0	0	1.6	27	36	S	3	9	7	14	6.0	57
NANTUCKET	43	1020.0	1020.2	52	39	45.9	0.0	64	3	26	21	0	6	40	80	6.95	2.90	4.95	10	3	0.0	0	1.1	36	42	N	6	6	4	20	7.5	33
PITTSFIELD	1170			51	31	40.7	3.4	65	3+	14	21+	0	18			2.87	-1.04	1.00	17		4.3	2										
WORCESTER	986	982.7	1020.5	51	35	43.1	3.9	65	3	21	20	0	14	32	67	4.93	0.67	2.36	15	0	0.7	T	2.5	26	29	29	18	9	7	14	5.9	
MICHIGAN																																
ALPENA	689	990.5	1016.2	42	25	33.7	-0.9	55	10	7	5	0	24	27	76	7.45	5.08	1.93	18	2	30.5	17	1.7	26	37	E	27	2	4	24	8.7	20
DETROIT	623	993.9	1017.1	48	35	41.4	1.0	63	8	23	21	0	16	33	71					1			4.6	25	29	21	27					
DETROIT M WAYNE CO	633	992.6	1017.3	49	35	41.8	1.4	65	9	23	4	0	15	35	78	3.13	0.86	0.75	13	1	11.8	6	4.5	25	35	NW	29+	4	3	23	8.4	
DETROIT WILLOW RUN	711	988.8	1017.6	47	32	39.4	-0.6	63	9	20	4	0	17	31	72	3.09	0.84	0.87	12	1	15.1	6	5.7	25	40	35	2	3	2	25	8.6	
FLINT	770	988.5	1016.9	45	32	38.5	1.6	60	10+	19	20	0	16	32	77	2.81	0.63	0.92	15	2	13.5	9	4.7	24	31	22	27	0	4	26	9.1	
GRAND RAPIDS	784	987.5	1016.9	50	34	42.1	4.8	64	16+	22	4	0	16	35	77	7.81	5.32	2.66	17	6	16.6	8	3.0	25	39	NW	27	1	3	26	9.1	17
HOUGHTON LAKE	1149	973.6	1016.7	42	27	34.4		55	10	14	21+	0	21	30	83	4.81		1.81	14	2	15.1	8	2.5	26	29	36	29	1	3	26	9.0	
LANSING	841	984.4	1016.7	47	31	39.2	1.3	62	9	9	4	0	16	32	74	4.60	2.39	1.43	17	4	16.8	9	4.5	24	34	S	27	0	4	26	9.2	21
MARQUETTE J	677			38	28	32.9	-0.9	53	22	7	30	0	22			3.62	0.34	1.50	14		28.0	12			38	NW	28	0	4	26	9.2	22
MUSKEGON	627	993.6	1017.1	47	33	40.2	0.6	63	7	20	21	0	18	32	75	5.63	2.69	2.06	21	3	20.3	4	2.8	28	44	1	29	1	1	28	9.4	
SAULT STE MARIE	721	989.5	1016.7	36	25	30.5	-2.8	45	23	11	19	0	23	26	82	5.70	2.37	1.13	21	2	17.8	7	2.5	3	29	W	18+	1	0	29	9.6	8
MINNESOTA																																
DULUTH	1428	966.1	1013.7	33	18	25.2	-2.1	52	22	-6	30+	0	29	18	74	1.17	-0.61	0.36	11	0	7.6	3	2.0	31	40	E	17	5	7	18	7.5	31

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
MINNESOTA																																
INTERNATIONAL FALLS	1179	975.3	1020.5	28	11	19.1	- 4.7	42	22	-15	12	0	30	15	81	0.80	- 0.66	0.49	7	0	6.5	4	0.9	25	29	27	17	4	10	16	7.3	
MINNEAPOLIS	834	988.2	1019.7	38	22	30.1	- 1.1	57	22	- 4	12	0	27	23	76	0.39	- 1.01	0.15	6	0	3.4	2	2.5	34	31	N	26	7	4	19	7.0	39
ROCHESTER	1297	969.9	1019.0	40	24	31.8	0.3	58	16	1	12	0	24	25	77	0.40	- 1.17	0.12	7	0	2.5	2	2.2	29	29	35	27+	4	9	17	7.1	
ST CLOUD	1034	980.4	1019.5	35	18	26.6	- 2.9	52	6	- 7	12	0	28		73	0.49	- 0.84	0.19	8		5.3	4						7	5	18	6.9	
MISSISSIPPI																																
JACKSON	310	1009.8	1021.7	70	43	56.2	0.7	81	18+	17	3	0	4	47	76	3.66	- 0.24	1.22	7	1	T	0	1.1	17	31	NW	28	9	9	12	5.6	55
MERIDIAN	290	1010.8	1022.1	71	43	56.7	2.6	82	17+	18	3	0	6	44	70	2.67	- 0.43	1.43	7	1	T	0	0.8	28	23	32	28+	9	11	10	5.5	
VICKSBURG U	234			68	49	58.7	2.5	80	9	27	3	0	2			2.74	- 1.69	0.97	6		T	0			28	W	10	12	7	11	5.1	70
MISSOURI																																
COLUMBIA	778	990.2	1019.0	59	38	48.4	5.1	78	8+	19	3+	0	14	35	63	1.12	- 1.15	0.54	5	2	0.8	1	3.0	23	41	NW	27	7	8	15	6.4	57
KANSAS CITY	742	991.5	1019.0	60	38	49.1	4.5	78	21	22	3+	0	11	35	62	1.05	- 0.75	0.80	3	2	T	T	1.7	26	31	NW	27	7	10	13	6.1	59
SAINT JOSEPH	811			59	33	46.1	4.7	78	22	13	29	0	16	33	69	0.01	- 1.67	0.01	1	1	T	T	1.6	28	28	32	27	11	6	13	5.4	
ST LOUIS	535	999.3	1019.9	57	37	47.1	3.0	76	7	19	3	0	16	37	72	2.47	- 0.10	1.03	8	3	T	T	3.0	23	33	NW	27	6	9	15	6.8	56
SPRINGFIELD	1268	973.9	1020.0	60	37	48.7	3.7	79	8	16	3	0	12	37	70	2.82	0.06	1.79	8	1	T	0	3.2	19	33	NW	27	10	6	14	5.8	59
MONTANA																																
BILLINGS	3567	891.0	1017.6	45	24	34.5	- 0.6	63	20	2	8	0	22	21	63	1.07	0.44	0.57	6	0	12.0	8	4.6	25	46	NW	16	3	12	15	7.1	66
GLASGOW	2284	934.0		34	14	23.9	- 4.3	52	28	-10	30	0	29			0.34	- 0.13	0.16	7		4.6	2						4	10	16	7.2	
GREAT FALLS	3662	886.9	1018.1	40	18	29.0	- 5.3	63	20	-11	11	0	26	19	69	1.62	0.87	0.36	12	1	15.2	6	6.8	23	51	SW	25	6	5	19	7.2	47
HAVRE	2582	923.1	1018.6	33	12	22.3	- 7.2	52	5	-11	30	0	30	17	80	0.65	0.15	0.17	8		9.3	2	2.7	26	34	SW	25	4	12	14	7.0	48
HELENA	3828	880.5	1018.8	46	22	33.8	2.2	64	20+	- 1	11	0	26	21	63	1.04	0.47	0.36	8	0	9.5	5	4.7	26	34	W	26+	3	8	19	7.5	38
KALISPELL	2965	910.9	1017.9	38	23	30.7	- 0.3	53	2	0	10	0	28	26	84	2.52	1.09	0.56	17	0	11.9	6	0.4	8	29	2	6+	1	5	24	8.9	
MILES CITY	2629	923.1	1019.3	37	15	25.7	- 6.9	54	28	-10	11	0	30	18	74	0.80	0.37		6	0	7.9		1.2	33								
MISSOULA	3190	904.5	1018.8	41	27	34.0	3.5	60	2	15	11	0	27	27	80	0.59	- 0.31	0.11	12	1	3.4	2	0.7	29	26	W	21	0	3	27	9.0	30
NEBRASKA																																
GRAND ISLAND	1841	951.9	1019.6	51	25	38.1	0.9	72	15	9	2	0	24	28	70	0.09	- 0.67	0.09	2	0	0.2	T	2.5	30	35	34	29	6	6	18	6.8	
LINCOLN U	1150			50	31	40.5	- 0.3	70	15	16	10	0	17			0.24	- 1.02	0.15	3		0.2	T			31	NW	1	7	11	12	6.0	51
NORFOLK	1544			47	23	34.9	- 1.0	68	15	8	10	0	26			0.04	- 0.87	0.04	1		T	T						8	6	16	6.7	
NORTH PLATTE	2775	919.1	1019.3	52	20	36.0	0.5	73	6	6	2	0	29	23	67	0.04	- 0.46	0.04	2	0	0.5	T	2.1	35	30	NW	29	5	8	17	6.9	54
OMAHA	977	983.4	1019.4	52	28	40.1	1.2	71	15	14	10	0	22	28	67	0.22	- 1.04	0.18	2	0	0.1	T	2.1	34	42	NW	27	9	8	13	6.0	57
SCOTTSBLUFF	3957	880.1	1018.6	53	23	38.1	2.3	71	16	1	9	0	28	25	67	0.20	- 0.26	0.11	4	0	2.3	2	1.2	1	28	31	29	7	9	14	6.5	
VALENTINE	2587			48	20	33.9	0.3	75	21	1	9	0	29			0.11	- 0.38	0.11	1		3.5	3			33	S	14	5	10	15	6.8	62
NEVADA																																
ELKO	5050	845.6	1018.7	53	25	39.1	4.9	70	2	6	25	0	22	25	64	0.58	- 0.30	0.27	7	1	0.9	1	0.9	19	25	16	20	8	2	20	7.1	
ELY	6253	809.7	1018.6	52	24	38.1	4.4	70	2	5	25	0	24	20	55	0.30	- 0.29	0.19	4	1	1.0	1	6.4	20	29	S	20+	7	8	15	6.5	69
LAS VEGAS	2162	940.4	1017.3	67	43	55.4	2.9	81	1	32	27	0	1	29	40	0.33	0.02	0.33	2	0	0.0	0	3.4	22	31	NW	8	14	3	13	4.8	74
RENO	4404	866.2	1017.7	55	27	41.0	2.7	72	2+	14	25	0	23	29	68	1.07	0.50	0.33	5	0	T	0	2.4	21	40	SW	20	7	5	18	7.2	67
WINNEMUCCA	4299	868.6	1018.3	55	26	40.5	4.7	72	1	4	25	0	20	26	60	1.00	0.20	0.36	11	0	T	T	2.5	19	30	SW	20	4	6	20	7.6	27
NEW HAMPSHIRE																																
CONCORD	342	1007.8	1020.7	52	31	41.5	3.9	68	10+	10	21	0	14	33	73	3.01	- 0.71	1.52	17	0	T	0	0.6	21	26	NW	19+	9	6	15	6.3	43
MT WASHINGTON OBS	6262			33	21	27.0	6.7	48	3	- 2	15	0	25			5.79	- 0.82	2.64	20	0	18.3	10			98Y	SE	3	5	5	20	7.7	30
NEW JERSEY																																
ATLANTIC CITY	64	1018.6	1021.1	59	37	47.7	1.0	73	11	23	23	0	13	38	72	1.91	- 1.75	0.76	8	1	T	T	3.4	25	32	22	28	7	11	12	5.7	54
ATLANTIC CITY U	11			56	42	49.3	1.0	71	11	30	20	0	3			1.44	- 2.35	0.59	8			0			37	SSW	28					
NEWARK	7	1019.6	1020.7	57	40	48.9	3.0	73	10	28	23+	0	5	38	69	3.06	- 0.31	1.08	11	0	0.0	0	1.7	24	32	11	28	8	10	12	5.8	
TRENTON U	56			56	40	48.3	2.5	70	1	27	20	0	7			2.21	- 0.95	1.01	11		T	T			31	S	28	8	11	11	5.9	52
NEW MEXICO																																
ALBUQUERQUE	5311	840.5	1018.9	60	33	46.7	3.1	70	16	22	10	0	12	22	41	0.09	- 0.29	0.09	2	0	T	T	0.4	6	42	SE	1	10	10	10	5.0	78
CLAYTON	4969			62	30	46.2	4.5	77	15	17	2	0	16			T	- 0.33	T	0		0.0	1						13	4	13	5.5	
RATON '	6379			61	24	42.5	5.0	73	16	13	2	0	25			0.02	- 0.37	0.02	1		T	T						11	6	13	5.6	
ROSWELL	3617	894.0		70	32	50.6	4.7	85	17	18	28+	0	16	27	45	T	- 0.34	T	0	0	0.0	0	1.1	27				13	8	9	5.1	64
SILVER CITY	5373			64	37	50.5	3.0	75	16+	22	27	0	7			0.34	- 0.09	0.28	3		0.0	0						17	8	5	3.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

NOVEMBER 1966

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point		Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, Sleet		Resultant speed	Resultant direction	Fastest mile			Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
												Max. 90°F. or above	Min. 32°F. or below						.01 inch or more	With thunderstorms	Total	Maximum depth on ground			Speed	Direction	Date					
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1009.1	1020.1	52	33	42.3	3.2	70	2	13	22	0	14	34	74	1.79	-0.91	0.79	13	0	T	0	3.7	21	29	W	10	6	5	19	7.1	31
BINGHAMTON	1590	959.4	1019.1	48	34	41.1	3.1	63	10+	19	21	0	16	33	74	2.87	0.36	1.09	14	1	0.1	T	5.0	20	34	SW	10	5	3	22	7.9	25
BUFFALO	705	991.5	1017.8	49	34	41.5	2.4	67	10	18	20	0	16	34	77	4.50	0.90	1.18	18	4	10.0	6	6.7	22	43	SW	3	3	3	24	8.3	26
NEW YORK U	132	1016.6	1019.9	56	42	48.9	1.9	70	10	29	20	0	2	38	70	3.47	0.08	1.36	12	0	0.0	0	1.9	26	30	S	10	11	11	8	5.0	53
J.F. KENNEDY	13	1020.0	1020.6	55	40	47.7	1.5	67	2	28	23	0	5	39	73	2.29	-1.22	0.65	11	0	T	T	2.3	24	32	10	28	8	11	11	5.6	
NEW YORK LA GUARDIA	11	1018.6	1020.4	56	43	49.2	1.8	69	10	31	20	0	1	37	64	2.44	-1.15	0.87	13	0	0.0	0	1.6	26	35	SE	28	6	13	11	6.0	
ROCHESTER	547	998.3	1018.9	51	36	43.5	3.4	70	10	19	20	0	13	34	70	3.12	0.61	1.08	17	0	3.0	1	4.8	22	34	SW	18	4	3	23	8.2	27
SYRACUSE	410	1003.4	1018.7	52	34	42.9	2.7	68	10+	14	21	0	13	34	73	2.05	-0.85	0.57	16	2	T	T	2.8	20	34	SW	3	4	4	22	7.8	25
NORTH CAROLINA																																
ASHEVILLE	2140	943.8	1021.1	57	33	45.0	0.4	70	18	22	4	0	18	38	82	3.32	0.55	1.38	9	1	1.3	T	0.7	33	31	34	28	8	9	13	6.3	49
CAPE HATTERAS R	7	1020.7	1020.8	63	48	55.2	-1.0	75	11+	37	24	0	0	46	73	1.23	-2.86	0.72	4	2	0.0	0	4.9	35	42	SW	28	13	6	11	4.9	66
CHARLOTTE	736	993.2	1021.1	62	38	50.3	-0.1	74	18	22	4	0	9	39	70	1.19	-1.34	0.42	5	1	0.0	0	0.9	23	35	SW	2	10	8	12	5.5	68
GREENSBORO	897	989.2	1021.4	62	38	50.2	2.3	74	27+	26	4	0	13	40	72	1.55	-1.13	0.64	5	0	T	0	1.4	24	30	W	2	9	5	16	5.9	62
RALEIGH	434	1005.1	1021.2	63	38	50.8	0.8	79	10	25	4	0	12	39	68	2.06	-0.71	0.78	6	1	T	T	1.1	25	28	24	2	12	9	9	5.1	62
WILMINGTON	28	1020.0	1021.5	69	43	56.1	0.7	81	11+	33	30+	0	0	44	68	0.70	-2.39	0.47	4	1	0.0	0	1.5	35	30	W	28	11	13	6	4.2	71
NORTH DAKOTA																																
BISMARCK	1647	958.0	1020.4	33	9	21.3	-7.6	49	25	-13	11	0	30	15	74	0.29	-0.30	0.15	5	0	5.1	4	1.6	31	34	NW	29	5	8	17	7.1	34
FARGO	896	986.5	1020.7	33	13	23.1	-5.0	47	22	-4	30	0	29	16	75	0.18	-0.66	0.07	4	0	1.3	1	1.3	32	36	N	29	1	10	19	7.8	55
WILLISTON	1899			33	10	21.6	-6.0	52	25	-6	11	0	30			0.30	-0.28	0.24	5		3.4	2			35	N	29	8	5	17	6.7	36
OHIO																																
AKRON	1208	973.6	1018.8	50	34	41.7	0.9	68	9	22	20	0	17	34	77	5.05	2.80	1.74	16	1	9.7	6	5.4	22	26	21	27	4	6	20	7.8	
CINCINNATI OBS	761			53	37	44.7	0.1	70	7	22	4	0	12			4.27	1.32	1.27	12		10.2	8			28	NW	2					41
CLEVELAND	777	988.5	1018.3	51	35	42.8	2.4	67	9	23	20+	0	15	36	78	5.16	2.55	1.55	13	3	8.8	7	6.4	21	33	SW	27	4	3	23	8.2	26
COLUMBUS	812	989.2	1019.7	51	34	42.4	1.2	68	9	21	4	0	15	36	79	4.05	1.55	1.19	13	2	10.4	3	3.8	21	34	SW	27	4	4	22	8.0	31
DAYTON	1002	982.4	1019.3	51	34	42.2	0.4	68	9	19	4	0	17	35	74	3.44	0.77	1.12	12	1	9.8	6	4.7	22	31	SW	27	3	4	23	8.1	39
MANSFIELD	1295			48	34	40.8	1.4	65	9	21	20+	0	15	32	73	4.33	1.64	1.53	13	2	6.2	3	7.2	23				4	4	22	8.1	
TOLEDO	676	992.6	1018.4	48	33	40.4	1.8	66	9	20	4	0	17	34	77	4.63	2.59	1.15	12	2	17.9	9	5.1	24	30	SW	3+	3	4	23	8.3	22
YOUNGSTOWN	1178	975.3	1018.8	48	33	40.5	1.2	66	9	16	20	0	16	32	74	5.52	2.71	1.54	13	2	7.4	4	5.4	22	29	27	10	4	5	21	8.0	
OKLAHOMA																																
OKLAHOMA CITY	1280	972.2	1019.0	66	43	54.3	5.9	82	8+	22	2	0	8	40	61	0.84	-0.72	0.73	3	1	T	0	3.6	18	34	SW	6	13	4	13	5.5	77
TULSA	650	994.9	1019.6	66	41	53.4	5.8	83	8	20	2	0	10	39	64	0.51	-1.77	0.34	4	0	T	0	4.4	20	34	SW	23+	10	9	11	5.4	67
OREGON																																
ASTORIA	8	1013.9	1014.5	54	41	47.8	1.5	64	1	30	8	0	2	44	86	10.00	-1.20	1.99	24	1	0.0	0	3.3	15	29	20	11	2	3	25	8.7	
BURNS U	4151	873.0	1017.7	48	30	38.7	2.6	65	3+	13	23	0	20	31	77	2.03	0.87	0.55	13		2.4	2	1.6	25				2	6	22	8.1	
EUGENE	359	1002.0	1015.7	54	41	47.5	2.0	63	1	31	8	0	3	44	89	9.10	3.48	2.56	19	0	0.0	0	3.0	18	29	19	20	1	6	23	8.7	
MEACHAM	4050	875.4	1017.3	41	30	35.5	1.1	57	1	19	8	0	22	29	81	5.16	1.01	1.06	16		6.2	2	1.9	15				1	6	23	8.9	
MEDFORD	1298	968.8	1016.9	54	38	45.7	3.3	74	1	27	24+	0	8	40	84	5.89	3.29	1.79	16	0	T	T	0.4	19	23	14	18	1	5	24	8.8	
PENDLETON	1482	962.4	1016.5	53	37	45.1	3.8	64	19	29	11	0	4	37	78	2.09	0.69	0.66	13	0	0.4	T	1.9	21	25	27	16	2	9	19	8.0	
PORTLAND	21	1014.6	1015.8	54	41	47.1	2.0	66	1	33	26+	0	0	43	86	5.50	0.17	1.37	16	0	0.0	0	3.6	14	30	SW	25+	1	4	25	9.0	19
SALEM	196	1008.1	1015.4	55	39	47.1	1.9	65	4	27	22	0	3	44	88	5.88	0.17	1.20	20	0	0.0	0	3.5	17	32	18	20	2	4	24	8.6	
SEXTON SUMMIT R	3836	881.8	1015.0	47	37	41.8	-1.0	77	1	25	23	0	11			9.78	5.40	2.80	18		10.0	9						4	4	22	8.0	
PACIFIC AREA																																
CANTON ISLAND	8			88	78	83.2	-0.4	90	14+	76	26+	4	0			0.21	-1.40	0.16	2	0	0.0	0						7	16	7	5.4	
ENIWETOK	13	1008.1	1008.8	88	78	83.3	0.7	90	14+	75	28+	7	0	75	76	3.85	-2.45	0.78	15		0.0	0	12.1	6								
TAGUAC GUAM R	361			85	73	79.1	-0.2	87	15+	68	30+	0	0			7.26	-3.03	1.76	23		0.0	0			25	E	17					53
JOHNSTON	7	1010.2	1010.7	83	76	79.5	-0.1	85	19+	69	22	0	0	72	77	4.31	2.25	1.37	13	2	0.0	0	9.9	11	35	SE	24	5	10	15	7.1	34
KOROR R	94	1005.1	1008.6	89	76	82.1	0.9	91	20+	72	22	14	0	76	86	11.76	-1.17	2.24	23	5	0.0	0	1.6	8	22	NE	16	0	0	30	10.0	55
KWAJALEIN	8	1007.8	1008.4	87	77	82.0	0.7	90	11	73	27+	1	0	75	79	9.19	-2.94	3.31	20	1	0.0	0	9.7	7	37	5	22	0	6	24	8.9	
MAJURO	10	1008.1	1008.5	86	76	81.2	0.7	89	9	74	27+	0	0	75	80	12.24	-3.68	2.65	26	4	0.0	0	4.5	8	26	E	21+	0	7	23	8.6	43
MARCUS ISLAND	20	1013.2	1014.9	82	73	77.7	-1.7	85	21+	69	29+	0	0	67	72	1.65	-1.60	0.84	6	0	0.0	0	10.3	9	66	SW	3	14	10	6	4.6	66
PAGO PAGO	12	1009.5	1009.8	87	75	81.2		92	19	70	18	1	0	74	82	5.76		1.06	20	2	0.0	0	7.0	12	26	E	24	0	14	16	7.6	42
PONAPE R	123	1002.7	1008.2	88	73	80.3	0.4	90	19+	69	30	3	0	74	86	18.74	1.89	3.67	25	3	0.0	0	3.3	11	22	SW	1	1	4	25	9.0	49
TRUK MOEN ISLAND	5	1008.1	1008.4	87	76	81.5	0.7	90	20	74	26+	1	0	75	82	8.44	-3.92	1.42	24	3	0.0	0	5.2	9	39	SW	2	0	2	28	9.2	77
WAKE	11	1012.2	1012.5	83	75	78.9	-1.5	86	3	68	25	0	0	67	68	0.32	-2.76	0.14	10	0	0.0	0	13.4	3	29	35	29+	10	14	6	5.0	

See footnotes at end of table

CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
PACIFIC AREA																																
YAP R	62	1006.4	1008.2	88	75	81.6	0.1	91	3	71	17	6	0	76	85	8.84	-2.31	2.30	25	2	0.0	0	4.1	6	25	NE	15	0	1	29	9.8	53
PENNSYLVANIA																																
ALLENTOWN	387	1006.4	1020.6	54	33	43.5	1.6	67	3+	19	21+	0	16	33	68	3.05	-0.28	1.24	11	2	T	T	2.3	25	28	16	28+	7	10	13	6.2	
ERIE	731	990.9	1018.1	50	36	43.3	2.1	66	9	19	20	0	12	33	68	5.34	1.98	1.18	17	3	7.2	5	7.7	20	30	23	3	2	4	24	8.4	
HARRISBURG	338	1007.5	1020.5	55	35	45.1	1.7	72	10	20	21	0	16	37	75	3.56	0.61	1.47	13	0	0.2	T	1.7	25	29	W	10+	7	7	16	6.7	65
PHILADELPHIA	5	1019.6	1020.7	56	38	46.8	2.5	70	1	24	23	0	10	36	67	2.36	-1.04	1.07	11	0	T	0	2.2	25	28	SW	28	8	10	12	5.7	53
PITTSBURGH	1137	974.6	1019.4	52	33	42.8	2.0	71	9	21	20	0	17	32	69	3.39	1.15	0.87	14	0	5.1	4	4.6	23	35	23	2	3	7	20	8.0	29
READING U	266			56	38	47.0	1.9	70	1	24	21	0	10			2.82	-0.58	1.84	12		T	T			44	E	28	7	11	12	6.2	48
SCRANTON	930	985.4	1020.4	52	35	43.4	3.8	66	10+	21	21+	0	16	34	71	2.97	0.03	1.38	14	2	T	T	2.2	20	34	S	10	6	6	18	6.9	42
WILLIAMSPORT	524	1000.7	1020.3	51	32	41.3	0.2	67	10+	16	21	0	18	36	84	5.77	2.32	3.41	15	2	0.3	T	0.8	24	39	28	10	7	3	20	7.0	
RHODE ISLAND																																
BLOCK ISLAND	110			52	42	47.3	2.1	65	11	29	20	0	4			2.89	-0.82	1.55	7		0.0	0						8	9	13	6.1	
PROVIDENCE	51	1018.3	1020.5	54	37	45.5	2.5	68	11	20	21	0	11	36	73	3.93	-0.18	2.05	11	2	T	0	1.2	26	33	14	3	11	4	15	5.9	55
SOUTH CAROLINA																																
CHARLESTON	40	1019.6	1021.2	70	43	56.3	0.4	83	11+	27	4	0	7	41	63	0.48	-1.61	0.32	2	1	0.0	0	2.1	34	46Y	W	28	16	9	5	4.0	72
CHARLESTON U	9			67	50	58.5	-0.1	79	10	36	29+	0	0			0.37	-1.55	0.26	2		0.0	0			34	SW	2					
COLUMBIA	217	1013.2	1021.3	67	39	53.4	-0.3	81	10	28	24+	0	11	41	69	1.05	-1.31	0.44	6	0	0.0	0	1.6	29	31	27	2	12	12	6	4.5	72
GNVLE-SPARTANBURG	957	986.8	1021.7	63	40	51.6	0.3	75	26+	24	4	0	5	40	69	1.93	-0.91	0.89	6	1	0.0	0	1.3	27	26	SW	2	11	4	15	5.7	59
SOUTH DAKOTA																																
ABERDEEN	1296	971.6	1020.3	36	15	25.5	-4.8	57	21	-9	12	0	29	18	73	0.59	-0.15	0.35	8	0	4.5	3	2.4	36	31	35	29	5	5	20	7.3	
HURON	1282	971.6	1019.9	40	18	28.6	-2.6	58	21	1	10	0	28	21	74	0.40	-0.28	0.19	7	0	4.3	3	2.2	32	34	N	29	5	6	19	7.4	59
RAPID CITY	3162	904.8	1018.5	46	23	34.6	-0.5	68	21	2	9	0	25	23	68	0.95	0.54	0.61	7	0	6.4	4	4.0	34	59	NW	29	5	7	18	7.1	52
SIOUX FALLS	1418	966.5	1019.7	43	19	31.0	-1.6	61	22	-3	12	0	28	22	72	0.20	-0.80	0.14	2	0	2.3	2	2.4	35	31	35	29	6	8	16	6.7	
TENNESSEE																																
BRISTOL	1507	966.1	1021.2	58	36	47.0	1.1	69	7+	21	4	0	16	38	75	3.71	1.20	0.84	12	0	1.9	1	1.6	26	26	24	2	6	9	15	6.8	
CHATTANOOGA	665	996.3	1021.4	60	39	49.5	0.1	73	18	22	4	0	8	42	80	2.65	-1.00	0.83	7	1	T	T	1.5	25	28	NW	27	4	11	15	6.8	42
KNOXVILLE	980	985.1	1020.9	58	40	49.1	0.4	71	18	25	4	0	6	43	83	5.12	1.88	1.78	12	1	T	T	2.2	28	28	W	10	3	8	19	7.7	30
MEMPHIS	258	1011.2	1021.6	63	44	53.7	3.6	76	9	22	3	0	3	40	64	1.57	-2.81	0.79	5	2	T	T	2.0	23	38	S	10	6	8	16	6.6	59
NASHVILLE	590	998.6	1020.8	61	41	50.7	2.2	75	18	22	4	0	6	40	68	2.76	-0.52	1.04	8	1	7.2	5	1.6	9	29	SW	10	7	6	17	6.9	42
OAK RIDGE	905			57	38	47.8	0.5	69	18+	21	4	0	9			4.74	0.97	1.32	13		1.0	1			21		27	5	5	20	7.4	
TEXAS																																
ABILENE	1762	957.0	1018.7	71	48	59.5	6.5	81	22	27	2	0	3	42	57	0.28	-0.83	0.25	2	0	0.0	0	6.2	19	29	N	27	16	5	9	4.4	74
AMARILLO	3604	892.7	1016.5	67	37	51.6	5.6	82	16	20	2	0	12	32	55	0.08	-0.58	0.08	1	0	T	T	5.8	24	36	NE	26	13	6	11	5.1	66
AUSTIN	597	998.0	1020.1	76	52	64.2	5.4	84	11+	31	2	0	1	48	60	0.11	-2.01	0.05	3	0	0.0	0	2.1	19	34	N	1	10	12	8	4.8	66
BROWNSVILLE	16	1018.6	1019.2	80	58	68.9	1.3	86	12+	37	29	0	0	58	73	0.02	-1.30	0.02	1	0	0.0	0	4.6	13	38	N	1	19	9	2	3.7	71
CORPUS CHRISTI	41	1018.3	1019.7	79	55	67.0	2.9	88	11	36	29	0	0	56	72	0.07	-1.65	0.07	1	0	0.0	0	5.2	12	41	N	1	12	13	5	4.5	62
DALLAS	481	1002.4	1019.9	72	50	60.6	5.7	83	20+	29	2	0	1	46	63	1.04	-1.66	0.48	4	0	0.0	0	4.8	18	34	W	26	11	9	10	5.0	63
DEL RIO	1026	982.7	1018.9	76	51	63.7	4.9	83	11	33	28	0	0	43	52	T	-0.62	T	0	0	0.0	0	5.8	12	21	32	30+	13	9	8	4.3	
EL PASO	3918	884.5	1017.3	70	39	54.5	3.3	81	17	27	27	0	7	30	43	0.01	-0.32	0.01	1	0	0.0	0	0.7	28	35	W	9	17	6	7	3.8	85
FORT WORTH	537	999.3	1019.9	73	49	60.7	5.9	83	8+	30	2	0	2	45	60	0.53	-1.93	0.36	2	0	0.0	0	3.9	17	30	35	27	12	7	11	5.0	
GALVESTON U	7			71	62	66.3	3.3	77	11	41	2	0	0			0.93	-2.63	0.64	2		0.0	0			34	N	1					68
HOUSTON U	41			74	57	65.4	3.8	81	7	36	2	0	0			0.50	-3.54	0.22	6		0.0	0										
HOUSTON	50	1018.6	1020.8	75	54	64.7	3.9	84	7	33	3	0	0	54	75	1.56	-2.30	1.38	4	1	0.0	0	2.9	11	29	34	27+	8	11	11	5.6	63
LUBBOCK	3254	905.5	1017.3	71	40	55.6	7.7	85	17	22	2	0	10	34	49	0.11	-0.43	0.06	2	0	T	0	3.9	22	29	24	8+	11	9	10	4.9	
MIDLAND	2851	918.7	1017.3	72	42	56.8	4.3	81	22+	27	2	0	4	39	58	0.04	-0.43	0.04	1	0	0.0	0	3.9	19	32	2	1	12	8	10	4.7	
PORT ARTHUR	16	1020.7	1021.2	74	54	64.2	4.5	82	18+	30	3	0	1	55	78	4.85	1.39	4.46	5	1	0.0	0	3.2	11	38	SW	11+	7	12	11	5.4	61
SAN ANGELO	1903	951.6	1018.4	73	45	59.3	4.5	82	8	22	2	0	4	42	57	T	-0.78	T	0	0	0.0	0	5.4	20	31	4	1	13	8	9	4.6	
SAN ANTONIO	788	991.9	1020.1	76	50	63.0	3.5	83	11	26	3	0	4	48	64	T	-1.37	T	0	0	0.0	0	2.4	15	34	NE	1	12	12	6	4.4	68
VICTORIA	104	1016.3	1020.3	78	55	66.1	3.7	84	11	32	2	0	1	54	71	0.87	-1.49	0.78	4	0	0.0	0	2.9	11	48Y	N	1	11	10	9	5.0	
WACO	501	1002.0	1020.3	75	51	63.4	6.6	86	11	33	29+	0	0	48	62	0.13	-2.06	0.13	1	0	0.0	0	4.8	17	32	33	27	13	10	7	4.4	
WICHITA FALLS	994	982.4	1019.1	71	45	58.0	5.5	87	7	23	2	0	5	42	60	0.60	-0.82	0.48	2	1	0.0	0	4.9	18	31	20	6+	10	10	10	5.1	
UTAH																																
MILFORD	5028	848.0		57	26	41.5	5.4	71	2	9	27	0	23			0.34	-0.18	0.34	1		4.1	3						9	9	12	5.7	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	873.4	1019.1	54	32	43.1	6.4	67	15	16	25	0	15	30	66	0.75	- 0.55	0.51	6	1	3.2	2	3.7	15	39	S	6	7	4	19	7.0	52
WENDOVER	4237			50	32	40.9	3.3	62	20	16	25	0	14			0.22	- 0.07	0.17	5		T	T										
VERMONT																																
BURLINGTON	332	1006.4	1019.2	49	32	40.6	5.3	68	3	13	21	0	12	34	77	1.41	- 1.21	0.57	15	0	2.4	2	4.3	19	35	SW	10	5	4	21	7.7	33
VIRGINIA																																
LYNCHBURG	916	986.5		59	37	48.2	1.2	73	18	23	4	0	13	36	66	2.65	0.07	1.27	6	1	T	0	2.6	25	31	SW	2	10	7	13	5.7	57
NORFOLK	22	1020.0	1021.1	60	41	50.5	- 0.9	78	10	28	24	0	6	41	72	1.05	- 2.00	0.94	4	0	T	0	0.6	29	35	SW	28	12	9	9	5.2	61
RICHMOND	162	1015.2	1021.3	62	37	49.5	1.0	79	10	26	4	0	12	38	71	1.31	- 1.73	0.44	6	0	0.2	T	1.5	25	26	SW	28	12	9	9	4.9	58
ROANOKE	1149	978.0	1020.6	59	35	47.2	0.5	73	9	23	23	0	12	33	61	1.73	- 0.97	0.76	6	1	T	0	2.5	27	29	30	28	6	13	11	6.0	
WASHINGTON																																
OLYMPIA	195	1007.8	1015.2	51	37	44.0	0.2	63	1	26	10	0	9	41	90	8.16	0.49	2.14	21	0	0.0	0	3.7	20	32	24	11	3	2	25	8.7	
QUILLAYUTE	179	1005.8	1013.4	52	39	45.2	0.6	60	3+	29	11+	0	4	43	93	16.07	2.75	3.80	24	2	0.0	0	3.3	14	27	S	19	3	3	24	8.6	13
SEATTLE TACOMA	400	998.3	1014.9	51	40	45.4	1.5	58	19+	31	8	0	1	40	83	6.85	1.50	1.92	20	0	0.0	0	2.5	15	29	17	25+	1	3	26	9.1	19
SPOKANE	2356	930.6	1015.9	44	30	36.9	1.2	57	2	16	11	0	20	31	82	3.01	0.77	0.76	14	0	0.9	1	2.9	18	34	S	25	2	5	23	8.6	24
STAMPEDE PASS R	3958	876.7		37	30	33.3	1.9	52	3+	21	11	0	21			10.03	- 2.55	1.81	25		50.3	22						2	0	28	9.3	
WALLA WALLA U	949			53	39	45.8	3.5	63	19	28	11	0	3			2.72	1.00	0.77	13		T	T			23	W	16	1	10	19	8.2	29
YAKIMA	1052	977.3	1016.2	54	34	43.8	6.4	66	2	24	11	0	11	33	70	2.14	1.18	0.73	10	0	T	T	2.7	26	25	20	25+	2	7	21	7.8	
WEST INDIES																																
SAN JUAN P.R.	13	1009.5	1012.0	83	73	77.5	- 0.7	87	2+	69	27	0	0	71	80	7.99	1.50	2.82	15	4	0.0	0	1.4	4	25	N	25	7	15	8	5.4	61
SWAN ISLAND	28			83	74	78.5	- 1.6	85	12+	69	29	0	0			6.64	- 0.75	1.34	19		0.0	0						5	15	10	5.9	
WEST VIRGINIA																																
BECKLEY	2504	930.6	1020.6	54	34	44.0		69	9	18	4	0	16	33	69	3.39		1.15	11	2	4.0	4	5.2	22	37	23	2	5	8	17	7.1	
CHARLESTON	939	985.4	1020.0	59	37	48.2	2.9	79	9	20	20	0	15	37	70	3.05	0.26	1.20	12	1	3.8	4	3.3	23	28	24	10	4	9	17	7.2	
ELKINS	1970	948.2	1020.7	56	28	42.1	1.4	72	10	14	22+	0	20	33	77	2.63	- 0.12	1.15	13	0	7.8	7	3.2	25	29	31	10	7	5	18	7.0	
HUNTINGTON	827	989.5	1020.2	56	38	47.0	1.5	72	9	28	14+	0	14	38	75	3.06	0.60	1.45	12	1	4.1	3	3.2	21	35	23	10	5	7	18	7.2	
PARKERSBURG U	615			55	36	45.3	0.5	72	9	25	20	0	14			3.90	1.54	1.16	13		0.5	1			32	W	10					40
WISCONSIN																																
GREEN BAY	682	991.5	1017.9	41	27	34.2	0.0	55	7	10	30	0	20	26	73	1.58	- 0.33	0.46	13	1	2.9	1	3.6	32	39	NW	27	2	4	24	8.3	25
LA CROSSE	651	993.6	1018.8	44	28	35.6	1.4	60	16	12	30	0	21	27	74	0.30	- 1.64	0.18	6	0	0.2	T	2.1	31	26	33	30	5	6	19	7.2	
MADISON	858	986.1	1018.1	45	27	36.0	2.0	62	7	12	30+	0	22	28	75	1.28	- 0.86	0.62	10	2	0.1	T	3.1	29	35	NW	27	5	9	16	7.3	38
MILWAUKEE	672	991.9	1017.6	46	30	38.0	2.2	66	7	15	30	0	21	30	72	2.70	0.52	1.12	10	3	2.0	1	3.9	29	36	NW	28	1	5	24	8.6	23
WYOMING																																
CASPER	5338	836.8	1017.4	49	23	36.1	2.5	62	16+	- 8	8	0	23	21	59	0.43	- 0.28	0.20	7	0	8.0	4	10.4	25	35	24	21	6	8	16	6.6	
CHEYENNE	6126	811.7	1017.5	52	26	38.8	4.6	66	15	5	9	0	21	21	53	0.29	- 0.33	0.15	5	0	2.3	1	6.5	27	38	NW	26	10	4	16	6.3	52
LANDER	5563	828.3	1017.7	46	22	34.2	3.2	62	2	- 7	9	0	30	21	61	0.51	- 0.41	0.50	2	0	6.6	6	1.8	24	48	SW	16	4	12	14	6.7	72
SHERIDAN	3964	878.4	1019.1	45	16	30.6	- 2.8	62	16	- 9	9+	0	30	16	60	0.62	- 0.18	0.25	5	0	11.1	5	3.0	31	33	NW	26	4	11	15	6.8	52

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or with a measurable amount the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70°F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

V Sun below horizon November 19 - 30, inclusive.
X Sun below horizon November 24 - 30, inclusive.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C.	C	C.	C		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm	M.p.s.		M.p.s.							%
ALABAMA																																
BIRMINGHAM	189	999.3	1021.9	18.9	5.6	12.3	0.4	25.0	26+	-3.9	4+	0	5	6.1	69	58	-32	33	9	1	T	T	0.6	24	14.3	W	10	11	4	15	5.8	64
HUNTSVILLE	183	998.3	1021.5	17.8	5.0	11.3	0.9	23.9	18+	-5.0	4	0	5	5.6	69	44	-49	13	9	1	102	102	0.4	21	11.2	27	27	9	5	16	6.2	
MOBILE	64	1013.9	1021.7	22.2	10.0	15.9	1.0	27.2	11+	-3.3	3	0	2	9.4	70	34	-51	20	8	2	T	0	0.5	7	13.0	34	28	15	4	11	4.7	
MONTGOMERY	59	1014.6	1022.0	20.0	7.8	13.7	1.3	25.6	19+	-2.8	4+	0	4	7.2	72	118	41	77	7	2	T	0	0.1	29	11.2	S	10	14	5	11	4.9	61
ALASKA																																
ANCHORAGE PRK STRIP	26			-3.3	-10.6	-7.1	-1.6	3.9	2	-20.0	14	0	29			21	-5	6	12		269	203										
ANCHORAGE	35	1008.8	1013.7	-4.4	-11.7	-8.1		3.9	1	-21.7	14	0	30	-10.6	83	28		9	14	0	343	254	0.8	3	10.7	18	2	5	10	15	6.9	48
ANNETTE	34	1006.8	1010.8	6.1	1.1	3.7	-1.0	11.1	4	-2.8	29+	0	12	0.0	77	157	-215	29	18	0	221	25	1.1	6	13.0	16	1	6	5	19	7.4	
BARROW	7	1016.3	1017.1	-11.1	-17.2	-14.2	3.9	-2.2	29	-26.1	27	0	30	-16.1	84	13	7	5	7	0	163	229	2.5	12	24.1	26	17	V2	V4	V12		
BARTER ISLAND	12	1016.3	1018.3	-10.0	-17.2	-13.7	4.0	1.7	29	-26.1	14+	0	30	-18.9	65	21	11	6	12	0	333	279	1.6	12	30.0	25	30	X5	X2	X16		
BETHEL	38	1011.2	1017.0	-3.3	-8.9	-6.2	2.1	2.8	10+	-20.0	15	0	30	-7.8	87	39	12	15	14	0	335	178	0.7	19	14.8	19	16	6	4	20	7.4	
COLD BAY	29	1014.9	1018.9	2.8	-2.2	0.2	-1.2	8.9	5	-7.8	28	0	22	-2.2	84	71	-25	13	18	0	152	178	2.4	27	22.8	32	26	2	7	21	8.2	
FAIRBANKS	133	1000.7	1018.8	-12.8	-22.2	-17.4	-1.8	0.0	1	-36.7	28+	0	30	-20.0	78	52	37	12	14	0	930	813	0.4	34	9.4	26	19+	5	7	18	7.3	
JUNEAU	4	1012.2	1013.0	0.0	-7.8	-3.8	-5.1	9.4	1	-20.6	21	0	27	-6.1	84	112	-42	28	12	0	508	254	2.5	9	15.6	11	24+	10	3	17	6.4	47
KING SALMON	13	1013.9	1016.0	-2.8	-10.0	-6.4	-0.8	4.4	5	-21.1	28	0	29	-7.8	89	55	18	12	15	0	206	102	0.3	36	16.5	16	5	6	4	20	7.4	
KOTZEBUE	3	1013.9	1014.6	-6.7	-13.9	-10.3	3.4	2.2	7	-24.4	27+	0	30	-12.8	80	16	7	3	18	0	391	356	4.9	12	23.2	11	5	4	2	24	8.3	
MC GRATH	106	1005.1	1018.4	-8.9	-17.2	-12.9	1.9	1.1	22+	-35.0	27	0	30	-15.6	76	7	-21	4	8	0	498	330	0.5	15	13.4	22	18	6	2	22	7.9	
NOME	4	1012.9	1013.7	-3.3	-12.8	-8.3	0.3	1.7	16+	-28.3	27+	0	30	-8.9	86	27	-2	10	14	0	272	279	1.6	11	18.3	11	5	5	5	20	7.5	14
ST. PAUL ISLAND	7	1015.6	1016.5	3.3	0.0	1.6	1.1	6.1	16+	-7.2	27	0	15	-1.1	81	87	24	32	20	0	102	102	2.6	22	23.2	17	4	3	4	23	8.3	
SHEMYA	37	1008.5	1012.3	5.6	0.0	3.0	0.9	8.3	5	-3.3	5	0	12	0.5	82	137	68	30	23	0	28	T	4.9	20	23.7	15	28+	1	6	23	8.6	
YAKUTAT	9	1008.8	1009.8	1.1	-9.4	-4.3	-5.3	8.9	30	-21.1	19+	0	29	-6.7	83	227	-181	74	15	0	732	305	1.7	10	14.8	12	3	7	4	19	7.0	
ARIZONA																																
FLAGSTAFF	2131	788.7	1019.5	12.8	-4.4	4.2	1.9	20.6	2	-12.8	9	0	27	-4.4	61	59	34	50	4	1	287	152	1.2	20	10.3	22	8	16	9	5	3.9	
PHOENIX	340	976.6	1015.8	24.4	7.2	15.8	1.3	32.2	1	-0.6	27	1	2	4.4	53	10	-3	10	2	0	0	0	0.8	12	17.9Y	WSW	8	19	8	3	3.1	83
TUCSON	788	927.5	1015.6	24.4	8.3	16.2	1.7	28.9	20+	0.0	27	0	1	1.1	42	2	-14	2	1	0	0	0	1.8	15	14.8	SE	2	17	5	8	3.8	83
WINSLOW	1492	853.7	1020.0	17.2	-1.1	7.9	2.8	22.8	20	-8.3	27	0	21	-2.8	57	19	10	19	2	0	122	51	1.3	18	10.7	21	22	17	7	6	3.5	
YUMA	59	1008.5	1015.9	25.6	10.0	17.8	1.3	34.4	1	2.8	26	1	0	1.7	38	T	-3	T	0	0	0	0	1.3	36	11.2	S	7	22	3	5	2.5	88
ARKANSAS																																
FORT SMITH	136	1003.4	1020.3	19.4	5.6	12.4	2.4	26.7	8	-9.4	3	0	6	4.4	65	69	-11	34	5	2	0	0	0.1	29	13.0	NW	27	9	5	16	6.0	57
LITTLE ROCK	78	1011.5	1021.4	18.9	6.7	12.7	2.9	25.0	9+	-6.1	3	0	3	5.6	67	78	-26	49	5	2	T	T	0.6	22	14.3	NW	27	8	7	15	6.4	61
TEXARKANA	113	1007.8	1021.1	21.1	8.9	15.1	3.1	26.7	6	-5.0	3	0	2	7.8	67	58	-52	45	4	2	0	0	1.4	19				10	11	9	5.3	
CALIFORNIA																																
BAKERSFIELD	151	1000.3	1018.1	19.4	8.9	14.3	1.0	32.2	1	3.9	27+	1	0	6.7	66	22	10	18	6	1	0	0	0.6	2	11.6	4	19	7	9	14	6.3	
BISHOP	1252	875.0		17.8	-1.7	8.1	0.4	27.8	1	-6.7	26	0	22			7	-7	4	3		0	0						10	10	10	5.3	
BLUE CANYON	1609			10.6	3.3	6.8	-0.8	24.4	1	-5.0	23+	0	8			403	231	76	12		716	356			16.5	17	16	7	0	23	7.5	
EUREKA U	13			15.0	7.8	11.4	0.8	21.1	18+	1.1	23	0	0			250	133	67	17		0	0			13.4	SE	18+	4	5	21	7.8	42
FRESNO	100	1006.1	1017.9	20.0	7.8	13.8	1.7	31.1	1	0.6	25	0	0	8.3	75	40	16	12	8	0	0	0	0.5	14	8.9	E	28+	11	7	12	5.3	67
LONG BEACH	10	1016.6	1018.0	21.7	11.1	16.4	0.2	38.3	1	5.0	26	2	0	10.0	73	45	19	40	4	0	0	0	0.5	28	8.0	10	7	9	7	14	5.9	
LOS ANGELES	30	1013.9	1017.5	21.1	12.8	16.9	0.8	38.3	1	7.2	26	2	0	10.6	72	68	41	62	3	0	0	0	0.8	27	9.8Y	W	22+	10	8	12	5.7	
LOS ANGELES U	82			22.2	12.8	17.6	0.5	37.8	1	7.8	26	2	0			103	76	98	2		0	0			7.6	E	7	11	10	9	4.9	50
MT SHASTA R	1080			9.4	1.1	5.2	-0.2	23.3	2+	-7.2	25	0	11			288	187	84	16		170	51										
OAKLAND	2	1017.3	1017.5	16.7	10.6	13.4	0.8	24.4	1	3.3	25	0	0	8.9	76	98	54	26	9	0	0	0	1.2	19	11.6	15	28+	6	5	19	6.9	
RED BLUFF	104	1004.1	1016.8	18.3	8.9	13.7	1.2	32.8	1	1.7	25	1	0	5.6	63	188	130	68	12	0	0	0	1.0	16	19.7	SE	20	6	3	21	7.6	43
SACRAMENTO	5	1016.6	1017.3	17.8	7.8	12.6	1.0	28.9	2	0.6	25+	0	0	7.8	77	146	109	40	10	0	0	0	0.8	19	14.8	SE	19	7	3	20	7.0	61
SANDBERG R	1377			12.8	5.6	9.2	-0.2	23.3	2	-1.1	23	0	1			139	115	126	4		0	0			15.6	21	6	11	7	12	5.7	
SAN DIEGO	4	1016.3	1017.4	20.6	12.8	16.6	0.1	36.1	1	7.2	25+	2	0	11.1	74	21	-2	17	5	1	0	0	1.3	31	14.8	S	7	14	7	9	4.6	72
SAN FRANCISCO	2	1016.9	1017.5	16.7	8.9	12.6	-0.1	27.8	1	2.2	25	0	0	7.2	72	122	82	33	8	0	0	0	1.1	18	19.7	SSE	19	6	6	18	6.9	
SAN FRANCISCO U	16			17.2	11.1	14.0	-0.1	30.0	1	7.8	25	0	0			122	71	28	10		0	0			13.9	SW	15					47
SANTA CATALINA	478			17.8	12.2	14.9	-0.9	31.7	1	8.3	24+	0	0			40	12	35	7	0	0	0						6	10	14	6.5	
SANTA MARIA	72			19.4	7.8	13.5	0.1	33.3	2+	0.6	25	2	0			52	26	26	11		0	0						9	8	13	5.9	
STOCKTON	7	1016.9	1018.0	18.3	7.8	13.2	1.6	28.9	1	0.6	25+	0	0	8.3	76	92	62	24	10	0	0	0	0.8	17	12.5	15	6	9	3	18	6.7	
COLORADO																																
ALAMOSA	2297	773.1		11.7	-8.9	1.4	2.8	15.6	21+	-14.4	27	0	30			3	-5	2	2		8	T						13	7	10	4.8	
COLORADO SPRINGS	1873	811.4	1018.8	12.2	-2.8	4.8	1.7	18.9	21+	-11.7	9	0	23	-7.2	49	4	-6	4	1	0	43	51	1.2	6	12.5	1	8	8	10	12	6.1	
DENVER	1610	836.4	1016.8	13.9	-3.3	5.3	2.1	21.1	21+	-12.2	9	0	24	-3.9	61	8	-9	7	3	0	76	76	0.6	21	10.3	W	2	7	9	14	6.4	54
GRAND JUNCTION	1480	854.4	1019.3	12.8	0.6	6.6	2.8	19.4	21+	-6.1	9	0	16	-2.2	60	16	1	15	4	0	107	76	1.0	13	12.1	SW	22+	10	4	16	6.1	55
PUEBLO	1428	856.4	1017.7	15.6	-3.9	5.9	1.4	22.8	21	-9.4	27	0	25	-6.1	48	T	-13	T	0	0	T	T	0.4	2	15.6	NW	25	11	8	11	5.7	69

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
CONNECTICUT																																
BRIDGEPORT	2	1019.6	1020.4	11.7	4.4	8.1	1.1	17.8	3	- 3.9	20	0	6	3.9	77	79	- 23	35	13	0	0	0	1.1	28	13.4	11	28+	9	12	9	5.5	
HARTFORD	52	1013.5	1020.2	12.8	2.8	7.9	2.7	21.1	10	- 7.2	23	0	12	1.1	65	97	- 1	37	15	0	T	T	0.8	25	11.6	NW	19	6	10	14	6.2	51
NEW HAVEN	2	1020.3		12.2	3.9	7.9	1.6	18.3	11+	- 5.0	21	0	8			73	- 29	24	13		0	0			11.6	E	28	7	12	11	5.9	60
DELAWARE																																
WILMINGTON	24	1017.6	1020.7	13.3	2.8	8.1	0.7	20.6	10	- 4.4	20	0	12	2.8	70	44	- 45	16	9	0	T	T	1.0	26	12.1	16	3	6	13	11	5.9	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1018.3	1020.6	15.6	3.9	9.7	1.0	22.8	10+	- 2.2	22+	0	7	2.8	65	38	- 34	23	8	0	T	0	1.0	22	11.6	W	28+	6	12	12	5.9	50
FLORIDA																																
APALACHICOLA U	4			20.6	11.7	16.1	-0.2	26.1	12	0.6	3	0	0			529	189	182	25	1	0	0	1.3	18	11.2	E	4	1	13	16	7.4	22
DAYTONA BEACH	9	1019.3	1020.8	23.3	12.2	17.8	-0.7	28.3	11+	0.6	30	0	0	11.1	68	240	185	132	10	3	0	0	2.5	8	13.0	NE	26+	5	15	10	6.3	50
FORT MYERS	5	1019.3	1019.7	25.6	13.9	19.8	-0.8	28.9	8	5.6	4	0	0	15.0	79	56	17	36	6	0	0	0	2.5	7	12.5	NE	24+	11	10	9	5.4	72
JACKSONVILLE	6	1020.3	1021.3	21.7	10.0	15.8	-0.7	28.9	12	- 0.6	4	0	1	9.4	72	207	91	73	23	2	0	0	2.1	8	10.7	SE	25+	4	11	15	7.1	48
KEY WEST	1	1017.6	1018.2	25.6	20.0	22.8	-0.6	27.8	11+	13.9	4	0	0	17.2	72																	
LAKELAND U	65			23.9	12.8	18.3	-1.1	28.9	12+	4.4	4+	0	0																			
MIAMI	2	1018.0	1018.1	25.6	16.7	21.2	-1.2	30.0	2	6.7	29	0	0	15.6	73	12	- 54	5	4	1	0	0			13.0	NW	2	20	4	6	3.2	86
ORLANDO	33	1016.3	1020.4	24.4	13.3	18.8	-0.1	28.9	11+	4.4	29+	0	0			30	- 29	11	9	0	0	0	2.2	36	11.2	36	22	10	15	5	4.8	
PENSACOLA	34	1018.0	1022.1	21.1	10.0	15.4	0.2	26.7	11	- 1.7	3	0	2	9.4	75	5	- 26	3	3	0	0	0	2.9	3	11.6	30	2	19	8	3	3.4	
TALLAHASSEE	17	1019.3	1021.8	23.3	7.8	15.6	0.5	28.9	12	- 2.2	30	0	3	8.3	70	5	- 38	3	3	0	0	0	1.9	35	14.8	W	28	13	11	6	4.5	69
TAMPA	6	1020.0	1020.2	25.0	11.7	18.4	-0.9	28.9	13+	2.2	4	0	0	12.2	72	18	- 53	14	4	0	0	0	4.6	4	13.4	NW	2	17	7	6	3.7	77
WEST PALM BEACH	5	1018.3	1018.8	25.6	16.1	20.9	-1.6	28.9	2	3.9	30	0	0	14.4	70	4	- 36	3	3		0	0						17	11	2	3.5	81
																98	26	64	12	1	0	0	2.8	3	14.3	8	16	11	13	6	4.7	
GEORGIA																2	- 38	1	4	0	0	0	2.5	35	12.5	30	28	13	15	2	3.7	
ATHENS	244	991.9	1021.4	17.8	5.6	11.7	0.8	24.4	12	- 3.3	4	0	4	5.6	71	39	- 44	14	8		0	0	1.0	4	17.4	NW	27	14	6	10	4.4	65
ATLANTA	308	984.4	1021.8	16.7	6.1	11.2	0.5	22.8	18+	- 4.4	4	0	5	5.0	70	29	- 33	15	6	2	0	0	0.8	2	10.3	18	1	15	6	8	3.8	
AUGUSTA	44	1016.3	1021.6	20.0	3.9	12.1	-0.2	27.8	10	- 2.8	24	0	10	5.0	69	10	- 27	7	3	1	0	0	2.3	3	10.7	31	28	18	9	3	3.6	69
COLUMBUS	117			20.0	6.7	13.3	1.1	25.0	19+	- 2.2	4+	0	3			51	- 22	20	11	0	0	0	2.7	4	14.3	2	14	11	13	6	5.0	
MACON	108	1009.1	1022.3	20.0	5.6	12.7	-0.3	26.1	10	- 2.8	4	0	7	5.6	68																	
ROME	194			17.2	3.3	10.3	0.8	23.9	18	- 6.1	4	0	10																			
SAVANNAH	14	1020.0	1021.8	21.1	6.7	13.9	-0.1	28.9	10	- 2.8	4	0	6	6.7	66	83	9	37	9	2	0	0	0.7	29	10.3	29	28	11	7	12	5.5	
																122	47	71	8	1	T	0	0.4	29	15.2	W	28	10	6	14	5.9	53
HAWAII																22	- 34	9	6	0	0	0	0.9	29	11.2	28	28	10	9	11	5.0	
HILO	8	1013.2	1014.5	27.8	20.6	24.2	1.3	30.0	2	18.9	28+	0	0	20.0	82	101	35	32	8		0	0	0.2	36	12.1	30	28	11	9	10	5.2	
HONOLULU	2	1013.2	1013.6	28.9	21.7	25.1	0.7	30.6	2	18.9	28	0	0	20.0	76	56	- 7	16	7	0	0	0	0.6	33	11.6	W	28	13	4	13	5.1	60
KAHULUI	15	1011.2	1013.6	28.9	20.0	24.3	0.4	30.6	7+	16.7	30+	0	0	17.8	69	49	- 38	17	7		T	0										
LIHUE	31	1009.1	1014.3	26.7	21.1	23.8	0.2	28.3	7	18.3	28+	0	0	20.6	84	4	- 48	3	4	0	0	0	0.7	34	14.3	NW	28	11	11	8	4.5	70
IDAHO																																
BOISE	865	917.0	1018.3	11.1	1.1	6.1	2.4	19.4	20+	- 5.0	9	0	13	0.0	70	41	10	13	10	0	T	T	1.8	13	20.1	SW	16	3	8	19	7.8	48
IDAHO FALLS 42NW R	1460			6.7	- 7.8	- 0.6	1.6	14.4	20+	-15.0	24+	0	28			7	- 1	4	6				0.6	21	17.0	SSW	16					
IDAHO FALLS 46W R	1503			7.2	- 6.1	0.6	1.8	15.0	20	-11.7	24	0	26			7	- 3	3	6		15	T										
LEWISTON	431			10.6	2.2	6.2	1.9	16.7	2	- 2.8	11	0	5			46	15	23	14		8	T						1	7	22	8.4	
POCATELLO	1358	864.2	1019.2	9.4	- 2.8	3.2	1.5	15.6	20+	- 9.4	25	0	23	- 2.8	67	16	- 9	6	11	0	64	25	3.0	20	15.6	W	21	2	7	21	8.0	43
ILLINOIS																																
CAIRO U	96			15.0	5.6	10.3	1.5	23.3	8	- 3.9	3	0	4			54	- 44	24	6		T	T			14.3	NW	28	8	5	17	6.7	54
CHICAGO O HARE	201	993.2	1018.0	11.1	0.6	5.8	2.4	21.7	7	- 6.7	19	0	19	0.6	70	120	65	44	10	4	13	T	1.6	26	15.2	34	28	2	6	22	8.2	
CHICAGO MIDWAY	185	995.3		10.6	1.7	6.1	1.7	21.7	7	- 5.0	4+	0	17	0.6	70	128	72	74	9	2	38	25	2.2	25	16.1	NW	28	2	5	23	8.2	24
MOLINE	177	996.3	1018.4	10.0	0.6	5.4	1.4	23.3	7	- 7.8	3	0	20	0.0	71	28	- 21	12	7	5	T	T	1.7	25	15.6	NW	28	5	12	13	6.7	38
PEORIA	199	994.6	1018.9	11.1	0.6	5.9	1.6	23.3	7	- 7.2	3	0	19	0.0	67	61	7	33	8	5	T	T	1.5	24	14.8	NW	2	6	6	18	7.0	41
ROCKFORD	221	990.5	1018.0	8.9	- 1.1	3.9	1.1	21.1	7	- 8.9	19	0	21	- 0.6	75	90	29	33	8	6	T	T	1.4	27	13.4	34	28	6	8	16	7.0	
SPRINGFIELD	179	996.6	1019.1	11.7	1.7	6.7	1.3	22.8	7	- 6.7	3	0	19	1.7	75	78	18	41	9	4	8	T	1.9	22	15.2	NW	28	5	9	16	6.8	48
INDIANA																																
EVANSVILLE	116	1006.1	1020.5	13.3	2.2	8.0	0.9	22.8	8+	- 5.0	3	0	17	2.2	70	60	- 20	25	9	1	71	51	1.4	22	13.0	W	27	5	7	18	7.0	44
FORT WAYNE	241	988.2	1018.6	8.9	0.6	4.6	0.8	17.8	9	- 8.3	4	0	16	0.6	78	123	58	35	16	[illegible]	305	178	2.1	24	18.3	N	2	4	3	23	8.0	36
INDIANAPOLIS	241	989.5	1019.2	11.7	1.7	6.6	1.6	22.2	9	- 7.8	4	0	15	1.1	71	120	41	42	9	1	211	203	1.4	24	14.8	NW	29	3	8	19	7.8	28
SOUTH BEND	236	989.2	1017.7	9.4	2.2	6.0	2.1	18.3	7	- 5.6	4	0	15	2.2	77	124	57	37	15	2	411	152	1.9	25	13.9	33	28	3	3	24	8.6	
IOWA																																
BURLINGTON	211			11.1	0.6	5.7	1.6	23.3	7	- 7.8	3+	0	17	0.6	71	22	- 26		5	4	T		1.6	27	13.0	32	27	6	9	15	6.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature												Precipitation							Wind					No. of days (sunrise to sunset)				
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	983.7	1019.4	9.4	- 2.2	3.6	0.7	23.3	7	-11.7	12	0	19	- 1.1	74	18	- 27	16	4	2	T	T	1.0	30	13.4	NW	27	8	9	13	6.2	46
DUBUQUE	322	978.0		7.8	- 1.7	2.9	1.3	21.7	7	-11.7	30	0	22			47	- 19	37	7		T	T						6	5	19	7.4	
SIOUX CITY	334	978.7	1019.6	8.3	- 4.4	1.9	-0.3	18.9	15	-12.2	12	0	25	- 2.8	75	3	- 27	1	4	0	5	T	1.0	33	16.5	NW	29	7	8	15	6.5	57
WATERLOO	265	986.1	1018.7	7.8	- 3.9	2.1	0.6	22.8	7	-12.8	30	0	25	- 2.8	72	12	- 35	9	3	0	T	T	1.0	31	14.3	34	27	5	11	14	6.6	
KANSAS																																
CONCORDIA	448	965.1	1019.1	11.7	- 1.7	5.0	-0.3	22.2	6	-11.7	2	0	19	- 1.7	67	1	- 24	1	2	2	T	T	0.7	28	17.9	NW	26	10	8	12	5.8	60
DODGE CITY	787	926.2	1018.6	13.3	- 1.1	6.2	0.2	23.9	6	- 9.4	2+	0	16	- 2.2	62	T	- 16	T	0	1	T	0	1.2	27	14.8	N	26	7	8	15	6.2	60
GOODLAND	1113	889.6	1018.7	12.8	- 3.3	4.6	1.3	22.2	21+	-10.0	9	0	25	- 3.3	66	1	- 11	1	3	1	8	T	1.2	24	14.3	32	26	10	6	14	5.8	
TOPEKA	267	987.1	1019.4	13.9	- 0.6	6.7	0.8	24.4	22+	-12.2	3	0	17	1.1	70	6	- 32	4	3	2	T	T	0.8	27	17.0	NW	27	8	5	17	6.5	59
WICHITA	403	970.5	1018.9	16.1	2.2	9.1	2.2	25.6	22+	-10.0	2	0	14	0.6	60	2	- 36	2	1	1	T	0	0.6	19	16.5	N	27	7	13	10	5.9	59
KENTUCKY																																
COVINGTON	265	987.8	1019.9	11.7	2.8	7.1	1.1	20.6	7	- 7.8	4	0	14	2.2	73	106	30	33	12	2	307	203	1.7	24	12.5	25	27+	5	5	20	7.5	
LEXINGTON	294	984.4	1020.6	12.2	3.3	7.6	0.6	21.1	7	- 6.1	4	0	11	2.2	72	102	18	34	11	1	213	127	2.1	20	11.2	27	10	5	5	20	7.3	
LOUISVILLE	145	1002.4	1020.2	12.8	3.9	8.4	1.4	22.2	8+	- 6.1	4	0	8	3.3	71	93	12	34	10	1	335	203	1.1	23	15.2	NW	10	5	7	18	7.3	42
LOUISIANA																																
ALEXANDRIA	28	1017.3	1021.5	22.2	7.8	14.8	1.2	27.2	18+	- 4.4	3	0	5	10.0	79	83	- 38	50	5	1	0	0	0.1	28	11.6	32	2	12	8	10	5.1	
BATON ROUGE	20	1019.0	1021.6	23.3	10.0	16.7	1.7	28.9	11+	- 2.2	3	0	3	10.0	71	71	- 33	45	7	1	0	0	0.6	9	11.2	34	1	9	12	9	5.1	
LAKE CHARLES	3	1020.7	1021.6	23.9	12.2	17.9	2.6	28.9	18	- 1.1	3	0	1	12.8	78	113	6	89	5	1	0	0	1.0	11	10.3	35	27	12	10	8	4.9	
NEW ORLEANS	1	1020.7	1021.5	22.8	10.0	16.4	0.9	28.3	10	- 2.2	3	0	2	12.2	80	18	- 67	6	5	0	0	0	0.9	3	11.2	32	28+	13	8	9	4.6	
SHREVEPORT	77	1011.5	1021.0	22.2	9.4	15.8	2.6	27.2	8	- 4.4	3	0	3	8.9	70	25	- 82	13	3	2	0	0	1.1	17	11.6	1	1	10	11	9	4.9	63
MAINE																																
CARIBOU	190	997.3		5.6	- 2.2	1.6	2.6	15.6	11+	-15.0	22	0	17			91	14	40	15		180	152						0	8	22	8.5	
PORTLAND	14	1018.3	1020.5	9.4	0.6	5.1	1.7	17.8	11	- 9.4	21	0	15	1.7	79	127	21	75	16	0	0	0	0.4	22	14.8	SE	3	8	5	17	6.7	41
MARYLAND																																
BALTIMORE	45	1014.9	1020.7	14.4	1.7	8.0	0.5	22.2	9	- 5.0	21+	0	16	1.7	65	71	- 9	36	9	0	T	T	1.3	25	13.4	S	28	8	10	12	5.5	56
MASSACHUSETTS																																
BLUE HILL OBS R	192			11.1	3.3	6.9	1.4	19.4	1	- 5.6	20	0	11			125	10	50	14		0	0			24.1	SSE	3					52
BOSTON	5	1019.6	1020.5	11.7	4.4	8.3	1.1	20.6	11	- 2.8	20	0	8	2.8	71	113	13	45	13	0	0	0	0.7	27	16.1	S	3	9	7	14	6.0	57
NANTUCKET	13	1020.0	1020.2	11.1	3.9	7.7	0.0	17.8	3	- 3.3	21	0	6	4.4	80	177	74	126	10	3	0	0	0.5	36	18.8	N	6	6	4	20	7.5	33
PITTSFIELD	357			10.6	- 0.6	4.8	1.9	18.3	3+	-10.0	21+	0	18			73	- 26	25	17		109	51										
WORCESTER	301	982.7	1020.5	10.6	1.7	6.2	2.2	18.3	3	- 6.1	20	0	14	0.0	67	125	17	60	15	0	18	T	1.1	26	13.0	29	18	9	7	14	5.9	
MICHIGAN																																
ALPENA	210	990.5	1016.2	5.6	- 3.9	0.9	-0.5	12.8	10	-13.9	5	0	24	- 2.8	76	189	129	49	18	2	775	432	0.8	26	16.5	E	27	2	4	24	8.7	20
DETROIT	190	993.9	1017.1	8.9	1.7	5.2	0.6	17.2	8	- 5.0	21	0	16	0.6	71					1			2.1	25	13.0	21	27					
DETROIT M WAYNE CO	193	992.6	1017.3	9.4	1.7	5.4	0.8	18.3	9	- 5.0	4	0	15	1.7	78	80	22	19	13	1	300	152	2.0	25	15.6	NW	29+	4	3	23	8.4	
DETROIT WILLOW RUN	217	988.8	1017.6	8.3	0.0	4.1	-0.3	17.2	9	- 6.7	4	0	17	- 0.6	72	78	21	22	12	1	384	152	2.5	25	17.9	35	2	3	2	25	8.6	
FLINT	235	988.5	1016.9	7.2	0.0	3.6	0.9	15.6	10+	- 7.2	20	0	16	0.0	77	71	16	23	15	2	343	229	2.1	24	13.9	22	27	0	4	26	9.1	
GRAND RAPIDS	239	987.5	1016.9	10.0	1.1	5.6	2.7	17.8	16+	- 5.6	4	0	16	1.7	77	198	135	68	17	6	422	203	1.3	25	17.4	NW	27	1	3	26	9.1	17
HOUGHTON LAKE	350	973.6	1016.7	5.6	- 2.8	1.3		12.8	10	-10.0	21+	0	21	- 1.1	83	122		46	14	2	384	203	1.1	26	13.0	36	29	1	3	26	9.0	
LANSING	256	984.4	1016.7	8.3	- 0.6	4.0	0.7	16.7	9	-12.8	4	0	16	0.0	74	117	61	36	17	4	427	229	2.0	24	15.2	S	27	0	4	26	9.2	21
MARQUETTE U	206			3.3	- 2.2	0.5	-0.5	11.7	22	-13.9	30	0	22			92	9	38	14		711	305			17.0	NW	28	0	4	26	9.2	22
MUSKEGON	191	993.6	1017.1	8.3	0.6	4.6	0.3	17.2	7	- 6.7	21	0	18	0.0	75	143	68	52	21	3	516	102	1.3	28	19.7	1	29	1	1	28	9.4	
SAULT STE MARIE	220	989.5	1016.7	2.2	- 3.9	- 0.8	-1.6	7.2	23	-11.7	19	0	23	- 3.3	82	145	60	29	21	2	452	178	1.1	3	13.0	W	18+	1	0	29	9.6	08
MINNESOTA																																
DULUTH	435	966.1	1019.7	0.6	- 7.8	- 3.8	-1.2	11.1	22	-21.1	30+	0	29	- 7.8	74	30	- 15	9	11	0	193	76	0.9	31	17.9	E	17	5	7	18	7.5	31
INTERNATIONAL FALLS	359	975.3	1020.5	- 2.2	-11.7	- 7.2	-2.6	5.6	22	-26.1	12	0	30	- 9.4	81	20	- 17	12	7	0	165	102	0.4	25	13.0	27	17	4	10	16	7.3	
MINNEAPOLIS	254	988.2	1019.7	3.3	- 5.6	- 1.1	-0.6	13.9	22	-20.0	12	0	27	- 5.0	76	10	- 26	4	6	0	86	51	1.1	34	13.9	N	26	7	4	19	7.0	39
ROCHESTER	395	969.9	1019.0	4.4	- 4.4	- 0.1	0.2	14.4	16	-17.2	12	0	24	- 3.9	77	10	- 30	3	7	0	64	51	1.0	29	13.0	35	27+	4	9	17	7.1	
ST CLOUD	315	980.4	1019.5	1.7	- 7.8	- 3.0	-1.6	11.1	6	-21.7	12	0	28		73	12	- 21	5	8		135	102						7	5	18	6.9	
MISSISSIPPI																																
JACKSON	94	1009.8	1021.7	21.1	6.1	13.4	0.4	27.2	18+	- 8.3	3	0	4	8.3	76	93	- 6	31	7	1	T	0	0.5	17	13.9	NW	28	9	9	12	5.6	55
MERIDIAN	88	1010.8	1022.1	21.7	6.1	13.7	1.4	27.8	17+	- 7.8	3	0	6	6.7	70	68	- 11	36	7	1	T	0	0.4	28	10.3	32	28+	9	11	10	5.5	
VICKSBURG U	71			20.0	9.4	14.8	1.4	26.7	9	- 2.8	3	0	2			70	- 43	25	6		T	0			12.5	W	10	12	7	11	5.1	70

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	°C.		°C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
MISSOURI																																
COLUMBIA	237	990.2	1019.0	15.0	3.3	9.1	2.8	25.6	8+	- 7.2	3+	0	14	1.7	63	28	- 29	14	5	2	20	25	1.3	23	18.3	NW	27	7	8	15	6.4	57
KANSAS CITY	226	991.5	1019.0	15.6	3.3	9.5	2.5	25.6	21	- 5.6	3+	0	11	1.7	62	27	- 19	20	3	2	T	T	0.8	26	13.9	NW	27	7	10	13	6.1	59
SAINT JOSEPH	247			15.0	0.6	7.8	2.6	25.6	22	-10.6	29	0	16	0.6	69	T	- 42	T	1	1	T	T	0.7	28	12.5	32	27	11	6	13	5.4	
ST LOUIS	163	999.3	1019.9	13.9	2.8	8.4	1.7	24.4	7	- 7.2	3	0	16	2.8	72	63	- 3	26	8	3	T	T	1.3	23	14.8	NW	27	6	9	15	6.8	56
SPRINGFIELD	386	973.9	1020.0	15.6	2.8	9.3	2.1	26.1	8	- 8.9	3	0	12	2.8	70	72	2	45	8	1	T	0	1.4	19	14.8	NW	27	10	6	14	5.8	59
MONTANA																																
BILLINGS	1087	891.0	1017.6	7.2	- 4.4	1.4	-0.3	17.2	20	-16.7	8	0	22	- 6.1	63	27	11	14	6	0	305	203	2.1	25	20.6	NW	16	3	12	15	7.1	66
GLASGOW	696	934.0		1.1	-10.0	- 4.5	-2.4	11.1	28	-23.3	30	0	29			9	- 3	4	7		117	51						4	10	16	7.2	
GREAT FALLS	1116	886.9	1018.1	4.4	- 7.8	- 1.7	-2.9	17.2	20	-23.9	11	0	26	- 7.2	69	41	22	9	12	1	386	152	3.0	23	22.8	SW	25	6	5	19	7.2	47
HAVRE	787	923.1	1018.6	0.6	-11.1	- 5.4	-4.0	11.1	5	-23.9	30	0	30	- 8.3	80	17	4	4	8		236	51	1.2	26	15.2	SW	25	4	12	14	7.0	48
HELENA	1167	880.5	1018.8	7.8	- 5.6	1.0	1.2	17.8	20+	-18.3	11	0	26	- 6.1	63	26	12	9	8	0	241	127	2.1	26	15.2	W	26+	3	8	19	7.5	38
KALISPELL	904	910.9	1017.9	3.3	- 5.0	- 0.7	-0.2	11.7	2	-17.8	10	0	28	- 3.3	84	64	28	14	17	0	302	152	0.2	8	13.0	2	6+	1	5	24	8.9	
MILES CITY	801	923.1	1019.3	2.8	- 9.4	- 3.5	-3.8	12.2	28	-23.3	11	0	30	- 7.8	74	20	9		6	0	201	152	0.5	33								
MISSOULA	972	904.5	1018.8	5.0	- 2.8	1.1	1.9	15.6	2	- 9.4	11	0	27	- 2.8	80	15	- 8	3	12	1	86	51	0.3	29	11.6	W	21	0	3	27	9.0	30
NEBRASKA																																
GRAND ISLAND	561	951.9	1019.6	10.6	- 3.9	3.4	0.5	22.2	15	-12.8	2	0	24	- 2.2	70	2	- 17	2	2	0	5	T	1.1	30	15.6	34	29	6	6	18	6.8	
LINCOLN U	351			10.0	- 0.6	4.7	-0.2	21.1	15	- 8.9	10	0	17			6	- 26	4	3		5	T			13.9	NW	1	7	11	12	6.0	51
NORFOLK	471			8.3	- 5.0	1.6	-0.6	20.0	15	-13.3	10	0	26			1	- 22	1	1		T	T						8	6	16	6.7	
NORTH PLATTE	846	919.1	1019.3	11.1	- 6.7	2.2	0.3	22.8	6	-14.4	2	0	29	- 5.0	67	1	- 12	1	2	0	13	T	0.9	35	13.4	NW	29	5	8	17	6.9	54
OMAHA	298	983.4	1019.4	11.1	- 2.2	4.5	0.7	21.7	15	-10.0	10	0	22	- 2.2	67	6	- 26	5	2	0	T	T	0.9	34	18.8	NW	27	9	8	13	6.0	57
SCOTTSBLUFF	1206	880.1	1018.6	11.7	- 5.0	3.4	1.3	21.7	16	-17.2	9	0	28	- 3.9	67	5	- 7	3	4	0	58	51	0.5	1	12.5	31	29	7	9	14	6.5	
VALENTINE	789			8.9	- 6.7	1.1	0.2	23.9	21	-17.2	9	0	29			3	- 10	3	1		89	76			14.8	S	14	5	10	15	6.8	62
NEVADA																																
ELKO	1539	845.6	1018.7	11.7	- 3.9	3.9	2.7	21.1	2	-14.4	25	0	22	- 3.9	64	15	- 8	7	7	1	23	25	0.4	19	11.2	16	20	8	2	20	7.1	
ELY	1906	809.7	1018.6	11.1	- 4.4	3.4	2.4	21.1	2	-15.0	25	0	24	- 6.7	55	8	- 7	5	4	1	25	25	2.9	20	13.0	S	20+	7	8	15	6.5	69
LAS VEGAS	659	940.4	1017.3	19.4	6.1	13.0	1.6	27.2	1	0.0	27	0	1	- 1.7	40	8	1	8	2	0	0	0	1.5	22	13.9	NW	8	14	3	13	4.8	74
RENO	1342	866.2	1017.7	12.8	- 2.8	5.0	1.5	22.2	2+	-10.0	25	0	23	- 1.7	68	27	13	8	5	0	T	0	1.1	21	17.9	SW	20	7	5	18	7.2	67
WINNEMUCCA	1310	868.6	1018.3	12.8	- 3.3	4.7	2.6	22.2	1	-15.6	25	0	20	- 3.3	60	25	5	9	11	0	T	T	1.1	19	13.4	SW	20	4	6	20	7.6	27
NEW HAMPSHIRE																																
CONCORD	104	1007.8	1020.7	11.1	- 0.6	5.3	2.2	20.0	10+	-12.2	21	0	14	0.6	73	76	- 18	39	17	0	T	0	0.3	21	11.6	NW	19+	9	6	15	6.3	43
MT WASHINGTON OBS	1909			0.6	- 6.1	- 2.8	3.7	8.9	3	-18.9	15	0	25			147	- 21	67	20	0	465	254			43.8Y	SE	3	5	5	20	7.7	30
NEW JERSEY																																
ATLANTIC CITY	20	1018.6	1021.1	15.0	2.8	8.7	0.6	22.8	11	- 5.0	23	0	13	3.3	72	49	- 44	19	8	1	T	T	1.5	25	14.3	22	28	7	11	12	5.7	54
ATLANTIC CITY U	3			13.3	5.6	9.6	0.6	21.7	11	- 1.1	20	0	3			37	- 60	15	8			0			16.5	SSW	28					
NEWARK	2	1019.6	1020.7	13.9	4.4	9.4	1.7	22.8	10	- 2.2	23+	0	5	3.3	69	78	- 8	27	11	0	0	0	0.8	24	14.3	11	28	8	10	12	5.8	
TRENTON U	17			13.3	4.4	9.1	1.4	21.1	1	- 2.8	20	0	7			56	- 24	26	11		T	T			13.9	S	28	8	11	11	5.9	52
NEW MEXICO																																
ALBUQUERQUE	1619	840.5	1018.9	15.6	0.6	8.2	1.7	21.1	16	- 5.6	10	0	12	- 5.6	41	2	- 7	2	2	0	T	T	0.2	6	18.8	SE	1	10	10	10	5.0	78
CLAYTON	1515			16.7	- 1.1	7.9	2.5	25.0	15	- 8.3	2	0	16			T	- 8	T	0		0	25						13	4	13	5.5	
RATON	1944			16.1	- 4.4	5.8	2.8	22.8	16	-10.6	2	0	25			1	- 9	1	1		T	T						11	6	13	5.6	
ROSWELL	1102	894.0		21.1	0.0	10.3	2.6	29.4	17	- 7.8	28+	0	16	- 2.8	45	T	- 9	T	0	0	0	0	0.5	27				13	8	9	5.1	64
SILVER CITY	1638			17.8	2.8	10.3	1.7	23.9	16+	- 5.6	27	0	7			9	- 2	7	3		0	0						17	8	5	3.8	
NEW YORK																																
ALBANY	84	1009.1	1020.1	11.1	0.6	5.7	1.8	21.1	2	-10.6	22	0	14	1.1	74	45	- 23	20	13	0	T	0	1.7	21	13.0	W	10	6	5	19	7.1	31
BINGHAMTON	485	959.4	1019.1	8.9	1.1	5.1	1.7	17.2	10+	- 7.2	21	0	16	0.6	74	73	9	28	14	1	T	T	2.2	20	15.2	SW	10	5	3	22	7.9	25
BUFFALO	215	991.5	1017.8	9.4	1.1	5.3	1.3	19.4	10	- 7.8	20	0	16	1.1	77	114	23	30	18	4	254	152	3.0	22	19.2	SW	3	3	3	24	8.3	26
NEW YORK U	40	1016.6	1019.9	13.3	5.6	9.4	1.1	21.1	10	- 1.7	20	0	2	3.3	70	88	2	35	12	0	0	0	0.8	26	13.4	S	10	11	11	8	5.0	53
J.F. KENNEDY	4	1020.0	1020.6	12.8	4.4	8.7	0.8	19.4	2	- 2.2	23	0	5	3.9	73	58	- 31	17	11	0	T	T	1.0	24	14.3	10	28	8	11	11	5.6	
NEW YORK.LA GUARDIA	3	1018.6	1020.4	13.3	6.1	9.6	1.0	20.6	10	- 0.6	20	0	1	2.8	64	62	- 29	22	13	0	0	0	0.7	26	15.6	SE	28	6	13	11	6.0	
ROCHESTER	167	998.3	1018.9	10.6	2.2	6.4	1.9	21.1	10	- 7.2	20	0	13	1.1	70	79	15	27	17	0	76	25	2.1	22	15.2	SW	18	4	3	23	8.2	27
SYRACUSE	125	1003.4	1018.7	11.1	1.1	6.1	1.5	20.0	10+	-10.0	21	0	13	1.1	73	52	- 22	14	16	2	T	T	1.3	20	15.2	SW	3	4	4	22	7.8	25
NORTH CAROLINA																																
ASHEVILLE	652	943.8	1021.1	13.9	0.6	7.2	0.2	21.1	18	- 5.6	4	0	18	3.3	82	84	14	35	9	1	33	T	0.3	33	13.9	34	28	8	9	13	6.3	49
CAPE HATTERAS R	2	1020.7	1020.8	17.2	8.9	12.9	-0.6	23.9	11+	2.8	24	0	0	7.8	73	31	- 73	18	4	2	0	0	2.2	35	18.8	SW	28	13	6	11	4.9	66
CHARLOTTE	224	993.2	1021.1	16.7	3.3	10.2	-0.1	23.3	18	- 5.6	4	0	9	3.9	70	20	- 34	11	5	1	0	0	0.4	23	15.6	SW	2	10	8	12	5.5	68

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb	C.	C.	C.	C.	C		C.				C.	%	Mm.	Mm	Mm.			Mm.	Mm.	M.p.s.		M.p.s							%
NORTH CAROLINA																																
GREENSBORO	273	989.2	1021.4	16.7	3.3	10.1	1.3	23.3	27+	- 3.3	4	0	13	4.4	72	39	- 29	16	5	0	T	0	0.6	24	13.4	W	2	9	5	16	5.9	62
RALEIGH	132	1005.1	1021.2	17.2	3.3	10.4	0.4	26.1	10	- 3.9	4	0	12	3.9	68	52	- 18	20	6	1	T	T	0.5	25	12.5	24	2	12	9	9	5.1	62
WILMINGTON	9	1020.0	1021.5	20.6	6.1	13.4	0.4	27.2	11+	0.6	30+	0	0	6.7	68	18	- 61	12	4	1	0	0	0.7	35	13.4	W	28	11	13	6	4.2	71
NORTH DAKOTA																																
BISMARCK	493	958.0	1020.4	0.6	-12.8	- 5.9	-4.2	9.4	25	-25.0	11	0	30	- 9.4	74	7	- 8	4	5	0	130	102	0.7	31	15.2	NW	29	5	8	17	7.1	34
FARGO	273	986.5	1020.7	0.6	-10.6	- 4.9	-2.8	8.3	22	-20.0	30	0	29	- 8.9	75	5	- 17	2	4	0	33	25	0.6	32	16.1	N	29	1	10	19	7.8	55
WILLISTON	579			0.6	-12.2	- 5.8	-3.3	11.1	25	-21.1	11	0	30			8	- 7	6	5		86	51			15.6	N	29	8	5	17	6.7	36
OHIO																																
AKRON	368	973.6	1018.8	10.0	1.1	5.4	0.5	20.0	9	- 5.6	20	0	17	1.1	77	128	71	44	16	1	246	152	2.4	22	11.6	21	27	4	6	20	7.8	
CINCINNATI OBS	232			11.7	2.8	7.1	0.1	21.1	7	- 5.6	4	0	12			108	34	32	12		259	203			12.5	NW	2					41
CLEVELAND	237	988.5	1018.3	10.6	1.7	6.0	1.3	19.4	9	- 5.0	20+	0	15	2.2	78	131	65	39	13	3	224	178	2.9	21	14.8	SW	27	4	3	23	8.2	26
COLUMBUS	247	989.2	1019.7	10.6	1.1	5.8	0.7	20.0	9	- 6.1	4	0	15	2.2	79	103	39	30	13	2	264	76	1.7	21	15.2	SW	27	4	4	22	8.0	31
DAYTON	305	982.4	1019.3	10.6	1.1	5.7	0.2	20.0	9	- 7.2	4	0	17	1.7	74	87	20	28	12	1	249	152	2.1	22	13.9	SW	27	3	4	23	8.1	39
MANSFIELD	395			8.9	1.1	4.9	0.8	18.3	9	- 6.1	20+	0	15	0.0	73	110	42	39	13	2	157	76	3.2	23				4	4	22	8.1	
TOLEDO	206	992.6	1018.4	8.9	0.6	4.7	1.0	18.9	9	- 6.7	4	0	17	1.1	77	118	66	29	12	2	455	229	2.3	24	13.4	SW	3+	3	4	23	8.3	22
YOUNGSTOWN	359	975.3	1018.8	8.9	0.6	4.7	0.7	18.9	9	- 8.9	20	0	16	0.0	74	140	69	39	13	2	188	102	2.4	22	13.0	27	10	4	5	21	8.0	
OKLAHOMA																																
OKLAHOMA CITY	390	972.2	1019.0	18.9	6.1	12.4	3.3	27.8	8+	- 5.6	2	0	8	4.4	61	21	- 18	19	3	1	T	0	1.6	18	15.2	SW	6	13	4	13	5.5	77
TULSA	198	994.9	1019.6	18.9	5.0	11.9	3.2	28.3	8	- 6.7	2	0	10	3.9	64	13	- 45	9	4	0	T	0	2.0	20	15.2	SW	23+	10	9	11	5.4	67
OREGON																																
ASTORIA	2	1013.9	1014.5	12.2	5.0	8.8	0.8	17.8	1	- 1.1	8	0	2	6.7	86	254	- 30	51	24	1	0	0	1.5	15	13.0	20	11	2	3	25	8.7	
BURNS U	1265	873.0	1017.7	8.9	- 1.1	3.7	1.4	18.3	3+	-10.6	23	0	20	- 0.6	77	52	22	14	13		61	51	0.7	25				2	6	22	8.1	
EUGENE	109	1002.0	1015.7	12.2	5.0	8.6	1.1	17.2	1	- 0.6	8	0	3	6.7	89	231	88	65	19	0	0	0	1.3	18	13.0	19	20	1	6	23	8.7	
MEACHAM	1234	875.4	1017.3	5.0	- 1.1	1.9	0.6	13.9	1	- 7.2	8	0	22	- 1.7	81	131	26	27	16		157	51	0.8	15				1	6	23	8.9	
MEDFORD	396	968.8	1016.9	12.2	3.3	7.6	1.8	23.3	1	- 2.8	24+	0	8	4.4	84	150	84	45	16	0	T	T	0.2	19	10.3	14	18	1	5	24	8.8	
PENDLETON	452	962.4	1016.6	11.7	2.8	7.3	2.1	17.8	19	- 1.7	11	0	4	2.8	78	53	18	17	13	0	10	T	0.8	21	11.2	27	16	2	9	19	8.0	
PORTLAND	6	1014.6	1015.8	12.2	5.0	8.4	1.1	18.9	1	0.6	26+	0	0	6.1	86	140	4	35	16	0	0	0	1.6	14	13.4	SW	25+	1	4	25	9.0	19
SALEM	60	1008.1	1015.4	12.8	3.9	8.4	1.1	18.3	4	- 2.8	22	0	3	6.7	88	149	4	30	20	0	0	0	1.6	17	14.3	18	20	2	4	24	8.6	
SEXTON SUMMIT R	1169	881.8	1015.0	8.3	2.8	5.4	-0.6	25.0	1	- 3.9	23	0	11			248	137	71	18		254	229						4	4	22	8.0	
PACIFIC AREA																																
CANTON ISLAND	2			31.1	25.6	28.4	-0.2	32.2	14+	24.4	26+	4	0			5	- 36	4	2	0	0	0						7	16	7	5.4	
ENIWETOK	4	1008.1	1008.8	31.1	25.6	28.5	0.4	32.2	14+	23.9	28+	7	0	23.9	76	98	- 62	20	15		0	0	5.4	6								
TAGUAC GUAM R	110			29.4	22.8	26.2	-0.1	30.6	15+	20.0	30+	0	0			184	- 77	45	23		0	0			11.2	E	17					53
JOHNSTON	2	1010.2	1010.7	28.3	24.4	26.4	-0.1	29.4	19+	20.6	22	0	0	22.2	77	109	57	35	13	2	0	0	4.4	11	15.6	SE	24	5	10	15	7.1	34
KOROR R	29	1005.1	1008.6	31.7	24.4	27.8	0.5	32.8	20+	22.2	22	14	0	24.4	86	299	- 30	57	23	5	0	0	0.7	8	9.8	NE	16	0	0	30	10.0	55
KWAJALEIN	2	1007.8	1008.4	30.6	25.0	27.8	0.4	32.2	11	22.8	27+	1	0	23.9	79	233	- 75	84	20	1	0	0	4.3	7	16.5	5	22	0	6	24	8.9	
MAJURO	3	1008.1	1008.5	30.0	24.4	27.3	0.4	31.7	9	23.3	27+	0	0	23.9	80	311	- 93	67	26	4	0	0	2.0	8	11.6	E	21+	0	7	23	8.6	43
MARCUS ISLAND	6	1013.2	1014.9	27.8	22.8	25.4	-0.9	29.4	21+	20.6	29+	0	0	19.4	72	42	- 41	21	6	0	0	0	4.6	9	29.5	SW	3	14	10	6	4.6	66
PAGO PAGO	4	1009.5	1009.8	30.6	23.9	27.3		33.3	19	21.1	18	1	0	23.3	82	146		27	20	2	0	0	3.1	12	11.6	E	24	0	14	16	7.6	42
PONAPE R	37	1002.7	1008.2	31.1	22.8	26.8	0.2	32.2	19+	20.6	30	3	0	23.3	86	476	48	93	25	3	0	0	1.5	11	9.8	SW	1	1	4	25	9.0	49
TRUK MOEN ISLAND	2	1008.1	1008.4	30.6	24.4	27.5	0.4	32.2	20	23.3	26+	1	0	23.9	82	214	-100	36	24	3	0	0	2.3	9	17.4	SW	2	0	2	28	9.2	77
WAKE	3	1012.2	1012.5	28.3	23.9	26.1	-0.8	30.0	3	20.0	25	0	0	19.4	68	8	- 70	4	10	0	0	0	6.0	3	13.0	35	29+	10	14	6	5.0	
YAP R	19	1006.4	1008.2	31.1	23.9	27.6	0.1	32.8	3	21.7	17	6	0	24.4	85	225	- 59	58	25	2	0	0	1.8	6	11.2	NE	15	0	1	29	9.8	53
PENNSYLVANIA																																
ALLENTOWN	118	1006.4	1020.6	12.2	0.6	6.4	0.9	19.4	3+	- 7.2	21+	0	16	0.6	68	77	- 7	31	11	2	T	T	1.0	25	12.5	16	28+	7	10	13	6.2	
ERIE	223	990.9	1018.1	10.0	2.2	6.3	1.2	18.9	9	- 7.2	20	0	12	0.6	68	136	50	30	17	3	183	127	3.4	20	13.4	23	3	2	4	24	8.4	
HARRISBURG	103	1007.5	1020.5	12.8	1.7	7.3	0.9	22.2	10	- 6.7	21	0	16	2.8	75	90	15	37	13	0	5	T	0.8	25	13.0	W	10+	7	7	16	6.7	65
PHILADELPHIA	2	1019.6	1020.7	13.3	3.3	8.2	1.4	21.1	1	- 4.4	23	0	10	2.2	67	60	- 26	27	11	0	T	0	1.0	25	12.5	SW	28	8	10	12	5.7	53
PITTSBURGH	347	974.6	1019.4	11.1	0.6	6.0	1.1	21.7	9	- 6.1	20	0	17	0.0	69	86	29	22	14	0	130	102	2.1	23	15.6	23	2	3	7	20	8.0	29
READING U	81			13.3	3.3	8.3	1.1	21.1	1	- 4.4	21	0	10			72	- 15	47	12		T	T			19.7	E	28	7	11	12	6.2	48
SCRANTON	283	985.4	1020.4	11.1	1.7	6.3	2.1	18.9	10+	- 6.1	21+	0	16	1.1	71	75	1	35	14	2	T	T	1.0	20	15.2	S	10	6	6	18	6.9	42
WILLIAMSPORT	160	1000.7	1020.3	10.6	0.0	5.2	0.1	19.4	10+	- 8.9	21	0	18	2.2	84	147	59	87	15	2	8	T	0.4	24	17.4	28	10	7	3	20	7.0	
RHODE ISLAND																																
BLOCK ISLAND	34			11.1	5.6	8.5	1.2	18.3	11	- 1.7	20	0	4			73	- 21	39	7		0	0						8	9	13	6.1	
PROVIDENCE	16	1018.3	1020.5	12.2	2.8	7.5	1.4	20.0	11	- 6.7	21	0	11	2.2	73	100	- 5	52	11	2	T	0	0.5	26	14.8	14	3	11	4	15	5.9	55

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	.25 mm. or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
SOUTH CAROLINA																																
CHARLESTON	12	1019.6	1021.2	21.1	6.1	13.5	0.2	28.3	11+	- 2.8	4	0	7	5.0	63	12	- 41	8	2	1	0	0	0.9	34	20.6Y	W	28	16	9	5	4.0	72
CHARLESTON U	3			19.4	10.0	14.7	-0.1	26.1	10	2.2	29+	0	0			9	- 39	7	2		0	0			15.2	SW	2					
COLUMBIA	66	1013.2	1021.3	19.4	3.9	11.9	-0.2	27.2	10	- 2.2	24+	0	11	5.0	69	27	- 33	11	6	0	0	0	0.7	29	13.9	27	2	12	12	6	4.5	72
GNVLF SPARTANBURG	292	986.8	1021.7	17.2	4.4	10.9	0.2	23.9	26+	- 4.4	4	0	5	4.4	69	49	- 23	23	6	1	0	0	0.6	27	11.6	SW	2	11	4	15	5.7	59
SOUTH DAKOTA																																
ABERDEEN	395	971.6	1020.3	2.2	- 9.4	- 3.6	-2.7	13.9	21	-22.8	12	0	29	- 7.8	73	15	- 4	9	8	0	114	76	1.1	36	13.9	35	29	5	5	20	7.3	
HURON	391	971.6	1019.9	4.4	- 7.8	- 1.9	-1.4	14.4	21	-17.2	10	0	28	- 6.1	74	10	- 7	5	7	0	109	76	1.0	32	15.2	N	29	5	6	19	7.4	59
RAPID CITY	964	904.8	1018.5	7.8	- 5.0	1.4	-0.3	20.0	21	-16.7	9	0	25	- 5.0	68	24	14	15	7	0	163	102	1.8	34	26.4	NW	29	5	7	18	7.1	52
SIOUX FALLS	432	966.5	1019.7	6.1	- 7.2	- 0.6	-0.9	16.1	22	-19.4	12	0	28	- 5.6	72	5	- 20	4	2	0	58	51	1.1	35	13.9	35	29	6	8	16	6.7	
TENNESSEE																																
BRISTOL	459	966.1	1021.2	14.4	2.2	8.3	0.6	20.6	7+	- 6.1	4	0	16	3.3	75	94	30	21	12	0	48	25	0.7	26	11.6	24	2	6	9	15	6.8	
CHATTANOOGA	203	996.3	1021.4	15.6	3.9	9.7	0.1	22.8	18	- 5.6	4	0	8	5.6	80	67	- 25	21	7	1	T	T	0.7	25	12.5	NW	27	4	11	15	6.8	42
KNOXVILLE	299	985.1	1020.9	14.4	4.4	9.5	0.2	21.7	18	- 3.9	4	0	6	6.1	83	130	48	45	12	1	T	T	1.0	28	12.5	W	10	3	8	19	7.7	30
MEMPHIS	79	1011.2	1021.6	17.2	6.7	12.1	2.0	24.4	9	- 5.6	3	0	3	4.4	64	40	- 71	20	5	2	T	T	0.9	23	17.0	S	10	6	8	16	6.6	59
NASHVILLE	180	998.6	1020.8	16.1	5.0	10.4	1.2	23.9	18	- 5.6	4	0	6	4.4	68	70	- 13	26	8	1	183	127	0.7	9	13.0	SW	10	7	6	17	6.9	42
OAK RIDGE	276			13.9	3.3	8.8	0.3	20.6	18+	- 6.1	4	0	9			120	25	34	13		25	25			9.4		27	5	5	20	7.4	
TEXAS																																
ABILENE	537	957.0	1018.7	21.7	8.9	15.3	3.6	27.2	22	- 2.8	2	0	3	5.6	57	7	- 21	6	2	0	0	0	2.8	19	13.0	N	27	16	5	9	4.4	74
AMARILLO	1098	892.7	1016.5	19.4	2.8	10.9	3.1	27.8	16	- 6.7	2	0	12	0.0	55	2	- 15	2	1	0	T	T	2.6	24	16.1	NE	26	13	6	11	5.1	66
AUSTIN	182	998.0	1020.1	24.4	11.1	17.9	3.0	28.9	11+	- 0.6	2	0	1	8.9	60	3	- 51	1	3	0	0	0	0.9	19	15.2	N	1	10	12	8	4.8	66
BROWNSVILLE	5	1018.6	1019.2	26.7	14.4	20.5	0.7	30.0	12+	2.8	29	0	0	14.4	73	1	- 33	1	1	0	0	0	2.1	13	17.0	N	1	19	9	2	3.7	71
CORPUS CHRISTI	12	1018.3	1019.7	26.1	12.8	19.4	1.6	31.1	11	2.2	29	0	0	13.3	72	2	- 42	2	1	0	0	0	2.3	12	18.3	N	1	12	13	5	4.5	62
DALLAS	147	1002.4	1019.9	22.2	10.0	15.9	3.2	28.3	20+	- 1.7	2	0	1	7.8	63	26	- 42	12	4	0	0	0	2.1	18	15.2	W	26	11	9	10	5.0	63
DEL RIO	313	982.7	1018.9	24.4	10.6	17.6	2.7	28.3	11	0.6	28	0	0	6.1	52	T	- 16	T	0	0	0	0	2.6	12	9.4	32	30+	13	9	8	4.3	
EL PASO	1194	884.5	1017.3	21.1	3.9	12.5	1.8	27.2	17	- 2.8	27	0	7	- 1.1	43	T	- 8	T	1	0	0	0	0.3	28	15.6	W	9	17	6	7	3.8	85
FORT WORTH	164	999.3	1019.9	22.8	9.4	15.9	3.3	28.3	8+	- 1.1	2	0	2	7.2	60	13	- 49	9	2	0	0	0	1.7	17	13.4	35	27	12	7	11	5.0	
GALVESTON U	2			21.7	16.7	19.1	1.8	25.0	11	5.0	2	0	0			24	- 67	16	2		0	0			15.2	N	1					68
HOUSTON U	12			23.3	13.9	18.6	2.1	27.2	7	2.2	2	0	0			13	- 90	6	6		0	0										
HOUSTON	15	1018.6	1020.8	23.9	12.2	18.2	2.2	28.9	7	0.6	3	0	0	12.2	75	40	- 58	35	4	1	0	0	1.3	11	13.0	34	27+	8	11	11	5.6	63
LUBBOCK	992	905.5	1017.3	21.7	4.4	13.1	4.3	29.4	17	- 5.6	2	0	10	1.1	49	3	- 11	2	2	0	T	0	1.7	22	13.0	24	8+	11	9	10	4.9	
MIDLAND	869	918.7	1017.3	22.2	5.6	13.8	2.4	27.2	22+	- 2.8	2	0	4	3.9	58	1	- 11	1	1	0	0	0	1.7	19	14.3	2	1	12	8	10	4.7	
PORT ARTHUR	5	1020.7	1021.2	23.3	12.2	17.9	2.5	27.8	18+	- 1.1	3	0	1	12.8	78	123	35	113	5	1	0	0	1.4	11	17.0	SW	11+	7	12	11	5.4	61
SAN ANGELO	580	951.6	1018.4	22.8	7.2	15.2	2.5	27.8	8	- 5.6	2	0	4	5.6	57	T	- 20	T	0	0	0	0	2.4	20	13.9	4	1	13	8	9	4.6	
SAN ANTONIO	240	991.9	1020.1	24.4	10.0	17.2	1.9	28.3	11	- 3.3	3	0	4	8.9	64	T	- 35	T	0	0	0	0	1.1	15	15.2	NE	1	12	12	6	4.4	68
VICTORIA	32	1016.3	1020.3	25.6	12.8	18.9	2.1	28.9	11	0.0	2	0	1	12.2	71	22	- 38	20	4	0	0	0	1.3	11	21.5Y	N	1	11	10	9	5.0	
WACO	153	1002.0	1020.3	23.9	10.6	17.4	3.7	30.0	11	0.6	29+	0	0	8.9	62	3	- 52	3	1	0	0	0	2.1	17	14.3	33	27	13	10	7	4.4	
WICHITA FALLS	303	982.4	1019.1	21.7	7.2	14.4	3.1	30.6	7	- 5.0	2	0	5	5.6	60	15	- 21	12	2	1	0	0	2.2	18	13.9	20	6+	10	10	10	5.1	
UTAH																																
MILFORD	1533	848.0		13.9	- 3.3	5.3	3.0	21.7	2	-12.8	27	0	23			9	- 5	9	1		104	76						9	9	12	5.7	
SALT LAKE CITY	1286	873.4	1019.1	12.2	0.0	6.2	3.6	19.4	15	- 8.9	25	0	15	- 1.1	66	19	- 14	13	6	1	81	51	1.7	15	17.4	5	6	7	4	19	7.0	52
WENDOVER	1291			10.0	0.0	4.9	1.8	16.7	20	- 8.9	25	0	14			6	- 2	4	5		T	T										
VERMONT																																
BURLINGTON	101	1006.4	1019.2	9.4	0.0	4.8	2.9	20.0	3	-10.6	21	0	12	1.1	77	36	- 31	14	15	0	61	51	1.9	19	15.6	SW	10	5	4	21	7.7	33
VIRGINIA																																
LYNCHBURG	279	986.5		15.0	2.8	9.0	0.7	22.8	18	- 5.0	4	0	13	2.2	66	67	2	32	6	1	T	0	1.2	25	13.9	SW	2	10	7	13	5.7	57
NORFOLK	7	1020.0	1021.1	15.6	5.0	10.3	-0.5	25.6	10	- 2.2	24	0	6	5.0	72	27	- 51	24	4	0	T	0	1.3	29	15.6	SW	28	12	9	9	5.2	61
RICHMOND	49	1015.2	1021.3	16.7	2.8	9.7	0.6	26.1	10	- 3.3	4	0	12	3.3	71	33	- 44	11	6	0	5	T	0.7	25	11.6	SW	28	12	9	9	4.9	58
ROANOKE	350	978.0	1020.6	15.0	1.7	8.4	0.3	22.8	9	- 5.0	23	0	12	0.6	61	44	- 25	19	6	1	T	0	1.1	27	13.0	32	28	6	13	11	6.0	
WASHINGTON																																
OLYMPIA	59	1007.8	1015.2	10.6	2.8	6.7	0.1	17.2	1	- 3.3	10	0	9	5.0	90	207	12	54	21	0	0	0	1.7	20	14.3	24	11	3	2	25	8.7	
QUILLAYUTE	55	1005.8	1013.4	11.1	3.9	7.3	0.3	15.6	3+	- 1.7	11+	0	4	6.1	93	408	70	97	24	2	0	0	1.5	14	12.1	5	19	3	3	24	8.6	13
SEATTLE TACOMA	122	998.3	1014.9	10.6	4.4	7.4	0.8	14.4	19+	- 0.6	8	0	1	4.4	83	174	38	49	20	0	0	0	1.1	15	13.0	17	25+	1	3	26	9.1	19
SPOKANE	718	930.6	1015.9	6.7	- 1.1	2.7	0.7	13.9	2	- 8.9	11	0	20	- 0.6	82	76	20	19	14	0	23	25	1.3	18	15.2	5	25	2	5	23	8.6	24
STAMPEDE PASS R	1206	876.7		2.8	- 1.1	0.7	1.1	11.1	3+	- 6.1	11	0	21			255	- 65	46	25		1278	559						2	0	28	9.3	
WALLA WALLA U	289			11.7	3.9	7.7	1.9	17.2	19	- 2.2	11	0	3			69	25	20	13		T	T			15.3	W	16	1	10	19	8.2	29
YAKIMA	321	977.3	1016.2	12.2	1.1	6.6	3.6	18.9	2	- 4.4	11	0	11	0.6	70	54	30	19	10	0	T	T	1.2	26	11.2	20	25+	2	7	21	7.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No. of days: Max 32 2 °C or above	No. of days: Min. 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C	C.	C.	C.	C.		C.				C.	%	Mm.	Mm.	Mm			Mm	Mm.	M.p.s.		M.p.s							%
WEST INDIES																																
SAN JUAN P.R.	4	1009.5	1012.0	28.3	22.8	25.3	-0.4	30.6	2+	20.6	27	0	0	21.7	80	203	38	72	15	4	0	0	0.6	4	11.2	N	25	7	15	8	5.4	61
SWAN ISLAND	9			28.3	23.3	25.8	-0.9	29.4	12+	20.6	29	0	0			169	- 19	34	19		0	0						5	15	10	5.9	
WEST VIRGINIA																																
BECKLEY	763	930.6	1020.6	12.2	1.1	6.7		20.6	9	- 7.8	4	0	16	0.6	69	86		29	11	2	102	102	2.3	22	16.5	23	2	5	8	17	7.1	
CHARLESTON	286	985.4	1020.0	15.0	2.8	9.0	1.6	26.1	9	- 6.7	20	0	15	2.8	70	77	7	30	12	1	97	102	1.5	23	12.5	24	10	4	9	17	7.2	
ELKINS	600	948.2	1020.7	13.3	- 2.2	5.6	0.8	22.2	10	-10.0	22+	0	20	0.6	77	67	- 3	29	13	0	198	178	1.4	25	13.0	31	10	7	5	18	7.0	
HUNTINGTON	252	989.5	1020.2	13.3	3.3	8.3	0.8	22.2	9	- 2.2	14+	0	14	3.3	75	78	15	37	12	1	104	76	1.4	21	15.6	23	10	5	7	18	7.2	
PARKERSBURG U	187			12.8	2.2	7.4	0.3	22.2	9	- 3.9	20	0	14			99	39	29	13		13	25			14.3	W	10					40
WISCONSIN																																
GREEN BAY	208	991.5	1017.9	5.0	- 2.8	1.2	0.0	12.8	7	-12.2	30	0	20	- 3.3	73	40	- 8	12	13	1	74	25	1.6	32	17.4	NW	27	2	4	24	8.3	25
LA CROSSE	198	993.6	1018.8	6.7	- 2.2	2.0	0.8	15.6	16	-11.1	30	0	21	- 2.8	74	8	- 42	5	6	0	5	T	0.9	31	11.6	33	30	5	6	19	7.2	
MADISON	262	986.1	1018.1	7.2	- 2.8	2.2	1.1	16.7	7	-11.1	30+	0	22	- 2.2	75	33	- 22	16	10	2	T	T	1.4	29	15.6	NW	27	5	9	16	7.3	38
MILWAUKEE	205	991.9	1017.6	7.8	- 1.1	3.3	1.2	18.9	7	- 9.4	30	0	21	- 1.1	72	69	13	28	10	3	51	25	1.7	29	16.1	NW	28	1	5	24	8.6	23
WYOMING																																
CASPER	1627	836.8	1017.4	9.4	- 5.0	2.3	1.4	16.7	16+	-22.2	8	0	23	- 6.1	59	11	- 7	5	7	0	203	102	4.6	25	15.6	24	21	6	8	16	6.6	
CHEYENNE	1867	811.7	1017.5	11.1	- 3.3	3.8	2.6	18.9	15	-15.0	9	0	21	- 6.1	53	7	- 8	4	5	0	58	25	2.9	27	17.0	NW	26	10	4	16	6.3	52
LANDER	1696	828.3	1017.7	7.8	- 5.6	1.2	1.8	16.7	2	-21.7	9	0	30	- 6.1	61	13	- 10	13	2	0	168	152	0.8	24	21.5	SW	16	4	12	14	6.7	72
SHERIDAN	1208	878.4	1019.1	7.2	- 8.9	- 0.8	-1.6	16.7	16	-22.8	9+	0	30	- 8.9	60	16	- 5	6	5	0	282	127	1.3	31	14.8	NW	26	4	11	15	6.8	52

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or with a measurable amount the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.
A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

V Sun below horizon November 19 - 30, inclusive.
X Sun below horizon November 24 - 30, inclusive.

HEATING DEGREE DAYS

(Base 65°F.)

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	331	537	462
HUNTSVILLE	376	555	565
MOBILE	173	205	235
MONTGOMERY	266	343	398
ALASKA			
ANCHORAGE	1419	3518	
ANNETTE	784	2070	2082
BARROW	1752	5980	6149
BARTER ISLAND	1727	5691	5923
BETHEL	1318	3855	3801
COLD BAY	977	3526	3114
FAIRBANKS	1929	3964	4181
JUNEAU	1191	3116	2768
KING SALMON	1329	3861	3346
KOTZEBUE	1539	4264	4527
MC GRATH	1684	4231	4154
NOME	1429	4261	4219
ST. PAUL ISLAND	901	3604	3581
SHEMYA	821	3221	3213
YAKUTAT	1216	3510	2811
ARIZONA			
FLAGSTAFF	757	1544	1740
PHOENIX	139	147	256
TUCSON	126	146	256
WINSLOW	555	837	962
YUMA	82	82	148
ARKANSAS			
FORT SMITH	325	540	589
LITTLE ROCK	309	510	601
TEXARKANA	212	336	423
CALIFORNIA			
BAKERSFIELD	222	255	319
BISHOP	549	788	866
BLUE CANYON	619	1110	1130
EUREKA U	368	1464	1528
FRESNO	238	304	417
LONG BEACH	130	135	208
LOS ANGELES	102	103	292
LOS ANGELES U	88	88	169
MT SHASTA R	699	1322	1284
OAKLAND	263	462	584
RED BLUFF	266	297	371
SACRAMENTO	303	368	456
SANDBERG U	489	738	712
SAN DIEGO	113	117	181
SAN FRANCISCO	301	730	668
SAN FRANCISCO U	241	814	817
SANTA CATALINA	209	308	240
SANTA MARIA	268	620	704
STOCKTON	273	325	437
COLORADO			
ALAMOSA	910	1941	2147
COLORADO SPRINGS	728	1361	1447
DENVER	699	1160	1379
GRAND JUNCTION	628	902	1129
PUEBLO	666	1116	1130
CONNECTICUT			
BRIDGEPORT	549	912	988
HARTFORD	554	1050	1188
NEW HAVEN	557	1050	1094
DELAWARE			
WILMINGTON	545	975	909
DIST.OF COLUMBIA			
WASH NATL AP	462	749	769
FLORIDA			
APALACHICOLA U	152	163	169
DAYTONA BEACH	88	91	75
FORT MYERS	44	44	24
JACKSONVILLE	173	193	156
KEY WEST	1	1	0
LAKELAND U	80	83	57
MIAMI	27	27	0
ORLANDO	70	71	72
PENSACOLA	193	223	214
TALLAHASSEE	190	223	226
TAMPA	85	92	60
WEST PALM BEACH	44	44	6
GEORGIA			
ATHENS	356	530	532
ATLANTA	379	561	559
AUGUSTA	341	463	411
COLUMBUS	277	340	420
MACON	308	402	368
ROME	425	665	659
SAVANNAH	259	309	293
IDAHO			
BOISE	654	1223	1339
IDAHO FALLS 42NW R	1013	2018	2093
IDAHO FALLS 46W R	948	1925	1999
LEWISTON	641	1090	1282
POCATELLO	812	1596	1565
ILLINOIS			
CAIRO U	434	713	713
CHICAGO O HARE	669	1229	1317
CHICAGO MIDWAY	653	1103	1160
MOLINE	695	1203	1217
PEORIA	666	1201	1178
ROCKFORD	773	1319	1366
SPRINGFIELD	618	1111	1059
INDIANA			
EVANSVILLE	554	952	892
FORT WAYNE	735	1469	1275
INDIANAPOLIS	631	1110	1129
SOUTH BEND	658	1233	1266
IOWA			
BURLINGTON	676	1169	1183
DES MOINES	789	1313	1308
DUBUQUE	826	1466	1555
SIOUX CITY	881	1426	1353
WATERLOO	869	1492	1506
KANSAS			
CONCORDIA	711	1078	1038
DODGE CITY	651	983	950
GOODLAND	731	1244	1278
TOPEKA	620	1002	999
WICHITA	499	779	880
KENTUCKY			
COVINGTON	602	1100	1035
LEXINGTON	570	975	902
LOUISVILLE	531	890	911
LOUISIANA			
ALEXANDRIA	197	332	329
BATON ROUGE	143	198	247
LAKE CHARLES	113	154	229
NEW ORLEANS	150	183	211
SHREVEPORT	181	280	344
MAINE			
CARIBOU	899	2145	2255
PORTLAND	710	1571	1575
MARYLAND			
BALTIMORE	555	976	897
MASSACHUSETTS			
BLUE HILL OBS R	610	1172	1201
BOSTON	535	946	988
NANTUCKET	567	1181	1032
PITTSFIELD	722	1621	1658
WORCESTER	649	1379	1411
MICHIGAN			
ALPENA	932	1874	1938
DETROIT	703	1205	1185
DETROIT M WAYNE CO	688	1264	1187
DETROIT WILLOW RUN	760	1479	1197
FLINT	787	1613	1397
GRAND RAPIDS	680	1264	1436
HOUGHTON LAKE	911	1867	
LANSING	767	1483	1410
MARQUETTE U	956	1854	1843
MUSKEGON	741	1366	1322
SAULT STE MARIE	1028	2086	2011
MINNESOTA			
DULUTH	1187	2342	2273
INTERNATIONAL FALLS	1371	2550	2483
MINNEAPOLIS	1042	1803	1761
ROCHESTER	988	1786	1724
ST CLOUD	1143	2024	1914
MISSISSIPPI			
JACKSON	270	425	361
MERIDIAN	257	406	420
VICKSBURG U	210	331	332
MISSOURI			
COLUMBIA	501	871	956
KANSAS CITY	478	712	871
ST JOSEPH			
ST LOUIS	534	948	938
SPRINGFIELD	488	865	868
MONTANA			
BILLINGS	910	1493	1591
GLASGOW	1225	2032	2060
GREAT FALLS	1075	1805	1803
HAVRE	1274	2083	2047
HELENA	930	1676	1987
KALISPELL	1023	2114	2144
MILES CITY	1169	1841	1660
MISSOULA	921	1729	2097
NEBRASKA			
GRAND ISLAND	799	1280	1329
LINCOLN U	730	1158	1108
NORFOLK	894	1480	1390
NORTH PLATTE	863	1475	1454
OMAHA	741	1215	1205
SCOTTSBLUFF	801	1438	1473
VALENTINE	928	1634	1621
NEVADA			
ELKO	769	1514	1753
ELY	801	1614	1836
LAS VEGAS	286	333	465
RENO	715	1462	1625
WINNEMUCCA	726	1440	1656
NEW HAMPSHIRE			
CONCORD	697	1472	1560
MT WASHINGTON OBS	1132	4147	4147
NEW JERSEY			
ATLANTIC CITY	513	971	839
ATLANTIC CITY U	463	773	766
NEWARK	480	829	903
TRENTON U	494	878	897
NEW MEXICO			
ALBUQUERQUE	541	803	883
CLAYTON	558	998	1081
RATON	666	1256	1419
ROSWELL	425	692	793
SILVER CITY	429	667	714
NEW YORK			
ALBANY	673	1399	1374
BINGHAMTON	709	1537	1569
BUFFALO	700	1420	1414
NEW YORK U	475	808	803
J.F. KENNEDY	513	868	848
NEW YORK LA GUARDIA	469	764	778
ROCHESTER	639	1303	1328
SYRACUSE	652	1324	1325
NORTH CAROLINA			
ASHEVILLE	593	1087	981
CAPE HATTERAS R	296	373	351
CHARLOTTE	437	670	568
GREENSBORO	438	689	738
RALEIGH	425	652	635
WILMINGTON	276	333	365
NORTH DAKOTA			
BISMARCK	1307	2209	1944
FARGO	1253	2211	1965
WILLISTON	1297	2174	2058
OHIO			
AKRON	690	1296	1212
CINCINNATI OBS	600	1034	914
CLEVELAND	655	1290	1261
COLUMBUS	671	1223	1151
DAYTON	674	1185	1090
MANSFIELD	723	1419	1310
TOLEDO	729	1343	1331
YOUNGSTOWN	728	1457	1328
OKLAHOMA			
OKLAHOMA CITY	338	510	677
TULSA	376	591	698
OREGON			
ASTORIA	514	1390	1422
BURNS U	781	1598	1641
EUGENE	517	978	1148
MEACHAM	876	2055	1994
MEDFORD	571	1013	1128
PENDLETON	590	1000	1172
PORTLAND	531	975	1099
SALEM	530	1047	1111
SEXTON SUMMIT R	690	1577	1442
PENNSYLVANIA			
ALLENTOWN	640	1239	1136
ERIE	644	1230	1232
HARRISBURG	592	973	1009
PHILADELPHIA	538	983	972
PITTSBURGH	659	1258	1215
PITTSBURGH U	593	1106	1076
READING U	533	949	908
SCRANTON	642	1264	1347
WILLIAMSPORT	703	1439	1212
RHODE ISLAND			
BLOCK ISLAND	523	995	995
PROVIDENCE	577	1131	1144
SOUTH CAROLINA			
CHARLESTON	280	331	341
CHARLESTON U	219	247	244
COLUMBIA	351	478	429
GNVLE-SPARTANBURG	394	602	550
SOUTH DAKOTA			
ABERDEEN	1181	2013	1807
HURON	1083	1888	1708
RAPID CITY	905	1650	1577
SIOUX FALLS	1016	1753	1646
TENNESSEE			
BRISTOL	533	859	860
CHATTANOOGA	459	718	629
KNOXVILLE	472	713	690
MEMPHIS	344	580	595
NASHVILLE	423	691	683
OAK RIDGE	511	814	762
TEXAS			
ABILENE	198	317	465
AMARILLO	395	690	793
AUSTIN	109	140	256
BROWNSVILLE	48	52	66
CORPUS CHRISTI	68	73	120
DALLAS	183	263	383
DEL RIO	93	119	249
EL PASO	307	435	498
FORT WORTH	182	261	389
GALVESTON U	63	79	138
HOUSTON U	85	109	165
HOUSTON	99	126	189
LUBBOCK	283	464	705
MIDLAND	242	408	468
PORT ARTHUR	115	161	229
SAN ANGELO	192	319	386
SAN ANTONIO	131	188	235
VICTORIA	83	100	156
WACO	126	178	313
WICHITA FALLS	247	368	480
UTAH			
MILFORD	700	1260	1409
SALT LAKE CITY	649	1170	1349
WENDOVER	717	1206	1242
VERMONT			
BURLINGTON	725	1599	1730
VIRGINIA			
LYNCHBURG	496	836	814
NORFOLK	437	650	544
RICHMOND	466	806	745
ROANOKE	527	895	829
WALLOPS ISLAND	499	781	
WASHINGTON			
OLYMPIA	624	1498	1395
QUILLAYUTE	586	1684	1602
SEATTLE TACOMA	585	1254	1304
SPOKANE	838	1521	1574
STAMPEDE PASS R	943	2626	2666
WALLA WALLA U	568	924	1078
YAKIMA	629	1092	1434
WEST VIRGINIA			
BECKLEY	625	1298	
CHARLESTON	507	867	908
ELKINS	679	1461	1298
HUNTINGTON	535	967	905
PARKERSBURG U	586	1050	930
WISCONSIN			
GREEN BAY	917	1785	1660
LA CROSSE	873	1500	1545
MADISON	862	1698	1643
MILWAUKEE	804	1543	1611
WYOMING			
CASPER	862	1640	1680
CHEYENNE	781	1524	1727
LANDER	919	1777	1804
SHERIDAN	1023	1831	1762

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

NOVEMBER 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
								†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE				†DAMAGE	
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS
Alabama	5	1	0	1	5																								
Alaska										0	0	5	0																
Arizona *																													
Arkansas	1	1	0	0	5					0	0	°5	C																
California	4	1	0	10	5																								
Colorado *																													
Connecticut *																													
Delaware *																													
Florida N																													
Georgia *																													
Hawaii																										2	0	0	0
Idaho												4																	
Illinois *																													
Indiana										0	0	4	0					0	0	4	3								
Iowa *																													
Kansas *																													
Kentucky																			?	?	?								
Louisiana										0	0	4	0	0	0	?	0									0	0	4	0
Maine										0	1	4	0													0	0	R6	0
Maryland *																													
Massachusetts										1	0	4	0													0	0	R3	0
Michigan										28	0	5	0					2	0	5	0	0	0	5	0				
Minnesota																										0	?	5	0
Mississippi	6	1	0	9	5																								
Missouri *																													
Montana *																													
Nebraska *																													
Nevada *																													
New Hampshire *																													
New Jersey *																													
New Mexico *																													
New York												4																	
North Carolina	1	1	0	9	5					0	0	5	0																
North Dakota *																													
Ohio																		17+	?	7									
Oklahoma *																													
Oregon N																													
Pacific Area *																													
Pennsylvania										0	2	4	0	0	0	3	0												
Puerto Rico *																													
Rhode Island *																													
South Carolina *																													
South Dakota *																													
Tennessee										0	0	5	0					0	?	°6	C								
Texas *																													
Utah *																													
Vermont *																													
U. S. Virgin Is. *																													
Virginia	3	1	0	2	5					0	0	3	0																
Washington *																													
West Virginia *																													
Wisconsin										0	0	5	0					0	0	5	0								
Wyoming *																													

° Includes crop damage
C Crop damage
R Rain
N No report received by printing deadline

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:
1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

NOVEMBER 1966

Elmer R. Nelson, Office of Hydrology

Record flooding occurred on the Piscataquis River and moderate flooding on the Kennebec and Androscoggin Rivers in Maine during November.

A flash flood in the Waimea area of Hawaii on November 20 caused 2 deaths by drowning. Heavy rains in the Waikii area caused a normally dry stream to overflow as much as 5 feet.

ST. LAWRENCE DRAINAGE

Lake Erie.--Heavy rain and wet snow occurred over the Sandusky Basin in Ohio on the 1st and 2d. This was followed by frequent light rains and snowmelt through the 11th. Runoff from the rain and snowmelt caused the Sandusky River to rise to near bankfull stage.

ATLANTIC SLOPE DRAINAGE

Moderate flooding occurred on the Kennebec and Androscoggin Rivers in Maine from the 3d through the 5th. Flash flooding resulted on many small streams in Maine and scattered sections of upper New Hampshire. A record-breaking flood occurred on the Piscataquis River on the 3d and 4th. A maximum flow of 22,800 c.f.s. occurred on the 4th on the Piscataquis River near Dover-Foxcroft, Maine. The previous maximum flow at this point was 21,500 c.f.s. on April 29, 1923. A maximum flow of 60,100 c.f.s. occurred on the 4th on the Piscataquis near Medford, Maine. The previous maximum flow was 50,200 c.f.s. on March 20, 1936. Minor lowland flooding and minor flash flooding occurred in parts of upper New Hampshire. Overall flood damage in Maine was estimated in the tens of thousands of dollars. There was no loss of life. This flooding was due to heavy rainfall on the 2d and 3d. Some local reports of rainfall in Maine during this storm ran as high as 5 inches to in excess of 6 inches. The total damages from flooding in Maine were estimated at about $500,000. The State of New Hampshire reported no flood losses.

Extremely heavy showers of short duration (about 30 minutes) in central and northern New Jersey on the 28th caused considerable storm drainage flooding. No stream flooding was reported.

MISSISSIPPI SYSTEM

Missouri Basin.--Moderate drought conditions continued in the upper portion of the Missouri Basin during November. The January through October total precipitation at Helena, Mont., was 4.80 inches. This was the least precipitation recorded at Helena in 86 years of record. The heaviest rain in the lower portion occurred on the 24th and was localized near the mouth of the Kansas River. Local amounts of near one-half inch to over an inch were reported. There were no significant rises on the Missouri River or tributaries.

Releases from upstream reservoirs were reduced for the winter season on the 23d with the navigation season ending at the end of the month.

Ohio Basin.--Heavy rain and wet snow on the 1st and 2d followed by frequent light rains and snowmelt through the 11th caused the Scioto River and tributaries in Ohio to rise to near bankfull stage from the 9th through the 11th. Another moderate rise developed over the upper Scioto on the 27th and 28th following moderate to heavy rains.

Heavy rains on the 26th and 27th caused minor flooding on the lower White River at Elliston, Ind., on the 29th. Flood stage was reached, but not exceeded, at Elliston, Ind., on the 28th and 29th.

Arkansas Basin.--Rainfall in the Arkansas Basin during November was much below normal. More than 20 stations reported no measurable precipitation during the month. The average stage on the Cimarron River at Ralston, Okla., was 1.5 feet, which is the lowest on record for November. The normal mean stage for Ralston is 4.0 feet.

WEST GULF OF MEXICO DRAINAGE

Heavy rain on the 11th caused light flooding on the Calcasieu River at Hineston and Oakdale, La., on the 13th and at Old Town Bay, La., on the 17th and 18th.

PACIFIC SLOPE DRAINAGE

Heavy rain on the 7th set a new record at Los Angeles, Calif., for November. On that date, 3.85 inches of rain was recorded. The Los Angeles River, normally a dry river, rose rapidly causing strong currents to overturn a canoe and drown its occupant.

A minor rise occurred on streams in the Sacramento Basin during the third week in November. Brief overflow occurred at Tisdale Weir and Sutter Bypass on the 22d. By the end of the month, the streams started to rise again as a new series of storms started moving toward California.

Heavy precipitation from the 10th to the 16th caused the first substantial rise for the season in the Columbia Basin. Precipitation amounts during the period ranged from 4 inches at valley locations to 7 inches at mid-Cascade elevations. This series of storms accounted for much of the above-average November totals west of the Cascades. Most of the Willamette tributaries rose 4 to 5 feet on the 11th and 12th. This was followed by a larger rise on the 14th-16th. During this rise the Santiam River at Jefferson, Oreg., and the Willamette River at Harrisburg, Oreg., reached near bankfull stages. The flow of the Columbia River at Bonneville Dam remained almost constant throughout the month at 110,000 c.f.s. The Columbia River at Vancouver, Wash., averaged 3.4 feet during November. This was 2.7 feet below the long-term normal.

FLOOD STAGE DATA

(All dates in November unless otherwise specified)

NOVEMBER 1966

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft.			Ft.	
ATLANTIC SLOPE DRAINAGE					
Kennebec: Augusta, Maine	13	3	5	16.7	4
MISSISSIPPI SYSTEM					
Ohio Basin					
White: Spencer, Ind.	14	28	29	14.0	28
Elliston, Ind.	18	29	29	18.15	29

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft.			Ft.	
WEST GULF OF MEXICO DRAINAGE					
Calcasieu: Hineston, La.	12	13	13	12.5	13
Oakdale, La.	12	13	13	13.2	13
Old Town Bay, La.	4	17	18	4.1	17,18

* Provisional

RAWINSONDE DATA

Average monthly values

NOVEMBER 1966

ALBANY, N. Y.
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	86	3.3	83	[illegible]	3.3
1000	30	166			222	3.5
950	30	584	4.0	73	228	7.4
900	30	1,023	2.7	75	249	10.7
850	30	1,485	1.7	71	255	13.4
800	30	1,973	- .2	66	255	14.8
750	30	2,483	- 2.4	60	262	16.9
700	30	3,034	- 4.3	52	265	19.8
650	30	3,609	- 7.3	54	264	22.0
600	30	4,236	-10.9	46	260	24.7
550	30	4,895	-14.8	42	260	25.8
500	30	5,616	-19.6	43	256	28.2
450	30	6,383	-25.5	42	255	29.5
400	30	7,234	-31.7	37	257	30.3
350	30	8,164	-38.4	38	259	31.3
300	30	9,207	-45.8		271	37.5
250	30	10,401	-53.1		274	38.9
200	29	11,809	-58.[illegible]		276	44.3
175	28	12,649	-58.9		275	40.8
150	28	13,617	-58.5		273	37.3
125	28	14,761	-58.9		265	31.9
100	28	16,158	-60.0		264	27.4
80	28	17,548	-60.6		266	23.3
70	28	18,378	-60.4		263	20.0
60	28	19,340	-60.0		262	17.9
50	28	20,477	-60.2		263	16.5
40	28	21,870	-59.6		265	16.7
30	26	23,665	-59.2		268	20.2
25	25	24,808	-59.1		268	23.3
20	23	26,209	-57.6		272	33.2
15	21	28,019	-56.4		272	40.6
10	17	30,567	-54.5		272	49.3
7	7	32,877	-53.9			

ALBUQUERQUE, N. MEX.
841 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,619	3.4	52	52	1.9
1000	30	185				
950	30	608				
900	30	1,056				
850	30	1,527				
800	30	2,025	7.1	40	262	4.3
750	30	2,552	4.6	41	273	10.9
700	30	3,113	1.6	43	278	16.9
650	30	3,704	- 1.7	41	273	20.2
600	30	4,340	- 5.1	33	271	23.1
550	30	5,013	- 9.1	31	271	27.8
500	30	5,749	-14.2	33	270	31.1
450	30	6,536	-19.8	33	267	33.8
400	30	7,404	-26.0	32	266	38.1
350	30	8,358	-32.9	34	265	41.4
300	30	9,425	-40.9	35	265	49.1
250	30	10,642	-49.7		268	56.1
200	30	12,075	-58.1		269	63.1
175	30	12,909	-61.7		273	60.2
150	30	13,856	-64.5		272	55.6
125	30	14,963	-66.8		272	47.8
100	28	16,307	-68.8		274	37.5
80	28	17,642	-68.1		276	27.0
70	28	18,447	-65.9		278	19.4
60	26	19,382	-65.5		285	13.4
50	25	20,500	-62.3		291	9.1
40	24	21,886	-60.2		286	7.4
30	24	23,690	-57.7		292	9.1
25	24	24,843	-56.2		272	12.0
20	23	26,265	-54.0		272	18.3
15	18	28,108	-52.0		267	30.9
10	7	30,773	-48.4			
7						

AMARILLO, TEXAS
893 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	1,095	4.8	71	249	6.2
1000	29	156				
950	29	584				
900	29	1,033				
850	29	1,499	10.1	47	259	16.7
800	29	2,003	9.0	38	266	19.6
750	29	2,535	6.2	35	271	21.[illegible]
700	29	3,096	2.6	32	272	21.[illegible]
650	29	3,689	- .7	32	276	21.8
600	29	4,326	- 4.6	31	274	25.8
550	29	5,000	- 9.2	33	272	28.2
500	29	5,737	-14.0	37	273	31.7
450	29	6,521	-19.5	35	276	37.3
400	29	7,394	-26.0	34	276	41.8
350	29	8,347	-33.0	38	273	49.5
300	29	9,412	-40.9	41	274	57.7
250	29	10,630	-49.4		276	68.0
200	29	12,061	-58.0		277	71.7
175	29	12,895	-62.0		278	70.1
150	28	13,837	-64.7		276	66.0
125	27	14,945	-66.1		278	56.7
100	27	16,294	-67.4		280	47.4
80	26	17,639	-66.8		275	31.5
70	23	18,439	-65.9		276	23.5
60	22	19,379	-63.8		271	15.2
50	22	20,502	-61.7		278	9.1
40	21	21,887	-59.5		272	7.4
30	20	23,708	-56.7		273	12.2
25	18	24,868	-55.0		274	15.7
20	18	26,299	-52.9		277	18.8
15	11	28,178	-50.8		273	30.9
10						
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ANCHORAGE, ALASKA
1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	45	- 8.8	82	353	1.6
1000	30	104			358	3.7
950	30	509	- 4.0	60	11	6.6
900	30	934	- 4.4	59	17	5.[illegible]
850	30	1,383	- 5.8	60	358	4.3
800	30	1,856	- 7.8	62	339	5.6
750	30	2,354	-10.1	63	336	6.4
700	30	2,885	-13.1	62	345	8.4
650	30	3,443	-16.4	[illegible]	333	8.7
600	30	4,044	-19.9	60	331	9.5
550	30	4,681	-23.5	57	319	11.1
500	30	5,374	-28.4	54	31[illegible]	12.6
450	30	6,116	-33.1	49	305	18.1
400	30	6,941	-38.4	47	303	22.1
350	30	7,847	-44.2	41	298	22.5
300	30	8,868	-49.4		297	25.4
250	30	10,054	-52.0		289	29.3
200	30	11,4[illegible]	-52.5		280	25.4
175	30	12,360	-51.4		280	23.9
150	30	13,360	-51.5		282	[illegible]
125	30	14,542	-51.8		280	20.2
100	30	15,988	-51.7		288	19.0
80	30	17,435	-51.4		287	17.7
70	28	18,285	-51.1		294	14.4
60	28	19,287	-51.5		295	13.4
50	28	20,471	-51.4		311	11.7
40	28	21,921	-50.9		318	12.8
30	28	23,796	-50.4		336	12.4
25	28	24,965	-50.1		340	14.8
20	27	26,454	-49.7		345	17.5
15	23	28,360	-49.1		348	20.6
10	10	31,010	-48.5			
7						

* ANNETTE, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	37	3.4	78	[illegible]	2.5
1000	30	92			132	2.5
950	30	505	.6	78	157	4.7
900	30	[illegible]	- 1.7	79	194	6.2
850	30	1,393	- 4.1	84	220	7.8
800	30	1,869	- 6.6	84	234	11.5
750	30	2,370	- 9.1	77	249	14.0
700	30	2,902	-12.3	72	255	15.3
650	30	3,461	-15.6	70	267	15.0
600	30	4,066	-19.0	62	275	15.0
550	30	4,707	-22.8	58	[illegible]	17.9
500	[illegible]	5,400	-27.7	56	277	21.6
450	29	6,147	-32.9	52	277	25.8
400	29	[illegible]	[illegible]	[illegible]	285	30.1
350	29	7,876	-44.5	54	287	33.4
300	29	8,896	-49.5		291	29.7
250	28	[illegible]	-52.2		297	28.[illegible]
200	28	11,528	-53.0		297	25.8
175	28	12,390	-52.7		297	23.3
150	28	13,385	-52.9		299	23.1
125	28	14,559	-53.2		301	20.0
100	27	15,998	-53.6		307	17.9
80	27	17,430	-54.1		315	16.3
70	27	18,286	-54.1		319	15.0
60	26	19,273	-54.0		324	13.8
50	26	20,443	-53.9		340	13.0
40	26	21,874	-54.4		35[illegible]	11.8
30	25	23,717	-54.6		3	17.5
25	25	24,885	-54.1		11	16.7
20	24	26,324	-53.4		14	19.4
15	19	28,190	-53.2		23	21.8
10	13	30,809	-52.7		19	20.8
7	8	33,186	-50.7			

ATHENS, GA.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	246	7.0	83	331	1.7
1000	30	180				
950	30	604	9.5	66	278	3.5
900	30	1,054	8.4	63	269	7.6
850	30	1,525	6.5	62	278	10.5
800	30	2,021	4.4	55	280	13.4
750	30	2,541	2.3	48	272	15.3
700	30	3,100	.1	39	273	16.5
650	30	3,683	- 3.2	42	272	18.1
600	30	4,319	- 6.7	36	274	21.6
550	30	4,986	-10.5	32	272	26.8
500	30	5,721	-15.3	31	273	31.3
450	30	6,498	-20.9	35	272	34.2
400	30	7,369	-26.9	35	283	41.6
350	30	8,319	-33.6	37	282	47.2
300	30	9,383	-41.2	42	282	52.6
250	30	10,598	-49.6		285	62.9
200	30	12,031	-57.5		285	67.4
175	30	12,868	-60.4		285	68.2
150	29	13,827	-62.4		281	63.5
125	29	14,945	-64.9		282	52.8
100	29	16,300	-66.3		281	39.8
80	29	17,650	-66.3		276	25.8
70	29	18,460	-65.1		275	19.2
60	29	19,404	-62.8		280	14.8
50	28	20,535	-60.5		272	11.7
40	28	21,931	-58.4		272	13.8
30	27	23,751	-55.3		273	18.8
25	27	24,919	-53.8		270	22.7
20	27	26,357	-51.8		268	27.6
15	24	28,236	-49.3		265	40.2
10						
7						

* BARROW, ALASKA
1017 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	8	-14.4	82	112	5.4
1000	29	135	-13.9	79	103	8.0
950	29	526	-13.5	81	104	6.0
900	29	935	-14.3	74	119	3.1
850	29	1,368	-15.3	69	219	2.1
800	29	1,825	-16.6	62	245	2.9
750	29	2,310	-18.2	65	256	6.4
700	29	2,823	-20.3	62	258	8.7
650	28	3,364	-23.0	56	267	9.7
600	28	3,950	-26.2	54	270	11.1
550	28	4,573	-29.7	51	272	13.0
500	28	5,251	-33.7	53	272	16.3
450	28	5,977	-38.3	50	278	19.0
400	28	6,786	-43.1	57	295	19.0
350	28	7,676	-48.1		293	25.1
300	27	8,666	-52.9		295	27.2
250	27	9,838	-53.3		296	26.8
200	27	11,280	-51.5		291	26.2
175	27	12,150	-50.4		289	26.4
150	27	13,154	-50.6		289	25.3
125	26	14,347	-50.7		285	24.1
100	24	15,792	-50.3		283	24.9
80	24	17,247	-50.5		284	27.8
70	24	18,116	-50.7		286	28.2
60	24	19,118	-51.1		285	29.1
50	24	20,302	-51.4		287	31.9
40	23	21,737	-52.1		286	35.2
30	23	23,596	-52.5		285	40.8
25	23	24,774	-52.4		288	42.7
20	19	26,227	-52.5		287	44.5
15	16	28,083	-51.9		292	48.6
10	11	30,849	-49.[illegible]			
7	5	33,189	-47.9			

BARTER IS., ALASKA
1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	15	-13.3	66	108	3.9
1000	28	139	-12.6	74	106	3.3
950	28	532	-12.7	76	146	3.1
900	28	943	-12.9	66	203	2.5
850	28	1,378	-14.1	62	250	4.5
800	28	1,838	-15.5	55	261	5.2
750	28	2,324	-17.6	51	275	5.6
700	28	2,838	-19.9	52	290	7.4
650	28	3,386	-22.5	50	298	11.3
600	28	3,971	-25.4	47	304	15.[illegible]
550	28	4,594	-28.7	47	302	18.8
500	28	5,276	-32.7	50	302	22.3
450	28	6,009	-37.1	52	304	25.3
400	28	6,819	-42.1	55	302	30.1
350	28	7,713	-47.3		303	32.2
300	28	8,721	-52.4		294	32.8
250	28	9,895	-53.4		292	32.1
200	28	11,335	-52.1		296	28.[illegible]
175	28	12,203	-50.8		293	29.3
150	28	13,207	-50.5		293	29.3
125	28	14,397	-50.2		293	27.8
100	27	15,852	-50.1		295	27.4
80	27	17,309	-50.8		297	28.9
70	24	18,190	-51.1		298	29.7
60	24	19,190	-51.7		299	32.6
50	23	20,370	-51.8		303	33.4
40	22	21,809	-53.0		306	35.5
30	22	23,666	-52.7		307	38.9
25	21	24,863	-52.7		306	42.7
20	20	26,309	-53.0		307	46.2
15	14	28,234	-51.0		312	51.7
10						
7						

BETHEL, ALASKA
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	39	- 5.7	86	177	1.9
1000	30	125			258	2.3
950	30	526	- 4.6	75	237	3.9
900	30	954	- 6.[illegible]	72	242	4.5
850	30	1,401	- 7.1	64	252	5.4
800	30	1,873	- 8.6	59	275	8.[illegible]
750	30	2,371	-10.7	[illegible]	275	9.7
700	30	2,899	-13.[illegible]	58	270	11.5
650	30	3,458	-15.[illegible]	56	274	13.4
600	30	4,061	-19.[illegible]	53	272	15.2
550	30	4,698	-22.8	55	273	17.5
500	30	5,397	-27.1	49	275	20.6
450	30	6,142	-31.8	45	280	22.7
400	30	6,973	-37.1	42	275	25.1
350	30	7,886	-42.[illegible]	35	267	28.9
300	30	8,913	-48.2		266	31.[illegible]
250	30	10,100	-52.7		263	30.9
200	30	11,535	-53.9		266	25.8
175	30	12,395	-52.5		27[illegible]	22.9
150	30	13,391	-52.4		265	22.7
125	29	14,576	-52.3		270	18.6
100	29	16,023	-51.4		260	17.7
80	29	17,472	-51.5		268	18.5
70	29	18,337	-51.7		269	14.8
60	29	19,338	-51.[illegible]		271	13.2
50	29	20,525	-51.2		279	[illegible]
40	29	21,975	-51.1		282	7.8
30	28	23,856	-49.9		298	8.9
25	25	25,056	-49.7		315	9.7
20	25	26,517	-49.7		315	10.5
15	18	28,414	-49.[illegible]		329	15.5
10						
7						

BISMARCK, N. DAK.
958 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	505	- 8.6	80	344	1.7
1000	30	169				
950	30	572			231	1.2
900	30	996	- [illegible]	66	287	8.5
850	30	1,450	- [illegible]	56	290	13.8
800	30	1,931	- 3.6	57	288	18.6
750	30	2,436	- 5.8	55	291	23.3
700	30	2,977	- 8.3	53	291	26.2
650	30	3,544	-11.2	51	290	29.1
600	30	4,160	-14.7	52	288	32.1
550	30	4,809	-18.7	49	287	37.3
500	30	5,518	-23.4	47	286	41.[illegible]
450	30	6,277	-28.[illegible]	44	286	44.7
400	30	7,116	-34.[illegible]	45	286	47.7
350	30	8,036	-41.4	45	289	53.[illegible]
300	30	9,067	-48.4		290	59.8
250	30	10,250	-54.5		289	61.8
200	30	11,664	-58.0		286	60.0
175	30	12,507	-57.3		285	52.3
150	30	13,481	-57.1		285	48.4
125	30	14,637	56.9		286	40.8
100	28	16,047	-57.2		[illegible]	33.4
80	27	17,452	-58.[illegible]		287	28.[illegible]
70	26	18,290	-58.[illegible]		287	26.0
60	25	19,262	-58.8		292	21.4
50	25	20,405	-59.7		296	19.4
40	23	21,806	[illegible]		300	15.5
30	21	23,618	-58.[illegible]		302	16.9
25	21	24,766	-58.2		303	18.8
20	19	26,170	-57.9		306	18.6
15	16	27,984	-56.6		314	20.6
10	12	30,566	-55.7			
7						

BOISE, IDAHO
917 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	868	4.1	75	130	5.4
1000	30	160				
950	30	582				
900	30	1,023	6.2	61	130	7.0
850	30	1,491	4.9	56	169	6.6
800	30	1,983	2.[illegible]	59	233	8.5
750	30	2,502	- .8	59	249	13.2
700	30	3,050	- 4.2	62	257	16.1
650	30	3,629	- 7.6	63	259	19.2
600	30	4,250	-11.2	61	261	22.5
550	30	4,910	-15.2	58	262	26.2
500	30	5,627	-19.9	56	264	28.6
450	30	6,401	-25.1	55	263	33.0
400	30	7,247	-31.[illegible]	48	267	34.0
350	30	8,181	-37.9	44	269	38.5
300	30	9,226	-45.5		271	43.7
250	30	10,419	-53.5		272	49.5
200	30	11,835	-58.9		274	53.6
175	30	12,672	-59.8		272	49.1
150	30	13,634	-59.9		273	43.9
125	30	14,772	-60.3		273	35.5
100	30	16,159	-61.1		275	28.4
80	30	17,546	-60.5		281	20.4
70	30	18,378	-60.3		286	15.9
60	30	19,339	-59.9		298	12.4
50	29	20,480	-59.6		311	10.3
40	28	21,876	-59.5		343	7.2
30	28	23,684	-57.9		1	7.8
25	28	24,836	-56.9		3	9.3
20	25	26,252	-55.7		16	10.3
15	21	28,101	-54.[illegible]		358	10.3
10	13	30,702	-53.4		323	15.9
7						
5						

* BOOTHVILLE, LA.
1021 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1	15.7	88	19	2.7
1000	30	174	17.2	73	62	3.9
950	30	610	14.2	71	111	2.5
900	30	1,065	11.4	67	213	1.7
850	30	1,542	9.4	58	271	4.5
800	30	2,043	7.4	50	288	7.0
750	30	2,572	5.8	41	285	9.5
700	30	3,136	3.9	28	281	12.0
650	30	3,735	1.3	28	286	14.0
600	30	4,375	- 2.4	26	283	18.1
550	30	5,059	- 6.5	27	285	20.0
500	30	5,799	-11.3	28	284	24.7
450	30	6,597	-16.7	29	284	28.6
400	30	7,475	-22.8	29	284	31.3
350	30	8,440	-30.2	29	284	35.[illegible]
300	30	9,519	-38.4	33	283	38.7
250	30	10,749	-47.6		282	41.6
200	30	12,190	-57.3		283	45.6
175	30	13,026	-61.6		283	48.0
150	30	13,971	-65.3		277	47.8
125	29	15,074	-68.[illegible]		276	42.9
100	29	16,404	-71.[illegible]		278	36.7
80	28	17,723	-70.9		283	26.2
70	28	18,515	-69.4		282	18.6
60	28	19,441	-65.9		276	12.6
50	28	20,560	-61.5		262	9.5
40	26	21,954	-58.8		265	10.7
30	26	23,778	-54.4		267	15.5
25	26	24,952	-52.1		269	17.5
20	24	26,402	-49.5		270	19.6
15	22	28,299	-46		265	30.5
10	21	31,020	-42.6		261	43.1
7	5	33,530	-38.6			
5						

* BROWNSVILLE, TEXAS
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	7	16.1	89	121	1.2
1000	30	159	19.6	78	133	4.5
950	30	598	16.7	76	153	11.5
900	30	1,059	14.4	61	161	11.8
850	30	1,541	12.2	56	165	9.1
800	30	2,047	10.1	42	190	3.1
750	30	2,582	8.9	28	280	2.7
700	30	3,151	6.2	24	306	5.4
650	30	3,754	3.4	24	303	6.2
600	30	4,401	- .4	22	291	6.8
550	30	5,089	- 4.5	23	282	8.[illegible]
500	30	5,837	- 9.5	28	278	[illegible]
450	30	6,639	-15.1	[illegible]	276	12.4
400	30	7,525	-21.4	21	271	16.1
350	30	8,495	-28.9	22	272	19.2
300	30	9,579	-37.5	26	273	23.7
250	30	10,812	-47.1		276	26.4
200	30	12,255	-57.3		283	32.6
175	30	13,088	-62.7		278	35.[illegible]
150	30	14,026	-67.7		277	32.4
125	30	15,113	-70.8		267	30.1
100	30	16,427	-73.8		271	25.1
80	29	17,726	-74.4		281	18.3
70	29	18,505	-72.5		286	13.2
60	29	19,420	-68.2		286	8.5
50	29	20,524	-64.2		260	7.8
40	29	21,906	-59.2		261	9.5
30	28	23,728	-55.		265	12.0
25	28	24,898	-52.8		270	12.2
20	28	26,347	-49.9		276	11.8
15	27	28,246	-46.1		270	17.3
10	26	30,962	-41.5		267	31.5
7	24	33,388	-38.9		259	46.6
5	13	35,685	-37.9			

BUFFALO, N. Y.
992 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	218	4.[illegible]	78	219	5.6
1000	30	148				
950	30	565	4.0	69	238	13.6
900	30	1,004	1.[illegible]	72	244	16.9
850	30	1,465	.6	68	245	18.8
800	30	1,950	- 1.[illegible]	63	249	20.4
750	30	2,465	- 2.[illegible]	60	251	20.8
700	30	3,008	- 5.2	[illegible]	249	23.5
650	30	3,584	- 8.1	53	250	25.4
600	30	4,204	-11.[illegible]	51	250	27.6
550	30	4,861	-15.[illegible]	48	251	28.9
500	30	5,579	-20.[illegible]	49	251	30.7
450	30	6,347	-25.[illegible]	46	253	31.3
400	30	7,195	-32.[illegible]	41	255	32.6
350	30	8,124	-38.8	39	253	36.7
300	30	9,166	-45.[illegible]		265	42.5
250	29	10,357	-53.4		270	43.1
200	29	11,775	-57.9		275	45.8
175	29	12,615	-58.4		274	42.2
150	28	13,583	-57.[illegible]		271	39.8
125	28	14,731	-58.[illegible]		268	33.6
100	28	16,129	[illegible]		268	28.4
80	27	17,522	-60.5		267	26.4
70	27	18,352	-60.[illegible]		270	26.0
60	26	19,308	[illegible]		273	21.8
50	26	20,446	-60.		274	20.2
40	25	21,829	[illegible]		278	16.9
30	25	23,630	-59.[illegible]		277	21.4
25	25	24,777	-57.[illegible]		277	23.3
20	25	26,186	-57.[illegible]		277	28.7
15	24	28,026	-56.[illegible]		280	31.3
10	22	30,611	-53.[illegible]		274	39.
7	8	32,862	[illegible]			
5						

*CANTON IS., PACIFIC AREA
+ 1008 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	4	30.3	62	67	8.9
1000	30	77	28.5	62	68	[illegible]
950	30	519	22.7	[illegible]	75	[illegible]
900	[illegible]	998	[illegible]	54	[illegible]	10.7
850	[illegible]	1,488	[illegible]	[illegible]	[illegible]	11.8
800	[illegible]	2,006	16.4	51	[illegible]	10.3
750	[illegible]	2,548	14.3	[illegible]	[illegible]	8.7
700	[illegible]	3,131	11.1	[illegible]	[illegible]	[illegible]
650	[illegible]	3,740	7.6	[illegible]	[illegible]	[illegible]
600	[illegible]	4,400	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	5,094	- .1	[illegible]	[illegible]	[illegible]
500	[illegible]	5,858	- 4.7	[illegible]	82	[illegible]
450	[illegible]	6,675	- 9.5	[illegible]	[illegible]	[illegible]
400	[illegible]	7,581	-14.9	[illegible]	115	[illegible]
350	[illegible]	8,579	-21.8	[illegible]	158	[illegible]
300	[illegible]	9,694	-30.5	[illegible]	205	[illegible]
250	[illegible]	10,963	-40.9		208	[illegible]
200	[illegible]	12,441	-53.3		209	[illegible]
175	[illegible]	13,287	[illegible]		[illegible]	[illegible]
150	[illegible]	[illegible]	[illegible]		209	[illegible]
125	[illegible]	15,307	[illegible]		228	[illegible]
100	[illegible]	16,576	[illegible]		240	[illegible]
80	[illegible]	17,840	[illegible]		[illegible]	[illegible]
70	[illegible]	18,622	[illegible]		278	[illegible]
60	[illegible]	19,550	[illegible]		269	[illegible]
50	[illegible]	20,670	[illegible]		271	[illegible]
40	[illegible]	22,064	-58.1		273	[illegible]
30	[illegible]	23,885	-55.[illegible]		[illegible]	[illegible]
25	[illegible]	25,054	-53.5		271	[illegible]
20	[illegible]	26,497	-50.6		271	[illegible]
15	[illegible]	28,397	-45.9		161	[illegible]
10	[illegible]	[illegible]	-40.9		[illegible]	[illegible]
7	[illegible]	33,589	34.9		[illegible]	[illegible]
5	8	35,958	-27.9			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	* CAPE HATTERAS, N. C. 1020 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	11.5	78	334	4.9
1000	30	168	12.3	69	342	6.8
950	30	595	9.8	65	326	5.1
900	30	1,046	8.2	55	278	5.6
850	30	1,517	6.7	45	268	8.4
800	30	2,013	4.6	42	261	9.3
750	30	2,537	2.1	43	266	10.5
700	30	3,091	- .5	39	267	12.8
650	30	3,675	- 3.8	37	266	15.9
600	30	4,308	- 7.6	35	266	18.1
550	30	4,973	-12.0	33	271	19.6
500	30	5,703	-16.5	33	273	21.8
450	30	6,478	-22.1	35	275	25.6
400	30	7,344	-28.1	35	276	29.3
350	30	8,289	-34.9	35	277	35.4
300	30	9,348	-42.3	42	284	45.1
250	30	10,559	-50.2		282	52.3
200	30	11,990	-57.3		283	56.3
175	30	12,830	-59.6		281	51.7
150	30	13,789	-61.5		277	50.3
125	30	14,914	-63.5		280	42.2
100	30	16,279	-64.9		276	32.2
80	30	17,641	-64.1		275	22.9
70	30	18,459	-63.2		272	16.5
60	30	19,411	-61.5		268	16.5
50	30	20,544	-60.1		266	14.8
40	30	21,942	-58.5		264	14.6
30	29	23,758	-56.2		264	14.8
25	29	24,920	-54.6		262	17.7
20	29	26,356	-52.5		267	22.1
15	28	28,227	-50.0		261	40.6
10	20	30,873	-47.0		265	75.2
7	7	33,286	-43.8			
5						

Standard pressure surface (mb.)	* CARIBOU, ME. 998 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	191	.0	89	217	1.4
1000	30	170			234	1.2
950	30	582	1.2	83	205	7.4
900	30	1,018	.3	84	213	11.1
850	30	1,476	- 1.1	81	225	14.0
800	30	1,958	- 2.8	75	238	16.1
750	30	2,468	- 4.6	68	241	19.6
700	30	3,011	- 6.5	57	242	22.3
650	30	3,586	- 9.6	56	242	25.6
600	30	4,203	-12.7	52	241	29.3
550	30	4,859	-16.5	49	241	33.2
500	30	5,576	-20.7	45	242	36.3
450	30	6,342	-26.0	40	242	39.6
400	30	7,191	-32.0	39	242	42.7
350	30	8,120	-39.2	36	248	45.8
300	30	9,158	-47.1		249	49.5
250	30	10,343	-55.1		251	49.0
200	30	11,753	-58.3		248	47.8
175	30	12,594	-58.0		246	47.2
150	30	13,564	-58.1		244	44.1
125	30	14,710	-58.7		247	38.1
100	30	16,109	-59.1		249	35.0
80	30	17,506	-59.6		252	31.1
70	30	18,340	-59.7		254	25.8
60	29	19,301	-59.9		252	23.5
50	29	20,439	-59.9		257	25.3
40	29	21,830	-60.5		258	23.5
30	29	23,621	-60.4		268	28.2
25	28	24,748	-60.5		267	30.1
20	28	26,136	-60.8		268	35.5
15	25	27,919	-60.3		272	45.1
10	22	30,402	-59.0		268	61.8
7	19	32,656	-56.3		267	74.2
5	10	34,768	-53.3			

Standard pressure surface (mb.)	CHARLESTON, S. C. 1020 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	13	8.2	78	337	2.1
1000	30	176	11.6	74	24	4.1
950	30	607	11.1	62	342	3.5
900	30	1,056	9.7	57	288	4.7
850	30	1,530	7.5	57	273	6.6
800	30	2,027	5.2	49	268	8.7
750	30	2,553	2.7	45	273	10.7
700	30	3,109	.5	30	274	13.2
650	30	3,697	- 2.6	26	272	15.3
600	30	4,332	- 6.2	28	275	19.4
550	30	5,003	-10.0	28	276	23.7
500	30	5,739	-14.6	28	279	27.2
450	30	6,524	-20.1	31	277	32.1
400	30	7,394	-26.5	35	279	37.9
350	30	8,345	-33.6	35	283	44.5
300	30	9,410	-41.3	35	282	52.3
250	30	10,625	-49.9		282	57.1
200	30	12,056	-57.9		284	63.3
175	30	12,890	-61.3		286	61.6
150	30	13,840	-63.6		283	58.5
125	30	14,953	-65.8		282	51.3
100	30	16,302	-67.6		281	40.8
80	30	17,646	-67.1		275	26.0
70	30	18,453	-65.6		277	20.4
60	30	19,394	-63.3		273	14.4
50	30	20,520	-60.8		257	11.8
40	30	21,916	-58.2		267	12.4
30	30	23,740	-55.1		274	17.9
25	30	24,909	-53.1		269	21.2
20	27	26,344	-51.1		265	27.0
15	23	28,218	-49.0		263	35.2
10	11	30,870	-45.8			
7						
5						

Standard pressure surface (mb.)	CHIHUAHUA, MEXICO 859 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	1,428	6.6	62	254	.6
1000	29	154				
950	29	583				
900	29	1,037				
850	29	1,516	9.1	56	238	2.1
800	29	2,023	12.2	40	237	5.6
750	29	2,557	9.3	38	224	7.4
700	29	3,130	6.2	37	234	8.9
650	29	3,725	3.0	29	235	12.6
600	29	4,376	- 1.5	28	240	15.0
550	29	5,055	- 5.0	28	247	16.3
500	29	5,807	-10.0	30	251	19.0
450	29	6,598	-15.5	32	252	20.4
400	29	7,488	-22.0	36	255	22.1
350	29	8,456	-29.3	34	257	24.7
300	29	9,538	-37.7	33	268	24.9
250	29	10,769	-47.0		271	34.0
200	29	12,212	-57.4		274	41.8
175	28	13,043	-62.6		275	40.2
150	25	13,987	-67.0		272	38.3
125	24	15,078	-69.8		268	36.1
100	22	16,397	-72.4		269	29.1
80	19	17,712	-71.3		285	23.7
70	17	18,501	-70.3		285	18.8
60	15	19,421	-67.3		304	10.9
50	14	20,528	-63.5		292	10.1
40	13	21,910	-59.5		288	7.8
30	11	23,727	-54.6		257	11.1
25	10	24,885	-53.2		271	15.9
20	8	26,359	-50.0			
15	5	28,261	-46.8			
10						
7						
5						

Standard pressure surface (mb.)	* COLD BAY, ALASKA 1014 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	30	.1	85	239	5.1
1000	30	139			258	2.9
950	30	550	- .7	73	273	7.4
900	30	982	- 2.4	62	280	11.3
850	30	1,434	- 3.9	57	289	15.2
800	30	1,911	- 5.8	56	298	14.6
750	30	2,416	- 7.9	53	298	15.2
700	30	2,950	-10.5	49	298	16.1
650	30	3,517	-12.9	49	278	16.1
600	30	4,125	-16.5	47	278	16.9
550	30	4,771	-20.4	47	272	18.3
500	30	5,474	-24.7	48	264	17.7
450	30	6,226	-29.5	46	267	19.4
400	30	7,066	-34.5	43	270	21.8
350	30	7,988	-40.5	44	255	29.9
300	30	9,024	-46.7		250	33.0
250	30	10,218	-51.8		254	39.6
200	30	11,654	-54.2		249	29.1
175	30	12,511	-53.4		250	28.7
150	30	13,504	-53.3		256	24.9
125	30	14,676	-53.9		257	21.8
100	30	16,112	-52.8		258	20.8
80	30	17,549	-53.2		261	12.6
70	30	18,409	-52.8		264	10.5
60	30	19,403	-52.9		271	7.6
50	30	20,580	-52.4		276	6.8
40	30	22,023	-52.1		324	1.7
30	30	23,891	-50.9		285	1.7
25	30	25,078	-50.6		59	4.1
20	30	26,534	-50.1		51	14.4
15	25	28,422	-49.3		63	13.2
10	17	31,063	-48.0		36	14.6
7	9	33,445	-47.4			
5						

Standard pressure surface (mb.)	COLUMBIA, MO. 99[illegible] MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	238	5.3	74	213	2.1
1000	30	157				
950	30	579	6.3	65	238	7.8
900	30	1,021	5.9	58	269	14.4
850	30	1,488	4.2	57	278	18.6
800	30	1,980	1.7	55	281	18.6
750	30	2,496	- .7	52	284	19.2
700	30	3,048	- 3.4	44	278	22.5
650	30	3,628	- 6.4	44	275	26.2
600	30	4,253	- 9.9	39	278	28.6
550	30	4,912	-13.9	34	273	32.2
500	30	5,638	-18.3	36	274	36.5
450	30	6,406	-23.6	39	275	40.4
400	30	7,268	-29.9	44	277	45.8
350	30	8,207	-36.6	40	276	50.5
300	30	9,158	-44.2		276	53.4
250	30	10,459	-51.8		277	61.4
200	30	11,885	-58.2		278	66.0
175	30	12,722	-59.8		278	67.8
150	30	13,682	-61.2		280	57.9
125	30	14,812	-62.1		280	50.5
100	30	16,186	-63.2		281	39.6
80	29	17,555	-63.0		274	25.1
70	29	18,376	-62.8		271	19.6
60	29	19,325	-62.6		278	16.7
50	28	20,451	-61.6		286	13.6
40	25	21,840	-59.9		288	9.9
30	21	23,655	-58.2		278	15.9
25	20	24,809	-56.7		282	19.2
20	17	26,214	-55.8		278	22.5
15	13	28,087	-53.3			
10	5	30,776	-49.0			

Standard pressure surface (mb.)	DAYTON, OHIO 984 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	297	3.6	85	221	3.3
1000	30	160				
950	30	578	4.7	77	231	12.2
900	30	1,019	3.7	72	257	17.7
850	30	1,483	2.8	65	266	19.8
800	30	1,973	.5	66	271	19.6
750	30	2,488	- 1.5	67	266	20.6
700	30	3,038	- 3.7	62	261	22.1
650	30	3,615	- 6.6	59	262	27.0
600	30	4,242	-10.2	54	266	30.9
550	30	4,900	-14.5	55	267	31.9
500	30	5,623	-19.1	50	269	33.2
450	30	6,394	-24.7	51	272	35.4
400	30	7,247	-31.0	50	273	39.0
350	30	8,181	-37.6	43	273	40.8
300	30	9,228	-45.1		272	45.1
250	30	10,425	-52.7		274	55.9
200	30	11,844	-58.5		276	58.9
175	30	12,682	-59.4		281	54.4
150	30	13,645	-59.8		282	46.6
125	30	14,782	-60.7		276	40.6
100	30	16,167	-61.7		271	31.7
80	30	17,546	-62.1		272	23.9
70	29	18,370	-62.0		275	19.2
60	28	19,321	-61.8		275	16.3
50	28	20,451	-61.1		271	14.8
40	26	21,844	-60.2		268	15.3
30	25	23,646	-58.4		271	16.3
25	25	24,796	-57.1		271	19.8
20	24	26,213	-55.5		276	28.6
15	20	28,081	-53.7		272	36.5
10	9	30,703	-51.6			

Standard pressure surface (mb.)	DEL RIO, TEXAS 982 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	314	12.5	67	100	4.9
1000	30	163				
950	30	596	14.0	70	145	11.3
900	30	1,053	13.6	59	169	12.8
850	30	1,533	12.0	50	189	7.6
800	30	2,040	11.1	38	220	6.0
750	30	2,572	8.9	28	258	7.4
700	30	3,146	6.2	24	269	9.9
650	30	3,746	2.8	22	270	12.8
600	30	4,392	- 1.4	21	268	13.8
550	30	5,074	- 5.8	20	266	16.7
500	30	5,822	-10.5	23	268	21.0
450	30	6,618	-16.0	24	271	22.9
400	30	7,503	-22.3	27	269	26.0
350	30	8,470	-29.7	33	267	29.9
300	30	9,551	-38.2	29	271	33.6
250	30	10,781	-47.5		274	39.2
200	30	12,221	-58.2		278	44.3
175	30	13,052	-62.8		278	45.6
150	30	13,991	-67.3		276	41.2
125	29	15,083	-70.1		271	36.3
100	29	16,404	-71.7		271	33.4
80	27	17,713	-72.0		275	20.8
70	27	18,502	-70.4		277	15.7
60	25	19,424	-67.3		277	12.0
50	25	20,535	-62.8		275	8.0
40	25	21,923	-58.8		263	11.7
30	24	23,749	-54.8		260	16.9
25	24	24,920	-52.7		266	19.2
20	24	26,364	-51.2		268	22.1
15	17	28,247	-48.5		265	31.3
10						

Standard pressure surface (mb.)	DENVER, COLO. 838 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,611	- .5	74	206	3.7
1000	30	176				
950	30	595				
900	30	1,035				
850	30	1,496				
800	30	1,987	5.5	45	258	6.8
750	30	2,510	3.4	41	283	12.2
700	30	3,069	.1	38	284	17.7
650	30	3,654	- 3.4	38	287	20.8
600	30	4,287	- 7.6	36	287	26.8
550	30	4,953	-11.9	34	285	30.5
500	30	5,682	-16.5	32	287	31.3
450	30	6,458	-22.1	31	285	35.4
400	30	7,321	-28.3	36	283	36.9
350	30	8,265	-35.5	42	279	40.8
300	30	9,319	-43.5		275	46.6
250	30	10,523	-51.6		276	57.3
200	30	11,943	-59.4		273	62.7
175	30	12,775	-61.1		273	61.6
150	30	13,729	-62.4		273	59.4
125	30	14,853	-63.0		275	51.7
100	30	16,224	-63.9		276	38.7
80	30	17,590	-64.0		276	26.8
70	30	18,410	-62.5		281	20.4
60	30	19,364	-62.0		288	12.6
50	30	20,494	-61.3		289	10.7
40	29	21,882	-60.2		305	8.2
30	26	23,689	-57.9		306	8.4
25	22	24,835	-56.6		293	11.8
20	18	26,256	-55.2		301	15.2
15	12	28,101	-53.0		321	19.6
10	7	30,738	-51.1			

Standard pressure surface (mb.)	DODGE CITY, KANS. 926 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	791	.9	77	278	4.5
1000	30	166				
950	30	587				
900	30	1,023	6.3	59	286	6.4
850	30	1,493	8.0	44	291	10.9
800	30	1,992	6.3	36	288	12.0
750	30	2,520	3.6	36	281	15.7
700	30	3,076	.5	33	284	18.3
650	30	3,665	- 3.0	32	279	21.4
600	30	4,297	- 6.9	30	277	25.8
550	30	4,968	-11.4	32	276	29.7
500	30	5,695	-16.2	29	281	30.7
450	30	6,476	-21.9	33	284	36.5
400	30	7,337	-28.2	36	284	42.3
350	30	8,282	-35.4	36	283	47.2
300	30	9,338	-43.2		280	55.4
250	30	10,544	-51.6		279	64.1
200	30	11,967	-58.9		282	70.9
175	29	12,802	-61.5		281	69.2
150	29	13,754	-63.0		279	65.1
125	29	14,873	-64.4		281	53.4
100	29	16,230	-65.7		280	39.4
80	29	17,584	-65.4		281	27.8
70	29	18,398	-64.5		279	21.2
60	29	19,340	-63.7		280	12.4
50	28	20,462	-62.4		285	8.7
40	26	21,844	-60.7		294	7.0
30	22	23,633	-58.9		285	9.3
25	21	24,781	-57.5		296	13.0
20	19	26,197	-55.7		284	16.7
15	19	28,036	-53.9		280	22.9
10	16	30,665	-51.1		283	32.2

Standard pressure surface (mb.)	EL PASO, TEXAS 884 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,193	6.9	55	326	1.6
1000	30	169				
950	30	597				
900	30	1,050				
850	30	1,524	12.5	41	252	4.1
800	30	2,030	10.2	42	259	8.7
750	30	2,562	7.3	42	253	12.2
700	30	3,130	4.3	39	253	16.1
650	30	3,725	.8	35	257	19.2
600	30	4,368	- 3.1	33	258	21.8
550	30	5,044	- 7.3	3[illegible]	262	24.7
500	30	5,788	-12.0	29	261	27.0
450	30	6,584	-17.5	34	259	29.7
400	30	7,460	-23.5	34	261	34.6
350	30	8,422	-30.9	34	262	40.4
300	30	9,498	-39.1	38	263	43.7
250	30	10,724	-48.3		268	47.0
200	30	12,161	-58.0		271	56.1
175	30	12,993	-62.5		272	53.0
150	30	13,936	-66.0		270	48.8
125	29	15,033	-68.7		270	44.3
100	29	16,362	-70.7		272	33.0
80	29	17,685	-69.5		277	25.4
70	29	18,483	-68.0		281	18.6
60	29	19,411	-66.5		283	13.6
50	29	20,522	-63.2		284	9.9
40	29	21,903	-60.3		277	8.0
30	25	23,711	-56.5		270	12.8
25	22	24,871	-54.4		272	19.0
20	17	26,319	-51.9		270	21.2
15	15	28,189	-49.9		271	35.5
10						
7						

Standard pressure surface (mb.)	ELY, NEV. 810 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,908	- 1.2	63	191	8.0
1000	30	191				
950	30	614				
900	30	1,053				
850	30	1,517				
800	30	2,004	1.8	56	192	8.0
750	30	2,526	1.5	51	188	9.5
700	30	3,080	- 1.6	53	238	11.1
650	30	3,665	- 4.5	49	248	15.0
600	30	4,294	- 8.1	49	256	18.6
550	30	4,961	-12.2	47	257	19.6
500	30	5,689	-16.8	45	268	22.9
450	30	6,467	-22.4	43	269	26.4
400	30	7,329	-28.4	40	263	32.4
350	30	8,273	-35.3	41	263	33.8
300	30	9,330	-43.4		264	39.2
250	30	10,533	-52.0		263	42.7
200	30	11,953	-59.0		266	47.2
175	30	12,785	-61.3		266	48.8
150	30	13,738	-62.6		264	48.4
125	30	14,859	-64.0		269	40.4
100	30	16,221	-64.9		273	27.0
80	28	17,587	-64.0		276	18.3
70	28	18,405	-63.6		277	13.8
60	28	19,352	-62.6		291	10.5
50	28	20,477	-62.1		311	5.4
40	28	21,862	-60.5		327	1.7
30	28	23,660	-58.5		299	3.5
25	27	24,812	-57.3		314	2.9
20	24	26,233	-55.5		292	5.4
15	20	28,082	-53.4		275	12.8
10	14	30,701	-50.8			
7	6	33,044	-44.9			

Standard pressure surface (mb.)	* FAIRBANKS, ALASKA 1000 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	135	-17.6	77	259	1.4
1000	30	134			217	1.6
950	30	527	-11.4	84	99	1.2
900	30	940	-10.4	80	237	1.7
850	30	1,381	- 9.9	72	262	5.4
800	30	1,848	-10.8	68	276	6.8
750	30	2,338	-13.0	66	285	6.8
700	30	2,866	-15.7	67	302	9.5
650	30	3,419	-18.5	65	304	11.1
600	30	4,015	-21.9	62	306	13.6
550	30	4,647	-25.5	62	310	15.5
500	30	5,337	-29.8	59	309	18.5
450	30	6,075	-34.7	57	311	21.4
400	30	6,894	-40.3	48	311	21.2
350	30	7,792	-46.1	44	308	24.7
300	30	8,805	-51.4		309	28.4
250	30	9,983	-52.8		306	35.0
200	30	11,426	-51.7		301	32.2
175	30	12,293	-51.4		300	28.7
150	30	13,294	-51.5		296	28.2
125	30	14,478	-51.1		298	26.4
100	30	15,931	-50.9		293	23.3
80	29	17,384	-50.5		290	23.3
70	29	18,253	-51.0		295	22.3
60	29	19,255	-51.4		297	22.9
50	29	20,441	-50.9		301	21.0
40	28	21,888	-51.2		305	24.3
30	27	23,758	-50.8		311	22.5
25	25	24,947	-50.7		319	23.9
20	24	26,421	-50.3		325	28.6
15	19	28,291	-50.0		332	34.6
10	14	30,943	-50.2		335	49.0
7	6	33,275	-50.8			

Standard pressure surface (mb.)	FLINT, MICH. 988 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	234	2.6	80	229	4.1
1000	30	137				
950	30	553	2.3	83	245	10.7
900	30	989	1.4	78	262	14.6
850	30	1,449	- .2	72	263	16.3
800	30	1,934	- 1.2	65	264	19.2
750	30	2,446	- 3.3	66	265	22.1
700	30	2,991	- 5.9	62	265	24.9
650	30	3,566	- 8.5	56	266	27.8
600	30	4,186	-11.9	52	265	30.1
550	30	4,842	-15.9	51	264	30.7
500	30	5,559	-20.6	51	261	31.5
450	30	6,322	-26.3	54	263	35.4
400	30	7,171	-32.5	51	266	41.6
350	30	8,099	-38.8	48	263	45.1
300	30	9,141	-46.0		265	46.8
250	30	10,333	-53.4		270	50.7
200	30	11,749	-58.1		273	50.3
175	30	12,591	-57.6		275	51.1
150	29	13,567	-58.1		270	42.7
125	29	14,713	-58.5		267	34.8
100	29	16,113	-59.1		267	29.7
80	29	17,509	-60.0		269	23.9
70	29	18,340	-60.1		269	22.0
60	28	19,302	-60.4		269	20.6
50	28	20,437	-60.2		271	17.1
40	25	21,822	-59.5		274	20.0
30	25	23,625	-58.5		274	21.6
25	24	24,777	-57.8		278	19.6
20	23	26,179	-57.0		279	26.8
15	17	28,000	-55.3		294	26.6
10	9	30,541	-53.9			

Standard pressure surface (mb.)	FORT WORTH, TEXAS 1000 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	180	10.6	80	209	2.5
1000	30	175			270	1.4
950	30	608	12.0	68	213	12.6
900	30	1,058	11.6	58	234	15.9
850	30	1,535	10.0	48	257	14.2
800	30	2,037	7.8	45	273	10.5
750	30	2,571	5.4	33	280	10.9
700	30	3,129	2.9	30	280	14.0
650	30	3,727	- .6	31	277	18.5
600	30	4,362	- 3.9	31	278	22.5
550	30	5,040	- 8.1	27	280	26.8
500	30	5,779	-12.9	33	277	32.1
450	30	6,573	-18.2	36	278	35.0
400	30	7,446	-24.2	35	275	41.8
350	30	8,405	-31.6	36	276	46.2
300	30	9,477	-40.1	38	278	49.3
250	30	10,696	-49.7		279	55.6
200	30	12,127	-58.2		280	61.0
175	30	12,959	-62.5		281	59.1
150	29	13,902	-65.3		278	55.9
125	29	15,004	-67.9		277	50.3
100	28	16,342	-70.0		276	41.0
80	28	17,672	-69.2		280	26.6
70	28	18,469	-68.5		282	21.6
60	27	19,401	-66.4		282	14.2
50	27	20,514	-62.8		279	9.7
40	26	21,899	-59.9		282	11.1
30	26	23,709	-56.9		271	14.6
25	24	24,876	-54.7		275	21.6
20	24	26,310	-52.8		273	24.1
15	15	28,163	-51.0		281	28.0

See reference note at end of table

RAWINSONDE DATA

Average monthly values

NOVEMBER 1966

Standard pressure surface (mb.)	GLASGOW, MONT. 935 MB						* GRAND JUNCTION, COLO. 855 MB						* GREAT FALLS, MONT. 886 MB						GREEN BAY, WIS. 992 MB						GREENSBORO, N. C. 989 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	30	696	-7.3	79	33	3.1	30	1,474	3.2	70	122	4.9	30	1,123	-2.8	73	225	6.2	30	210	.0	78	315	3.1	30	273	5.6	86	265	1.4
1000	30	163					30	181					30	152					30	142					30	181				
950	30	568					30	603					30	568					30	555	-.6	80	299	8.4	30	605	8.2	62	271	4.3
900	30	990	-4.0	71	300	6.8	30	1,050					30	1,004					30	984	-1.6	77	306	9.9	30	1,049	6.6	62	269	8.[illegible]
850	30	1,443	-2.4	62	292	16.1	30	1,517			122	6.4	30	1,454	.1	56	240	14.4	30	1,439	-1.8	72	298	13.6	30	1,517	5.1	59	277	12.0
800	30	1,923	-3.4	57	295	20.8	30	2,013	5.0	48	151	8.4	30	1,938	-1.8	59	255	16.9	30	1,921	-2.6	61	290	18.1	30	2,011	3.5	50	275	12.4
750	30	2,431	-6.0	61	290	22.0	30	2,536	2.1	49	212	7.2	30	2,451	-4.0	61	269	20.8	30	2,426	-4.8	59	280	24.5	30	2,532	1.1	46	272	13.6
700	30	2,970	-8.5	61	289	24.7	30	3,091	-1.7	55	249	11.8	30	2,992	-6.8	64	272	23.7	30	2,972	-7.2	57	280	28.7	30	3,086	-1.3	41	267	16.3
650	30	3,541	-11.6	59	287	27.6	30	3,673	-5.1	58	264	15.5	30	3,568	-9.5	63	274	27.4	30	3,543	-10.1	59	277	32.4	30	3,673	-4.5	37	268	19.6
600	30	4,150	-15.1	54	285	33.4	30	4,302	-8.1	49	270	21.0	30	4,183	-13.4	59	278	29.9	30	4,160	-13.6	53	278	36.9	30	4,299	-8.6	36	273	22.1
550	30	4,800	-19.2	50	286	36.7	30	4,965	-11.9	43	268	25.4	30	4,837	-17.5	60	278	32.1	30	4,811	-17.7	51	275	40.4	30	4,965	-12.7	35	274	25.1
500	30	5,506	-23.5	48	288	41.4	30	5,698	-16.6	40	272	30.9	30	5,548	-22.3	58	281	35.9	30	5,524	-22.2	51	271	42.3	30	5,690	-17.2	36	272	28.2
450	30	6,262	-28.9	48	290	47.0	30	6,474	-21.8	37	274	34.0	30	6,313	-27.7	59	283	42.7	30	6,282	-27.4	53	267	44.9	30	6,467	-22.6	39	274	30.7
400	30	7,100	-35.0	43	290	52.6	30	7,339	-28.2	45	273	41.0	30	7,153	-33.1	52	282	46.8	30	7,128	-33.4	48	266	51.1	30	7,327	-28.5	36	274	35.4
350	30	8,018	-41.4	40	289	59.1	30	8,284	-35.2	44	272	46.2	30	8,080	-40.0	54	281	54.2	30	8,053	-39.9	42	266	55.8	30	8,271	-35.5	37	283	42.0
300	30	9,049	-48.0		290	62.0	30	9,341	-43.0		276	49.9	30	9,116	-47.4		281	59.8	30	9,090	-47.2		266	64.7	30	9,327	-43.1		285	50.3
250	30	10,233	-54.3		288	62.9	30	10,546	-51.5		276	60.0	30	10,302	-54.5		282	64.9	30	10,278	-53.6		270	65.5	30	10,535	-51.0		291	56.1
200	30	11,649	-57.4		287	60.2	30	11,969	-58.4		274	60.8	30	11,717	-58.1		284	62.7	30	11,699	-57.3		270	67.0	30	11,962	-57.9		288	60.4
175	30	12,493	-57.0		284	53.2	30	12,803	-60.7		274	60.4	29	12,553	-57.7		279	55.4	30	12,542	-57.6		271	62.5	30	12,801	-59.6		292	59.4
150	30	13,470	-56.7		282	46.4	29	13,753	-62.0		272	57.5	29	13,527	-57.5		276	50.5	30	13,516	-57.2		276	49.1	30	13,760	-61.4		289	52.6
125	30	14,625	-56.8		285	41.2	29	14,876	-63.5		272	47.8	28	14,677	-56.8		278	41.6	30	14,667	-58.1		275	45.5	30	14,886	-63.1		287	47.2
100	30	16,037	-56.7		285	34.4	29	16,240	-64.8		275	35.5	28	16,090	-57.6		283	30.5	30	16,071	-58.3		276	36.7	30	16,254	-64.6		284	37.1
80	29	17,445	-57.6		288	29.1	27	17,595	-65.0		277	25.1	27	17,502	-57.6		286	25.4	29	17,470	-59.5		278	34.2	30	17,617	-64.4		282	25.6
70	29	18,288	-57.6		294	23.1	26	18,409	-63.7		281	19.4	27	18,342	-58.4		292	22.0	29	18,305	-59.6		285	26.4	30	18,434	-63.2		277	19.0
60	29	19,259	-57.9		299	20.4	26	19,358	-62.3		287	11.7	27	19,311	-58.1		296	19.2	29	19,269	-60.0		283	19.2	30	19,384	-62.1		278	15.3
50	29	20,408	-57.7		305	19.4	26	20,485	-61.4		296	10.1	27	20,459	-58.1		308	16.7	27	20,420	-59.8		283	17.7	30	20,514	-60.8		272	13.6
40	27	21,819	-57.9		318	17.5	24	21,866	-60.2		314	6.0	24	21,861	-57.6		320	16.5	27	21,815	-59.3		292	17.1	29	21,905	-59.0		268	13.2
30	27	23,631	-57.9		328	17.7	23	23,664	-58.6		322	6.0	22	23,681	-57.3		360	12.4	27	23,621	-58.7		297	13.6	28	23,713	-57.2		279	16.1
25	26	24,786	-57.0		337	19.2	19	24,814	-57.3		327	8.5	22	24,835	-56.5		355	13.4	26	24,765	-58.5		299	16.9	28	24,870	-55.4		278	21.0
20	25	26,202	-55.8		350	18.8	19	26,23[illegible]	-55.2		311	9.1	22	26,253	-55.7		7	15.7	26	26,171	-57.4		296	20.8	26	26,301	-53.3		274	26.0
15	23	28,034	-55.5		355	21.4	16	28,085	-53.6		293	11.3	21	28,088	-54.9		355	16.9	25	27,992	-56.1		298	26.8	25	28,164	-51.1		270	39.2
10	18	30,627	-54.0		353	31.3	11	30,739	-50.8		289	13.6	19	30,676	-54.4		352	28.4	24	30,577	-53.6		285	43.3	23	30,813	-48.9		272	54.2
7	12	32,887	-53.0				5	33,064	-49.0				8	33,057	-49.5				12	32,903	-52.5				14	33,119	-46.8			
5	9	35,159	-50.0																											

Standard pressure surface (mb.)	GUAM, MARIANA IS. 998 MB						HILO, HAWAII 1013 MB						HUNTINGTON, W. VA. 991 MB						* INTERNAT. FALLS, MINN. 975 MB						JACKSON, MISS. 1010 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	30	111	25.4	90	83	7.4	30	11	21.1	88	218	4.7	30	246	5.6	83	195	1.7	30	360	-9.0	79	212	.8	30	94	10.2	85	245	.6
1000	30	93					30	127	22.3	82	205	4.3	30	170					30	164					30	178	11.6	74	185	2.1
950	30	545	23.2	91	78	18.3	30	576	19.4	86	146	5.6	30	592	6.7	69	236	9.9	30	560	-8.1	80	232	3.1	30	610	12.2	66	251	8.0
900	30	1,015	20.3	88	82	18.6	30	1,037	16.3	88	134	6.4	30	1,035	5.2	65	254	15.9	30	982	-8.1	81	253	7.8	30	1,062	10.3	62	281	8.0
850	30	1,508	18.0	78	85	17.1	30	1,522	13.6	86	125	7.4	30	1,501	3.9	59	258	16.9	30	1,427	-7.3	71	277	12.0	30	1,535	7.7	61	289	10.7
800	30	2,027	16.2	63	86	15.9	30	2,032	10.9	85	131	6.2	30	1,991	1.4	62	261	19.8	30	1,899	-7.6	61	282	16.1	30	2,033	5.3	58	292	13.0
750	30	2,573	13.6	54	87	16.9	30	2,573	8.8	63	128	5.4	30	2,513	-.7	63	262	19.4	30	2,396	-9.3	60	282	21.2	30	2,558	2.9	51	282	13.8
700	30	3,153	10.4	50	87	18.5	30	3,139	6.6	51	122	5.1	30	3,059	-3.1	55	262	20.0	30	2,931	-11.7	56	281	25.4	30	3,116	1.5	37	277	15.7
650	30	3,764	7.0	42	84	18.8	30	3,741	3.9	40	116	3.7	30	3,641	-5.8	48	263	21.4	30	3,489	-14.6	59	280	27.6	30	3,707	-1.1	33	279	19.0
600	30	4,420	3.2	36	84	19.0	30	4,392	.5	40	172	1.7	30	4,268	-9.6	48	256	23.5	30	4,099	-17.7	57	280	30.3	30	4,345	-4.6	37	284	22.1
550	30	5,119	-.8	36	88	18.6	30	5,082	-3.5	43	251	2.9	30	4,932	-13.8	48	269	29.1	30	4,738	-21.2	53	278	35.2	30	5,016	-8.5	37	285	26.2
500	30	5,876	-5.3	30	87	21.4	30	5,833	-8.0	38	283	4.9	30	5,653	-18.5	45	269	31.1	30	5,444	-25.4	51	278	40.2	30	5,759	-13.2	35	282	32.8
450	30	6,690	-10.5	31	85	24.7	30	6,640	-13.2	35	278	8.2	30	6,425	-24.1	46	272	34.2	30	6,191	-30.3	49	278	43.9	30	6,546	-18.8	37	280	39.0
400	30	7,592	-16.4	26	85	22.3	30	7,533	-19.1	34	274	10.7	30	7,281	-30.1	47	272	36.5	30	7,030	-36.3	45	278	46.2	30	7,421	-25.0	38	282	43.3
350	30	8,583	-23.1	29	80	17.1	30	8,513	-26.0	32	278	15.0	30	8,219	-36.7	46	275	39.8	30	7,943	-42.8	38	278	48.8	30	8,377	-32.1	37	283	48.8
300	30	9,693	-31.4	27	82	14.2	30	9,611	-34.1	32	283	20.2	30	9,270	-44.2		277	46.6	29	8,969	-49.3		277	53.0	30	9,447	-40.2	37	282	53.6
250	30	10,957	-41.3	25	71	13.0	30	10,861	-44.2		281	24.9	30	10,472	-51.9		277	55.9	29	10,149	-54.4		275	51.7	30	10,665	-49.5		283	56.7
200	30	12,432	-53.3		65	12.2	30	12,319	-55.9		280	30.5	30	11,896	-58.4		281	59.1	29	11,571	-55.6		275	47.8	30	12,093	-58.9		282	60.2
175	30	13,278	-60.1		62	12.6	30	13,156	-61.9		281	32.6	30	12,733	-59.6		282	56.9	27	12,414	-55.2		276	46.0	30	12,924	-62.2		281	61.2
150	30	14,222	-67.5		68	16.1	30	14,096	-67.8		283	30.3	30	13,695	-60.2		279	50.7	27	13,398	-55.1		276	40.8	30	13,870	-65.1		279	58.9
125	30	15,298	-75.4		76	21.6	29	15,178	-72.5		284	22.7	30	14,827	-61.8		276	41.4	27	14,562	-55.0		274	37.3	30	14,974	-67.4		280	50.3
100	28	16,563	-82.0		85	25.4	29	16,478	-75.8		280	13.6	30	16,205	-62.7		272	32.8	26	15,980	-56.3		276	36.1	30	16,313	-69.1		278	39.0
80	25	17,811	-81.1		87	21.2	26	17,770	-73.9		286	12.6	30	17,579	-62.7		270	22.5	26	17,396	-56.6		280	27.6	30	17,642	-69.3		279	26.2
70	25	18,574	-74.4		101	11.8	25	18,549	-71.3		295	6.8	30	18,402	-62.2		270	19.8	26	18,241	-57.0		281	25.4	29	18,442	-67.6		279	18.3
60	25	19,484	-68.5		99	4.7	25	19,468	-67.9		296	1.9	30	19,358	-61.4		274	16.1	25	19,219	-57.5		282	26.0	29	19,374	-65.3		269	12.8
50	24	20,588	-64.7		199	1.6	25	20,578	-62.7		174	2.1	30	20,490	-60.6		271	13.6	25	20,369	-58.1		284	20.6	29	20,494	-61.4		268	10.3
40	23	21,965	-60.1		233	2.7	25	21,967	-58.9		195	2.3	30	21,882	-59.6		271	14.6	25	21,773	-58.6		292	18.1	27	21,891	-58.2		269	12.2
30	23	23,779	-55.7		86	1.0	24	23,790	-54.9		150	1.6	29	23,684	-57.6		272	16.9	22	23,578	-58.5		297	21.2	27	23,711	-55.3		273	17.3
25	22	24,944	-53.2		82	2.3	23	24,963	-52.5		114	3.5	28	24,830	-56.6		271	20.2	19	24,708	-58.6		304	22.5	27	24,878	-53.3		274	19.0
20	21	26,396	-49.5		71	8.5	20	26,409	-50.6		45	3.1	25	26,265	-54.6		271	25.8	18	26,121	-57.8		300	25.3	27	26,322	-51.1		270	26.2
15	20	28,290	-46.2		76	15.2	18	28,305	-47.8		85	5.1	19	28,106	-52.8		271	38.1	12	27,958	-56.6		303	26.6	26	28,197	-48.9		269	36.7
10	10	30,970	-43.7				11	30,966	-42.8				5	30,806	-49.4				10	30,529	-56.5				26	30,883	-45.2		269	51.7
7							6	33,376	-40.9																11	33,254	-42.6			

Standard pressure surface (mb.)	OMAHA, NEBR. 970 MB						+ PAGO PAGO, AMERICAN SAMOA 1010 MB						* JACKSONVILLE, FLA. 1022 MB						JOHN F. KENNEDY INT. ARPT.NY 1021 MB						JOHNSTON IS., PACIFIC AREA 1011 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind		Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed					Direction	Speed
SURFACE	30	403	-.4	82	75	.8	30	5	29.3	75	120	8.4	30	5	11.5	87	326	3.9	30	5	6.7	76	286	2.7	30	3	25.9	80	112	8.9
1000	30	159					30	92	27.6	72	116	8.7	30	184	14.3	78	3	6.4	30	173	6.8	71	297	4.1	30	98	25.1	82	105	9.9
950	30	571	1.6	74	258	1.4	30	545	23.2	73	100	8.4	30	618	13.3	70	20	4.9	30	598	5.8	69	266	7.4	30	550	21.6	89	99	11.3
900	30	1,010	3.9	60	277	8.5	30	1,016	19.9	74	87	7.8	30	1,071	11.1	62	334	3.5	30	1,037	4.2	70	267	9.5	30	1,016	18.8	84	104	10.5
850	30	1,474	3.3	49	283	12.2	30	1,508	17.4	65	82	7.0	30	1,547	9.1	53	311	5.4	30	1,501	3.0	62	272	11.7	30	1,506	16.1	79	123	7.6
800	30	1,964	1.8	45	282	15.3	30	2,025	15.5	55	72	6.4	30	2,047	6.4	52	308	5.1	30	1,991	1.5	53	268	13.4	30	2,021	13.8	71	139	6.0
750	30	2,478	-.4	46	283	19.4	30	2,573	13.0	5[illegible]	68	4.9	30	2,573	4.5	42	272	7.6	30	2,511	-.8	54	262	15.2	30	2,563	11.2	60	164	4.7
700	30	3,032	-3.3	45	286	22.1	30	3,148	9.8	47	34	2.5	30	3,135	2.3	32	284	11.7	30	3,058	-3.5	55	262	15.9	30	3,137	8.1	54	200	5.8
650	30	3,607	-6.8	44	285	24.5	30	3,763	6.5	43	6	3.1	30	3,730	-.3	27	286	15.7	30	3,641	-6.7	57	259	18.6	30	3,743	4.5	52	213	6.8
600	30	4,235	-10.4	40	284	28.9	30	4,414	2.8	41	342	4.3	30	4,367	-3.5	27	286	21.8	30	4,261	-10.7	53	258	20.4	30	4,393	1.1	45	226	6.6
550	30	4,893	-14.6	37	285	32.2	30	5,112	-1.2	40	313	6.2	30	5,038	-7.7	28	283	26.2	30	4,922	-14.8	40	257	20.6	30	5,086	-2.5	40	241	8.0
500	30	5,616	-19.1	35	285	36.7	30	5,869	-5.8	38	290	7.8	30	5,785	-12.3	28	283	28.4	30	5,641	-19.4	39	256	22.7	30	5,839	-7.0	39	255	10.7
450	30	6,385	-24.7	37	288	38.7	30	6,688	-10.5	33	288	10.3	30	6,573	-17.8	30	281	35.2	30	6,413	-25.0	37	254	24.3	30	6,652	-11.9	41	256	14.6
400	30	7,239	-30.8	42	286	44.7	30	7,587	-16.2	31	280	13.2	30	7,453	-24.0	31	280	38.5	30	7,263	-31.0	38	255	23.7	30	7,546	-18.0	37	253	17.7
350	30	8,173	-37.9	40	284	50.7	30	8,579	-23.0	30	272	15.9	30	8,413	-31.2	32	283	43.1	30	8,198	-37.6	40	258	27.2	30	8,530	-25.0	36	250	22.5
300	30	9,219	-45.3		284	57.7	30	9,690	-31.4	28	274	22.1	30	9,488	-39.2	30	281	45.6	30	9,245	-45.1		261	30.9	30	9,633	-33.1	35	252	25.3
250	30	10,414	-53.1		280	61.6	30	10,955	-41.4	27	273	29.7	30	10,713	-48.2		286	51.9	30	10,442	-52.4		270	38.3	29	10,889	-43.0		256	28.7
200	30	11,832	-58.6		278	66.0	30	12,430	-53.6		255	36.3	30	12,154	-56.8		287	58.1	30	11,864	-58.0		273	42.3	29	12,355	-54.8		261	33.4
175	29	12,669	-59.7		278	64.1	30	13,276	-60.0		248	38.9	30	12,992	-60.5		282	58.9	30	12,702	-59.6		271	42.5	29	13,196	-61.3		264	33.8
150	29	13,632	-59.8		278	61.0	30	14,223	-66.6		247	35.5	30	13,944	-63.8		280	56.5	29	13,657	-59.3		268	38.5	28	14,138	-67.9		266	30.1
125	29	14,770	-60.6		278	50.9	30	15,308	-73.4		259	29.3	30	15,053	-67.2		282	49.9	28	14,791	-60.1		266	34.0	28	15,217	-73.9		280	24.5
100	28	16,155	-61.5		278	40.2	30	16,594	-78.2		265	18.5	30	16,389	-69.7		282	40.2	28	16,180	-61.0		266	30.1	27	16,501	-78.6		292	14.6
80	28	17,540	-61.0		277	27.8	30	17,874	-73.8		284	4.1	30	17,718	-69.3		284	27.6	28	17,565	-61.3		269	24.3	26	17,777	-75.6		315	4.3
70	28	18,368	-61.4		280	21.8	30	18,662	-69.5		72	1.4	30	18,517	-67.6		281	22.0	27	18,391	-61.1		268	20.4	25	18,554	-71.9		360	1.5
60	27	19,323	-61.3		281	17.1	29	19,593	-65.5		82	4.3	29	19,454	-63.7		279	16.9	27	19,350	-60.7		271	17.5	23	19,470	-67.9		66	1.2
50	27	20,455	-61.1		289	13.4	29	20,713	-61.6		99	2.7	29	20,580	-60.8		274	11.8	27	20,485	-60.4		274	16.5	23	20,577	-64.3		286	2.9
40	27	21,844	-60.1		296	12.0	28	22,107	-58.0		71	3.1	29	21,978	-57.4		280	10.3	27	21,879	-59.5		280	15.3	22	21,955	-59.9		261	3.7
30	27	23,646	-58.7		296	12.4	28	23,934	-54.2		70	6.0	29	23,808	-54.1		271	12.0	27	23,683	-58.4		279	19.0	22	23,774	-55.1		298	3.1
25	26	24,798	-57.7		299	13.4	28	25,112	-51.2		59	9.3	29	24,982	-52.2		272	15.2	26	24,837	-57.5		283	21.4	22	24,944	-53.0		358	.6
20	26	26,211	-56.3		296	17.1	27	26,576	-47.6		77	10.5	29	26,434	-49.8		270	19.6	26	26,251	-56.1		282	24.3	22	26,394	-50.1		94	5.8
15	24	28,050	-54.1		300	20.4	27	28,491	-43.5		86	14.8	26	28,326	-47.2		271	29.7	15	28,057	-54.8		291	25.3	19	28,274	-47.0		100	7.2
10	23	30,670	-51.7		285	31.9	27	31,246	-38.7		86	25.6	18	31,012	-43.6		270	48.4							14	30,964	-42.4			
7	13	32,943	-51.0		274	67.2	20	33,714	-35.6		81	33.0	6	33,301	-41.5										6	33,406	-40.3			
5	7	35,143	-49.9																											

See reference note at end of table

RAWINSONDE DATA

Average monthly values

KEY WEST, FLORIDA
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	27	3	20.6	78	30	7.8
1000	27	160	19.7	76	38	12.0
950	27	597	17.0	75	60	11.5
900	27	1,061	14.2	68	61	10.7
850	27	1,541	11.2	64	53	8.9
800	27	2,046	9.6	49	52	6.4
750	27	2,583	8.7	32	25	6.4
700	27	3,150	6.2	27	8	6.0
650	27	3,749	2.9	25	353	6.8
600	27	4,398	-.4	22	324	9.1
550	27	5,079	-4.5	22	309	11.1
500	27	5,831	-9.5	23	310	12.6
450	27	6,628	-15.1	23	300	14.6
400	27	7,517	-21.9	24	300	18.5
350	27	8,485	-29.5	24	293	20.0
300	27	9,566	-37.7	25	288	25.8
250	27	10,800	-46.6		282	36.5
200	27	12,248	-56.9		276	43.5
175	27	13,084	-61.9		276	45.6
150	27	14,027	-66.8		278	43.3
125	27	15,118	-70.7		277	37.1
100	25	16,439	-73.4		287	28.6
80	25	17,743	-73.7		293	14.8
70	25	18,527	-70.8		286	10.9
60	25	19,450	-65.7		269	7.6
50	24	20,572	-61.1		269	5.2
40	24	21,973	-57.4		294	5.4
30	23	23,810	-53.6		307	2.7
25	21	24,984	-50.9		270	3.5
20	21	26,451	-47.1		273	6.6
15	19	28,378	-43.6		261	10.9
10	15	31,130	-39.3		254	16.3
7	10	33,547	-39.2			
5						

KING SALMON, ALASKA
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	15	-6.7	91	82	1.6
1000	30	117			18	2.9
950	30	523	-4.	72	310	3.9
900	30	949	-4.2	70	293	6.0
850	30	1,399	-5.4	66	302	7.0
800	30	1,873	-7.5	63	291	8.9
750	30	2,374	-9.8	63	293	9.7
700	30	2,905	-12.3	61	291	11.1
650	30	3,467	-15.1	57	292	13.6
600	30	4,070	-18.0	54	298	14.8
550	30	4,713	-21.5	52	298	17.7
500	30	5,412	-25.9	48	295	20.8
450	30	6,165	-30.7	44	296	23.1
400	30	6,996	-36.3	41	294	26.0
350	30	7,910	-42.2	48	293	28.6
300	30	8,938	-48.3		301	28.6
250	30	10,127	-52.0		297	28.9
200	30	11,566	-53.4		295	26.4
175	30	12,428	-52.3		289	26.0
150	30	13,425	-52.3		292	24.3
125	30	14,604	-52.1		294	18.6
100	30	16,048	-51.6		292	16.7
80	30	17,494	-51.8		300	12.4
70	30	18,359	-51.7		294	10.9
60	30	19,358	-52.2		293	12.0
50	29	20,538	-51.7		303	9.9
40	28	21,985	-51.5		310	8.9
30	25	23,846	-50.2		344	8.2
25	24	25,033	-50.0		354	10.1
20	19	26,494	-50.2		17	13.4
15	7	28,440	-49.6			
10						
7						
5						

+ KOROR, CAROLINE IS.
1006 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	30	28.0	83	56	2.7
1000	30	85	27.5	83	58	2.9
950	30	533	24.0	81	61	4.7
900	30	1,011	21.0	76	66	5.4
850	30	1,505	18.1	74	75	6.0
800	30	2,023	15.3	68	79	6.2
750	30	2,565	12.7	61	84	7.0
700	30	3,146	9.6	59	92	9.9
650	30	3,755	6.1	55	94	10.9
600	30	4,411	2.3	54	94	13.2
550	30	5,105	-1.5	50	97	13.0
500	30	5,864	-5.7	44	101	13.2
450	30	6,682	-10.3	39	94	14.4
400	30	7,583	-15.5	37	89	12.6
350	30	8,576	-22.6	33	86	12.6
300	30	9,688	-31.0	32	89	12.6
250	30	10,954	-41.1		84	13.6
200	30	12,430	-53.6		76	15.3
175	30	13,274	-60.8		83	18.1
150	30	14,216	-68.3		84	23.1
125	29	15,288	-76.1		82	28.0
100	29	16,555	-81.8		83	29.1
80	29	17,811	-77.6		79	14.6
70	29	18,588	-71.1		334	3.7
60	29	19,510	-65.7		273	10.1
50	28	20,629	-62.0		271	13.2
40	28	22,019	-58.8		275	14.4
30	28	23,838	-55.4		261	13.0
25	26	25,007	-52.7		264	11.3
20	25	26,455	-49.6		212	2.3
15	25	28,354	-46.7		93	7.0
10	22	31,060	-41.9		93	35.7
7	11	33,451	-37.7			
5						

KOTZEBUE, ALASKA
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	-9.6	80	113	7.6
1000	30	110			143	7.2
950	30	505	-9.0	78	156	8.4
900	30	925	-10.0	74	196	6.2
850	30	1,365	-11.0	71	207	7.0
800	30	1,829	-12.8	70	222	8.5
750	30	2,319	-14.6	68	225	10.5
700	30	2,840	-16.9	64	235	12.2
650	30	3,390	-19.6	59	236	13.8
600	30	3,984	-22.9	60	240	14.6
550	30	4,615	-26.5	60	242	15.5
500	30	5,299	-30.6	62	250	17.9
450	30	6,040	-34.7	55	255	20.2
400	30	6,856	-39.5	53	254	24.7
350	30	7,758	-45.2		256	24.9
300	30	8,775	-50.2		265	27.8
250	30	9,956	-53.1		270	30.1
200	30	11,393	-53.1		266	30.3
175	30	12,255	-52.0		264	26.4
150	30	13,256	-51.3		268	25.1
125	30	14,441	-50.8		267	23.7
100	30	15,896	-50.5		266	22.9
80	29	17,354	-50.7		270	23.5
70	29	18,223	-50.8		269	21.8
60	29	19,227	-50.8		274	22.9
50	29	20,414	-50.7		270	22.0
40	29	21,867	-50.7		276	22.3
30	27	23,752	-50.4		279	24.5
25	25	24,944	-50.0		280	25.6
20	23	26,394	-49.8		280	29.5
15	15	28,256	-50.2			
10	5	30,810	-50.4			
7						
5						

KWAJALEIN, MARSHALL IS.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	29	4	27.4	78	71	9.5
1000	29	82	27.0	79	74	9.5
950	29	536	23.9	85	76	10.5
900	29	1,008	20.8	81	81	10.5
850	29	1,502	18.1	81	89	9.3
800	29	2,020	15.6	75	88	8.7
750	29	2,567	13.4	65	82	8.5
700	29	3,146	10.5	58	75	8.5
650	29	3,760	6.6	60	74	7.8
600	29	4,413	2.8	60	73	10.5
550	29	5,113	-.9	55	74	12.0
500	29	5,868	-5.5	51	70	12.2
450	29	6,686	-10.5	41	70	10.7
400	29	7,584	-16.4	40	67	9.1
350	29	8,576	-22.2	41	71	3.9
300	29	9,692	-30.5	38	311	.6
250	29	10,960	-41.2	43	273	3.5
200	29	12,436	-53.4	37	254	7.6
175	29	13,279	-60.9	36	260	8.4
150	29	14,222	-68.5	33	278	6.8
125	29	15,292	-76.2		314	3.5
100	26	16,559	-80.6		70	12.2
80	23	17,822	-77.9		85	7.6
70	23	18,595	-72.5		248	3.7
60	22	19,512	-67.1		272	6.4
50	22	20,627	-62.7		260	13.8
40	22	22,009	-60.0		267	12.8
30	21	23,822	-56.7		257	11.7
25	21	24,985	-53.5		276	7.6
20	21	26,429	-50.9		215	1.0
15	19	28,316	-46.5		84	12.8
10	15	31,019	-42.9		91	34.8
7	12	33,474	-36.7		92	44.1
5	5	35,802	-32.3			

LAKE CHARLES, LA.
1021 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	5	13.8	91	82	2.7
1000	30	177	15.3	80	120	5.1
950	30	614	13.5	69	195	5.4
900	30	1,066	11.5	55	225	5.1
850	30	1,542	9.1	50	256	6.2
800	30	2,042	6.6	55	275	9.7
750	30	2,571	4.7	44	280	11.1
700	30	3,132	3.6	28	281	10.9
650	30	3,730	1.0	23	278	12.8
600	30	4,371	-2.6	23	277	18.1
550	30	5,049	-6.9	25	281	21.6
500	30	5,793	-11.7	27	282	26.2
450	30	6,590	-17.0	26	282	29.9
400	30	7,468	-23.3	29	284	33.6
350	30	8,432	-30.7	29	282	37.7
300	30	9,508	-39.2	27	283	40.4
250	30	10,732	-48.8		282	44.7
200	30	12,166	-58.3		283	50.3
175	30	12,998	-62.5		280	49.1
150	30	13,941	-66.0		276	48.0
125	30	15,040	-68.7		274	44.1
100	30	16,370	-70.9		276	35.5
80	30	17,689	-71.2		280	24.3
70	30	18,480	-69.8		283	17.3
60	30	19,406	-66.4		276	11.1
50	30	20,523	-62.0		265	8.2
40	30	21,914	-58.2		268	11.1
30	29	23,740	-55.1		270	16.7
25	29	24,911	-52.6		270	21.0
20	28	26,355	-50.7		270	24.9
15	27	28,244	-47.7		270	35.2
10	22	30,929	-44.3		266	51.3
7	11	33,317	-42.6			
5						
4						

LANDER, WYO.
828 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,696	-1.7	68	253	2.7
1000	30	169				
950	30	586				
900	30	1,023				
850	30	1,487				
800	30	1,974	1.9	50	219	2.7
750	30	2,489	-.1	49	239	6.2
700	30	3,044	-2.8	45	268	15.0
650	30	3,624	-6.4	47	275	24.1
600	30	4,250	-9.6	45	283	29.3
550	30	4,912	-13.7	44	281	34.2
500	30	5,636	-18.4	42	281	35.9
450	30	6,408	-24.2	43	281	38.9
400	30	7,263	-30.7	45	279	43.3
350	30	8,198	-37.5	49	276	51.1
300	30	9,244	-45.6		274	55.0
250	30	10,436	-53.8		274	62.5
200	30	11,850	-59.4		276	65.3
175	30	12,683	-60.8		276	63.3
150	30	13,642	-60.5		276	58.1
125	29	14,777	-61.0		278	40.8
100	29	16,161	-61.5		277	31.1
80	29	17,543	-61.4		282	25.3
70	29	18,372	-60.7		281	16.9
60	29	19,331	-60.8		299	11.3
50	29	20,467	-60.1		324	8.7
40	29	21,861	-59.7		323	7.4
30	26	23,678	-57.6		344	8.2
25	24	24,840	-56.5		338	8.7
20	23	26,254	-55.6		333	11.8
15	22	28,093	-53.5		332	13.8
10	14	30,721	-51.4		325	16.3
7						
5						
4						

* LIHUE, HAWAII
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	36	22.3	90	83	3.5
1000	30	127	22.8	87	80	5.6
950	30	570	20.0	90	92	9.5
900	30	1,039	16.7	89	101	8.5
850	30	1,525	14.0	86	116	7.8
800	30	2,036	11.6	77	132	7.2
750	30	2,571	9.1	55	138	6.4
700	30	3,144	6.9	48	163	5.2
650	30	3,744	3.7	41	182	4.5
600	30	4,396	.1	36	207	4.5
550	30	5,079	-4.0	35	218	6.4
500	30	5,834	-8.5	29	232	9.9
450	30	6,639	-13.3	32	242	11.7
400	30	7,532	-19.3	34	251	14.0
350	30	8,511	-26.4	31	259	17.7
300	30	9,607	-34.8	31	262	22.3
250	30	10,853	-45.0		265	27.8
200	30	12,307	-56.3		269	35.2
175	30	13,143	-62.1		268	35.5
150	30	14,082	-68.0		271	31.1
125	30	15,164	-72.2		273	25.1
100	29	16,466	-75.5		276	13.4
80	28	17,761	-73.7		280	8.7
70	28	18,543	-71.6		308	5.8
60	28	19,457	-68.8		52	3.1
50	27	20,560	-64.8		92	.8
40	27	21,937	-60.0		135	3.1
30	27	23,750	-55.8		283	2.3
25	26	24,915	-53.6		267	1.2
20	26	26,359	-51.0		19	2.3
15	24	28,247	-48.0		220	5.8
10	22	30,965	-43.9		265	16.3
7	19	33,379	-40.7		263	28.2
5	12	35,659	-38.7		272	46.6
4	7	37,248	-35.9			

LITTLE ROCK, ARK.
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	79	8.4	78	264	1.4
1000	30	176	10.0	70	222	1.9
950	30	602	10.2	68	249	11.3
900	30	1,053	8.8	66	261	14.8
850	30	1,525	6.9	60	270	15.9
800	30	2,022	4.6	57	275	16.9
750	30	2,544	2.3	48	281	16.5
700	30	3,101	.2	41	282	17.3
650	30	3,689	-2.8	40	280	22.7
600	30	4,324	-6.3	36	276	26.4
550	30	4,989	-10.5	36	276	30.3
500	30	5,727	-15.1	34	278	34.2
450	30	6,509	-20.4	35	273	40.6
400	30	7,380	-26.4	40	275	47.6
350	30	8,331	-33.5	43	279	53.6
300	30	9,397	-40.9	41	279	62.0
250	30	10,612	-49.9		279	69.3
200	30	12,041	-58.4		282	70.9
175	30	12,875	-61.4		281	68.2
150	30	13,825	-63.3		278	62.2
125	30	14,940	-65.3		281	52.4
100	29	16,289	-67.2		280	37.5
80	29	17,635	-67.1		280	27.4
70	29	18,441	-66.0		277	20.4
60	28	19,380	-63.8		278	15.7
50	28	20,502	-61.9		275	12.6
40	28	21,891	-59.2		279	12.2
30	27	23,706	-56.7		275	15.5
25	25	24,867	-55.2		271	20.0
20	25	26,298	-52.8		272	27.4
15	23	28,173	-49.9		270	32.8
10	19	30,852	-46.7		269	49.7
7	6	33,217	-45.4			
5						
4						

MCGRATH, ALASKA
1004 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	103	-12.4	77	185	.8
1000	30	131			291	1.7
950	30	529	-9.0	84	117	1.2
900	30	947	-8.0	81	185	1.6
850	30	1,392	-8.2	79	230	4.7
800	30	1,862	-9.3	76	244	5.8
750	30	2,357	-11.2	73	254	7.6
700	30	2,888	-13.9	73	257	8.4
650	30	3,443	-17.1	71	264	8.5
600	30	4,044	-20.6	67	267	10.9
550	30	4,677	-24.3	62	267	13.0
500	30	5,374	-28.3	53	275	16.7
450	30	6,113	-32.9	49	290	19.2
400	30	6,943	-38.3	45	290	21.4
350	30	7,851	-44.0		293	25.8
300	30	8,874	-48.9		289	28.0
250	30	10,063	-51.8		286	28.2
200	30	11,507	-52.5		292	25.3
175	30	12,372	-51.7		295	22.1
150	30	13,373	-51.3		291	20.8
125	30	14,558	-51.1		289	20.6
100	30	16,012	-50.7		284	16.9
80	30	17,466	-50.5		287	17.7
70	30	18,336	-50.9		287	18.5
60	30	19,340	-50.6		285	16.7
50	30	20,528	-50.4		291	14.0
40	30	21,984	-50.3		294	14.0
30	30	23,862	-50.1		306	17.5
25	28	25,051	-50.1		312	19.6
20	26	26,508	-49.9		315	18.8
15	9	28,475	-47.2			
10						
7						
5						
4						

MAJURO, MARSHALL IS.
+ 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	3	28.8	77	86	3.1
1000	30	84	27.6	74	88	3.5
950	30	531	23.5	76	91	5.4
900	30	1,009	20.7	75	101	6.2
850	30	1,502	18.1	71	110	5.8
800	30	2,020	15.5	66	108	6.6
750	30	2,561	12.9	58	100	6.6
700	30	3,144	9.9	52	96	7.4
650	30	3,754	6.5	51	84	8.4
600	30	4,409	2.7	48	84	8.9
550	30	5,106	-.9	41	80	9.1
500	30	5,865	-5.0	40	77	8.9
450	30	6,687	-9.8	35	70	8.5
400	30	7,588	-15.3	34	67	5.8
350	30	8,585	-21.7	32	46	2.1
300	30	9,702	-30.0	29	302	3.1
250	30	10,976	-40.0	30	289	5.1
200	30	12,459	-52.9		277	7.2
175	30	13,307	-60.0		288	8.0
150	30	14,253	-67.4		300	7.2
125	30	15,331	-75.1		340	3.9
100	30	16,605	-80.6		65	8.0
80	29	17,869	-76.4		7	2.7
70	29	18,654	-69.2		269	8.5
60	29	19,583	-65.0		259	14.6
50	29	20,706	-61.2		267	17.5
40	29	22,100	-58.5		266	18.8
30	28	23,928	-55.0		265	17.5
25	28	25,101	-51.9		267	14.8
20	27	26,555	-48.7		264	10.1
15	26	28,459	-45.6		51	2.3
10	25	31,194	-40.3		87	33.4
7	10	33,641	-36.2			

MARCUS IS., N. PACIFIC
+ 1016 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	27	9	26.3	68	79	9.9
1000	27	145	24.1	67	81	10.9
950	27	591	19.6	70	71	12.0
900	27	1,055	16.3	63	71	11.5
850	27	1,540	14.7	54	69	9.7
800	27	2,052	13.3	41	56	6.8
750	27	2,593	12.2	29	22	5.6
700	27	3,170	9.2	28	342	6.4
650	27	3,776	5.7	28	339	7.0
600	27	4,430	1.8	27	317	9.1
550	27	5,121	-2.5	26	305	11.8
500	27	5,877	-6.7	23	293	16.5
450	27	6,687	-11.8	22	282	15.7
400	27	7,585	-18.1	21	282	18.5
350	27	8,568	-25.2	21	281	23.7
300	27	9,670	-33.2	21	286	26.2
250	27	10,925	-42.8		290	28.4
200	27	12,396	-53.6		290	26.8
175	27	13,242	-60.0		284	24.7
150	27	14,190	-66.4		285	26.4
125	27	15,277	-72.7		283	20.0
100	26	16,564	-78.4		266	14.2
80	25	17,833	-78.1		266	5.2
70	25	18,605	-72.9		50	1.7
60	25	19,520	-67.7		86	7.8
50	25	20,629	-63.6		80	8.7
40	24	22,016	-58.0		96	8.7
30	23	23,843	-54.5		87	4.7
25	21	25,015	-51.6		138	2.5
20	18	26,467	-48.6		217	2.5
15	16	28,378	-43.2		266	11.7
10	13	31,155	-36.8		267	26.0
7	11	33,628	-35.6			

* MEDFORD, OREG.
970 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	401	4.9	88	282	.6
1000	30	146				
950	30	569	6.3	87	122	1.4
900	30	1,011	6.4	75	168	7.2
850	30	1,479	4.8	69	200	9.3
800	30	1,972	2.3	70	222	12.6
750	30	2,488	-.3	64	232	14.2
700	30	3,040	-3.5	62	241	17.3
650	30	3,620	-6.7	56	245	19.8
600	30	4,244	-10.2	56	255	23.5
550	30	4,903	-14.3	51	255	24.3
500	30	5,626	-19.0	44	261	27.2
450	30	6,396	-24.5	42	262	31.3
400	30	7,250	-30.8	44	264	34.8
350	29	8,185	-37.5	44	262	39.6
300	29	9,233	-44.4		263	43.7
250	29	10,432	-52.6		262	44.7
200	29	11,853	-58.4		258	50.9
175	29	12,690	-59.6		265	46.0
150	29	13,652	-60.0		265	41.0
125	28	14,787	-61.0		262	33.2
100	28	16,172	-61.2		261	26.0
80	27	17,561	-60.4		268	17.3
70	27	18,392	-60.6		278	12.0
60	27	19,351	-60.4		293	9.3
50	26	20,491	-60.0		319	7.8
40	26	21,887	-59.2		4	7.4
30	25	23,697	-58.0		32	8.0
25	24	24,849	-57.2		39	10.9
20	24	26,266	-55.8		23	9.7
15	20	28,101	-53.5		39	12.6
10	14	30,713	-50.7		68	17.7
7						

MERIDA, MEXICO
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	28	11	16.2	97	50	2.7
1000	28	167	21.3	80	60	7.8
950	28	603	18.8	72	72	10.5
900	28	1,074	15.8	67	69	8.9
850	28	1,557	12.5	68	66	8.0
800	26	2,065	10.1	59	65	7.0
750	24	2,600	9.4	38	36	6.4
700	24	3,173	7.1	31	35	6.0
650	24	3,773	4.0	28	26	5.2
600	24	4,426	.9	23	6	5.6
550	24	5,108	-3.2	21	325	6.2
500	24	5,869	-7.7	21	303	8.5
450	24	6,672	-13.6	20	286	11.7
400	24	7,568	-20.3	19	279	16.7
350	24	8,543	-27.4	23	274	22.3
300	24	9,633	-35.5	24	267	27.8
250	24	10,876	-45.1		255	33.2
200	23	12,334	-55.7		253	36.9
175	23	13,172	-61.3		251	36.3
150	23	14,116	-66.6		253	33.2
125	23	15,203	-71.9		260	28.9
100	23	16,506	-75.1		268	18.1
80	23	17,798	-74.0		283	7.0
70	22	18,578	-72.4		291	1.9
60	20	19,496	-66.9		224	2.7
50	18	20,610	-60.6		50	.6
40	16	22,018	-56.6		52	1.9
30	13	23,878	-52.5			
25	9	25,062	-51.0			
20						
15						
10						
7						

* MIAMI, FLA.
1018 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	4	17.9	86	356	3.5
1000	30	154	19.5	75	28	8.4
950	30	593	16.8	79	48	11.8
900	30	1,054	13.6	77	48	10.9
850	30	1,534	11.3	64	47	9.3
800	29	2,040	9.9	50	37	6.4
750	29	2,578	8.6	37	14	6.0
700	29	3,143	6.0	25	353	6.2
650	29	3,747	2.8	23	320	7.6
600	29	4,390	-.9	21	311	10.7
550	29	5,073	-4.9	23	300	13.6
500	29	5,823	-9.7	21	295	17.7
450	29	6,625	-15.3	20	292	21.2
400	29	7,509	-21.7	20	287	24.9
350	29	8,479	-29.3	22	286	28.7
300	29	9,562	-37.5	23	282	33.2
250	29	10,797	-46.4		275	39.4
200	28	12,245	-56.0		272	48.4
175	26	13,083	-61.3		269	50.1
150	26	14,028	-66.0		271	49.0
125	22	15,128	-69.7		270	43.5
100	20	16,447	-72.9		278	36.1
80	18	17,756	-72.8		278	21.8
70	18	18,543	-70.5		274	12.8
60	18	19,468	-66.0		259	7.2
50	17	20,593	-61.5		256	4.7
40	17	21,991	-57.4		302	5.6
30	14	23,829	-54.1		319	2.7
25	13	25,008	-51.7		305	6.4
20	13	26,463	-48.9		296	8.5
15	13	28,369	-44.6		275	12.2
10	11	31,105	-41.1		260	27.6
7	7	33,547	-38.7			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

NOVEMBER 1966

Standard pressure surface (mb.)	* MIDLAND, TEXAS 919 MB						MONTERREY, MEXICO 970 MB						MONTGOMERY, ALA. 1015 MB						* NANTUCKET, MASS. 1019 MB						* NASHVILLE, TENN. 999 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	874	7.3	76	210	1.0	30	423	13.6	85	324	2.1	30	61	8.7	85	358	1.0	30	14	7.2	83	4	1.4	30	180	6.9	84	201	1.9
1000	30	167					30	164					30	184	11.5	70	143	1.7	30	169	7.9	73	246	2.1	30	173			158	2.9
950	30	597					30	601	14.8	81	56	2.3	30	614	11.5	62	233	4.9	30	589	6.8	70	257	5.2	30	599	8.3	65	230	10.3
900	30	1,045	11.1	63	200	5.1	30	1,056	13.9	73	110	3.1	30	1,065	9.5	66	263	7.0	30	1,034	4.5	69	246	6.8	30	1,043	7.3	65	251	13.6
850	30	1,524	12.7	49	239	11.5	30	1,538	13.2	53	151	7.4	30	1,539	7.5	61	271	9.5	30	1,499	3.5	65	241	10.9	30	1,512	5.0	69	263	16.1
800	30	2,031	10.3	42	259	11.5	30	2,048	12.0	40	168	2.9	30	2,036	5.4	52	273	12.2	30	1,990	1.4	61	246	12.6	30	2,005	2.8	65	270	17.3
750	30	2,562	7.6	37	271	12.2	30	2,585	9.9	32	266	3.9	30	2,562	3.3	47	283	14.8	30	2,505	- .3	55	247	13.4	30	2,526	.3	66	276	17.5
700	30	3,132	4.5	33	274	15.3	30	3,156	6.7	25	264	4.5	30	3,120	1.3	40	283	15.9	30	3,058	- 2.7	54	246	16.5	30	3,077	- 2.1	61	272	18.1
650	30	3,731	1.1	33	267	16.3	30	3,758	3.4	25	288	4.7	30	3,711	- 1.9	29	279	19.8	30	3,637	- 5.6	52	246	18.8	30	3,664	- 4.2	49	271	21.0
600	30	4,371	- 2.9	31	271	19.0	30	4,407	- .4	25	274	6.0	30	4,347	- 5.3	26	276	21.8	30	4,267	- 9.6	48	238	21.2	30	4,291	- 7.7	47	275	23.5
550	30	5,048	- 7.1	27	267	24.5	30	5,091	- 4.6	20	268	8.9	30	5,018	- 9.1	28	277	25.4	30	4,928	-13.5	45	245	20.2	30	4,957	-11.9	48	272	25.6
500	30	5,792	-11.8	28	268	28.4	30	5,841	- 9.7	21	255	9.7	30	5,757	-13.7	27	280	30.5	30	5,653	-18.4	44	256	19.2	30	5,686	-16.7	46	271	30.5
450	30	6,584	-17.2	26	268	32.1	30	6,642	-15.3	23	261	11.5	30	6,546	-18.9	31	282	35.4	29	6,430	-23.5	40	256	21.6	30	6,464	-22.3	47	274	32.4
400	30	7,464	-23.6	32	268	37.1	30	7,525	-21.9	25	263	15.2	30	7,418	-25.0	31	282	42.0	29	7,291	-29.7	37	255	22.5	30	7,325	-28.2	44	276	37.9
350	30	8,426	-30.7	33	265	41.0	30	8,493	-29.2	24	261	18.3	30	8,375	-32.3	33	280	47.4	29	8,229	-37.0	39	258	25.8	30	8,271	-35.0	42	276	41.2
300	30	9,503	-39.2	40	266	45.3	30	9,575	-37.6	27	259	20.6	30	9,444	-40.6	37	282	49.0	29	9,278	-45.1		267	26.4	30	9,330	-42.3	52	274	49.3
250	30	10,727	-48.5		267	52.4	30	10,807	-46.9		275	24.7	30	10,661	-49.6		282	54.2	29	10,473	-53.1		267	33.0	29	10,536	-50.5		275	55.6
200	30	12,163	-58.3		273	59.2	30	12,250	-57.5		278	32.4	29	12,094	-58.2		280	59.6	29	11,891	-58.7		270	39.6	28	11,974	-57.7		281	63.7
175	30	12,994	-62.7		273	58.9	30	13,082	-63.0		274	35.5	28	12,926	-61.6		281	57.7	29	12,728	-59.3		266	39.6	28	12,812	-59.7		281	62.0
150	29	13,936	-66.4		272	53.0	30	14,019	-67.9		270	32.1	28	13,875	-64.0		281	53.6	29	13,693	-59.8		261	38.9	28	13,773	-61.4		279	57.9
125	28	15,035	-69.1		274	46.4	30	15,106	-70.8		264	27.2	27	14,984	-66.5		279	49.7	28	14,832	-60.9		259	34.8	28	14,899	-63.4		280	47.4
100	28	16,365	-70.4		278	35.9	30	16,418	-73.8		268	23.9	26	16,328	-67.9		281	37.1	27	16,206	-60.8		260	31.3	28	16,265	-64.5		280	37.9
80	28	17,688	-70.3		277	25.6	30	17,720	-73.7		271	15.3	26	17,667	-67.7		282	26.0	27	17,589	-60.9		261	23.9	27	17,628	-64.7		277	28.0
70	28	18,484	-68.6		276	18.8	29	18,504	-71.6		278	10.7	26	18,473	-66.4		279	19.2	27	18,418	-61.4		259	21.4	27	18,444	-63.7		278	21.8
60	27	19,412	-66.7		283	12.6	28	19,425	-67.7		283	8.5	26	19,410	-64.3		281	13.8	27	19,373	-61.3		258	19.8	27	19,391	-62.5		281	16.7
50	27	20,522	-63.2		279	7.2	26	20,531	-63.5		264	5.2	26	20,534	-60.9		277	12.2	26	20,506	-60.5		258	18.6	26	20,517	-61.2		278	13.0
40	27	21,905	-60.0		267	8.9	26	21,921	-58.2		247	9.1	26	21,928	-58.3		265	10.9	26	21,898	-59.6		261	17.5	26	21,908	-59.2		275	14.8
30	27	23,716	-56.3		266	14.8	25	23,743	-55.0		259	13.8	24	23,754	-55.0		272	15.2	24	23,702	-58.7		261	19.8	26	23,720	-56.7		278	16.3
25	27	24,879	-54.4		273	17.3	23	24,913	-52.2		261	15.0	24	24,924	-52.7		272	17.3	24	24,848	-57.9		268	22.0	26	24,879	-55.1		276	19.8
20	27	26,314	-52.8		269	21.4	20	26,361	-49.8		266	18.3	24	26,371	-50.5		269	20.4	24	26,258	-56.3		265	29.7	25	26,307	-53.6		275	23.3
15	27	28,183	-50.0		272	30.7	14	28,243	-46.3		258	30.3	22	28,255	-48.0		267	30.9	23	28,076	-55.2		270	38.1	23	28,157	-51.2		274	26.2
10	24	30,842	-47.3		271	45.1	9	30,878	-43.7				21	30,954	-43.9		266	45.5	21	30,675	-53.1		269	59.1	20	30,795	-48.3		274	40.8
7	21	33,215	-44.9		267	55.4							17	33,352	-41.2		265	64.9	17	33,018	-50.1		271	74.2	19	33,159	-45.3		272	55.6
5	10	35,448	-40.9										10	35,646	-38.3				6	35,305	-46.9				6	35,346	-43.4			

Standard pressure surface (mb.)	NOME, ALASKA 1014 MB						■ NORTH PLATTE, NEBR. 919 MB						* OAKLAND, CALIF. 1017 MB						OKLAHOMA CITY, OKLA. 972 MB						* PEORIA, ILL. 995 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	27	5	- 7.4	80	99	3.9	30	848	- 3.7	78	342	3.7	30	6	11.3	82	151	3.3	30	392	8.6	72	183	2.7	30	200	3.0	73	261	1.9
1000	27	111			118	4.5	30	173					30	148	11.6	76	157	4.1	30	157					30	153				
950	27	509	- 7.2	78	175	5.1	30	583					30	578	10.4	69	176	4.1	30	584	10.0	60	199	10.1	30	573	3.7	73	264	12.6
900	27	932	- 8.3	72	196	6.8	30	1,014	1.2	63	319	5.4	30	1,026	9.2	60	198	5.8	30	1,033	10.0	54	232	21.8	30	1,010	4.2	60	278	16.1
850	27	1,375	- 9.6	72	214	8.7	30	1,478	4.1	51	315	9.9	30	1,498	7.2	53	221	7.8	30	1,508	9.1	47	251	20.0	30	1,474	2.8	56	283	15.9
800	27	1,842	-11.1	68	224	11.1	30	1,970	2.7	48	301	13.0	30	1,995	5.0	48	230	8.7	30	2,008	6.8	42	259	17.1	30	1,964	.9	56	285	16.9
750	27	2,336	-13.0	67	233	10.9	30	2,491	.5	43	296	17.7	30	2,520	2.5	39	233	11.1	30	2,531	3.9	39	262	17.1	30	2,481	- 1.6	56	278	18.3
700	27	2,860	-15.2	63	253	10.7	30	3,042	- 2.5	43	295	21.2	30	3,075	- .3	37	235	13.4	30	3,093	.5	37	264	19.4	30	3,027	- 4.7	54	275	22.9
650	27	3,414	-18.0	60	259	14.4	30	3,625	- 5.6	41	286	24.7	30	3,661	- 3.5	35	239	15.7	30	3,680	- 2.5	34	270	22.9	30	3,605	- 7.9	49	275	25.1
600	27	4,013	-21.4	64	264	15.7	30	4,250	- 9.4	41	277	23.9	30	4,293	- 7.3	33	245	16.5	30	4,316	- 5.9	31	273	25.8	30	4,226	-11.5	45	278	27.6
550	27	4,651	-24.7	62	267	18.6	30	4,913	-13.6	40	278	27.6	30	4,961	-11.5	31	253	18.1	30	4,988	-10.3	34	276	28.4	30	4,889	-15.4	48	275	31.5
500	27	5,339	-28.6	56	268	21.2	30	5,636	-18.5	39	279	31.9	30	5,691	-16.3	33	252	20.8	30	5,720	-15.2	39	278	34.2	30	5,602	-19.9	45	274	34.8
450	27	6,086	-33.2	52	273	22.0	30	6,407	-24.0	41	281	36.3	30	6,470	-21.7	29	258	23.9	30	6,500	-20.7	40	278	39.0	30	6,372	-25.0	42	272	37.1
400	27	6,907	-38.3	47	271	24.1	30	7,263	-30.2	44	282	43.3	30	7,335	-28.0	33	267	25.6	30	7,370	-26.7	37	277	45.5	30	7,222	-30.9	45	272	42.0
350	27	7,815	-44.3		272	26.4	30	8,200	-37.2	41	284	48.6	30	8,280	-34.8	39	270	29.3	30	8,320	-33.7	39	275	53.4	30	8,155	-38.0	47	271	47.8
300	27	8,834	-49.9		277	28.9	30	9,248	-45.1		284	52.4	30	9,340	-42.2	33	266	35.2	30	9,383	-41.5	39	276	61.4	30	9,201	-45.2		273	49.9
250	27	10,016	-53.8		274	29.5	30	10,444	-53.2		285	58.3	30	10,550	-50.9		271	39.0	30	10,597	-49.9		275	71.1	30	10,396	-52.9		275	55.4
200	27	11,447	-54.4		272	25.3	30	11,859	-59.0		284	62.2	30	11,976	-58.1		273	36.5	30	12,025	-58.4		278	73.6	30	11,815	-58.3		277	62.9
175	27	12,306	-52.9		262	22.5	30	12,694	-60.2		282	63.1	30	12,812	-60.4		270	37.7	30	12,858	-61.6		279	72.5	30	12,653	-59.3		280	59.1
150	27	13,302	-52.0		260	22.0	30	13,653	-60.9		281	56.3	30	13,769	-62.1		266	35.4	30	13,808	-63.7		280	62.4	30	13,616	-60.2		277	53.8
125	27	14,485	-51.3		260	20.6	30	14,784	-61.9		282	49.9	29	14,890	-63.1		264	32.6	30	14,920	-66.0		279	54.8	30	14,752	-60.9		280	46.0
100	27	15,937	-50.8		258	19.0	30	16,162	-62.8		281	38.3	29	16,259	-64.3		266	25.6	30	16,266	-67.7		275	43.1	30	16,136	-61.8		279	35.0
80	27	17,390	-50.7		259	19.2	30	17,538	-62.2		284	24.9	28	17,626	-63.9		263	17.9	30	17,611	-66.8		278	29.3	29	17,516	-61.9		277	24.5
70	27	18,259	-50.8		261	18.5	30	18,362	-62.0		286	19.2	28	18,445	-63.5		273	13.6	29	18,415	-65.9		281	19.2	29	18,342	-61.7		279	22.7
60	27	19,265	-50.8		261	17.1	30	19,317	-61.1		287	14.2	27	19,392	-62.2		286	9.1	29	19,352	-64.8		277	13.0	29	19,297	-61.7		279	17.5
50	27	20,454	-50.6		263	16.5	30	20,450	-60.7		294	13.0	27	20,520	-61.3		328	5.1	29	20,471	-62.4		273	11.8	29	20,426	-61.4		278	14.0
40	27	21,908	-50.4		268	16.7	29	21,840	-60.1		302	9.3	26	21,909	-60.1		23	3.3	28	21,655	-60.1		280	8.7	29	21,812	-60.3		284	13.0
30	27	23,789	-49.4		270	18.3	29	23,641	-58.6		308	9.7	24	23,715	-57.7		36	6.0	26	23,659	-57.7		286	15.0	28	23,613	-58.6		290	14.0
25	25	24,990	-49.4		279	19.6	29	24,787	-58.1		304	11.7	24	24,869	-56.0		57	6.0	25	24,815	-56.1		273	18.1	28	24,761	-57.3		282	14.4
20	21	26,476	-49.3		276	22.1	27	26,194	-56.3		308	13.4	22	26,300	-53.8		31	5.1	25	26,240	-53.5		272	25.3	28	26,176	-56.0		286	17.7
15	17	28,363	-48.5		295	28.7	25	28,027	-54.7		305	15.9	19	28,167	-51.2		20	4.3	23	28,080	-52.7		269	35.7	27	28,009	-54.2		282	24.5
10	10	30,948	-51.8				23	30,642	-52.3		288	19.8	19	30,820	-48.3		320	5.6	14	30,734	-49.4				26	30,636	-50.7		284	33.0
7							16	32,993	-50.1		279	38.1	11	33,148	-46.9		274	7.0							23	32,983	-49.0		279	46.8
5							5	35,154	-46.7				6	35,362	-44.5										14	35,106	-47.5			

Standard pressure surface (mb.)	* PITTSBURGH, PA. 977 MB						PONAPE, CAROLINE IS. + 1004 MB						PORTLAND, ME. 1019 MB						QUILLAYUTE, WASH. 1007 MB						RAPID CITY, S. DAK. 904 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	359	3.3	78	224	3.9	30	39	28.7	77	64	7.2	30	20	3.0	84	318	1.9	30	58	5.9	96	131	2.1	29	966	- 1.6	71	315	2.3
1000	30	165					30	74	28.3	77	68	6.2	30	172	4.6	76	303	2.9	30	110			108	1.6	29	158				
950	30	585	4.4	71	236	9.7	30	522	24.4	75	80	8.4	30	590	4.6	70	247	6.0	30	529	5.8	80	169	7.8	29	571				
900	30	1,021	3.0	71	256	15.0	30	1,001	20.9	76	85	8.9	30	1,030	3.2	72	259	9.1	30	973	3.4	83	197	11.7	29	1,004			297	2.1
850	30	1,483	1.6	62	257	16.9	30	1,495	18.1	71	84	10.1	30	1,493	1.5	69	256	10.3	30	1,435	.8	78	216	13.6	29	1,467	2.6	52	288	7.8
800	30	1,971	.1	61	258	19.8	30	2,014	15.6	66	85	8.5	30	1,980	.0	63	258	12.4	30	1,920	- 1.6	73	227	15.5	29	1,956	.4	49	294	12.0
750	30	2,488	- 2.0	57	259	22.5	30	2,559	13.2	59	86	8.7	30	2,496	- 1.9	59	248	15.2	30	2,433	- 3.9	66	238	17.7	29	2,470	- 1.6	49	289	17.9
700	30	3,033	- 4.4	56	258	24.5	30	3,138	10.2	54	90	10.3	30	3,043	- 4.6	55	251	17.3	30	2,973	- 6.9	59	245	19.2	29	3,020	- 4.2	46	287	21.0
650	30	3,614	- 7.1	53	259	27.4	30	3,750	6.8	53	85	12.0	30	3,616	- 7.7	52	256	21.0	30	3,545	-10.4	57	249	21.2	29	3,599	- 7.5	50	284	23.5
600	30	4,235	-10.7	51	262	28.4	30	4,406	3.0	52	78	14.6	30	4,244	-10.6	47	256	23.9	30	4,160	-14.0	54	256	23.1	29	4,219	-11.4	52	282	27.4
550	30	4,896	-14.9	47	262	30.1	30	5,103	- .7	48	83	15.0	30	4,898	-14.9	41	257	26.6	30	4,817	-18.0	57	264	24.3	29	4,878	-15.7	52	280	32.6
500	30	5,613	-19.8	49	258	29.1	30	5,863	- 4.8	43	79	15.5	30	5,624	-19.7	38	254	29.7	30	5,523	-22.5	50	263	27.2	29	5,594	-20.4	46	280	36.5
450	29	6,384	-24.9	44	260	31.1	30	6,682	- 9.5	38	79	14.4	30	6,388	-25.3	34	250	30.1	29	6,284	-27.8	49	266	25.6	29	6,357	-25.8	43	279	41.4
400	29	7,234	-31.2	43	266	34.0	30	7,588	-14.8	33	81	12.8	30	7,243	-31.5	33	252	33.0	29	7,126	-34.0	45	272	27.6	29	7,209	-31.7	42	281	43.7
350	29	8,167	-37.9	42	268	36.9	30	8,585	-21.6	32	84	8.5	30	8,175	-38.8	38	252	35.5	29	8,047	-40.9	40	269	36.3	29	8,140	-38.7	42	285	49.7
300	29	9,214	-45.0		270	39.4	30	9,703	-30.0	31	88	5.4	30	9,216	-46.5		255	37.7	29	9,081	-47.5		267	45.3	29	9,181	-46.7		287	57.5
250	29	10,412	-52.9		275	44.1	30	10,975	-40.1	31	84	2.3	30	10,406	-54.0		265	41.0	29	10,268	-53.9		268	48.0	29	10,368	-54.6		285	61.0
200	29	11,833	-57.6		277	52.3	29	12,459	-52.4		84	3.1	29	11,828	-58.6		268	39.2	29	11,687	-57.3		277	38.9	29	11,776	-59.4		280	62.5
175	29	12,673	-58.5		279	49.1	29	13,308	-59.6		90	3.9	29	12,666	-58.8		261	38.1	28	12,538	-57.7		279	34.6	29	12,610	-60.3		279	60.2
150	29	13,639	-59.6		276	39.4	29	14,255	-67.2		70	6.2	29	13,634	-59.2		259	38.1	27	13,507	-57.8		279	32.1	29	13,572	-59.7		280	56.3
125	29	14,778	-60.3		272	35.0	29	15,333	-75.1		57	11.8	28	14,764	-59.2		259	34.4	27	14,657	-57.4		277	27.2	29	14,712	-60.1		281	46.4
100	29	16,167	-60.7		272	29.3	29	16,605	-81.1		71	20.2	27	16,159	-59.6		258	31.1	26	16,063	-57.2		268	23.9	29	16,103	-60.5		281	35.9
80	28	17,549	-60.9		269	17.9	29	17,867	-76.0		76	9.1	27	17,552	-60.2		255	22.5	26	17,475	-57.3		279	16.1	29	17,493	-60.5		282	27.8
70	27	18,376	-61.1		273	17.5	29	18,649	-70.2		269	3.9	27	18,385	-59.9		255	23.9	26	18,317	-57.5		282	13.0	28	18,323	-59.9		283	22.5
60	27	19,331	-61.4		270	16.7	29	19,577	-65.2		261	13.8	26	19,348	-60.4		255	21.2	25	19,290	-57.8		288	11.3	28	19,286	-60.2		288	17.1
50	27	20,466	-60.0		274	14.6	28	20,696	-62.0		261	18.6	26	20,483	-60.0		261	20.4	24	20,438	-57.2		315	8.5	28	20,424	-59.9		298	15.0
40	27	21,861	-59.3		279	14.2	27	22,085	-58.6		270	17.5	26	21,876	-59.8		263	20.0	23	21,850	-57.2		347	10.3	28	21,817	-60.1		307	11.8
30	26	23,673	-57.7		268	15.5	27	23,909	-54.8		269	17.9	25	23,679	-59.1		269	21.0	22	23,671	-57.2		21	12.4	27	23,619	-58.6		326	10.9
25	26	24,826	-56.9		270	16.5	27	25,078	-53.2		268	15.7	25	24,822	-58.6		273	23.9	21	24,830	-56.6		26	15.3	26	24,767	-58.0		321	10.3
20	25	26,244	-55.5		272	20.2	27	26,525	-49.8		260	10.3	24	26,214	-58.4		271	30.7	19	26,290	-55.2		36	17.1	21	26,188	-57.1		330	12.4
15	23	28,072	-54.4		271	30.1	26	28,418	-46.7		222	6.4	21	28,009	-58.2		273	40.6	14	28,116	-54.6		48	17.3	8	28,111	-52.1			
10	17	30,696	-51.5		282	39.2	23	31,133	-42.0		92	28.0	19	30,553	-55.6		274	50.1	8	30,733	-54.3									
7	10	33,020	-48.8				10	33,559	-38.2				11	32,810	-52.9															
5													5	34,936	-51.5															

See reference note at end of table

Omaha and Pago Pago on page 555.

RAWINSONDE DATA

Average monthly values

NOVEMBER 1966

ST. CLOUD, MINN.
983 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	316	-4.9	78	338	1.2
1000	30	158				
950	30	566	-4.5	82	316	2.9
900	30	991	-2.0	67	296	6.8
850	30	1,446	-1.8	54	294	11.8
800	30	1,927	-3.2	50	291	15.5
750	30	2,435	-5.6	52	289	18.3
700	30	2,976	-8.0	49	287	22.0
650	30	3,546	-10.8	53	286	26.4
600	30	4,161	-14.2	49	289	30.5
550	30	4,815	-18.2	52	287	35.2
500	30	5,523	-22.5	48	284	39.0
450	30	6,281	-27.9	44	286	41.2
400	30	7,125	-34.1	40	284	44.7
350	30	8,047	-40.7	32	285	49.7
300	30	9,080	-47.8		284	54.2
250	30	10,263	-54.6		281	60.4
200	30	11,679	-57.6		281	58.3
175	30	12,521	-57.5		281	52.8
150	30	13,495	-57.4		281	47.8
125	30	14,646	-57.7		281	42.0
100	30	16,052	-57.9		253	33.6
80	30	17,456	-58.7		282	27.6
70	29	18,297	-59.2		286	23.5
60	29	19,262	-59.4		289	21.0
50	29	20,402	-59.8		291	18.1
40	29	21,795	-59.9		297	16.9
30	29	23,593	-59.8		305	15.7
25	27	24,739	-58.6		312	15.5
20	24	26,144	-57.5		314	19.0
15	19	27,970	-56.4		330	20.6
10	7	30,541	-55.4			
7						
5						

ST. PAUL IS., ALASKA
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	10	1.8	82	237	4.7
1000	30	122			217	5.4
950	30	531	-1.0	79	244	10.3
900	30	963	-3.0	76	244	13.2
850	30	1,415	-4.5	67	248	14.0
800	30	1,891	-6.4	62	248	12.2
750	30	2,393	-8.7	57	251	14.0
700	30	2,926	-11.6	59	260	15.9
650	30	3,486	-14.4	53	257	16.7
600	30	4,095	-17.5	50	251	18.8
550	30	4,737	-21.0	50	245	19.8
500	30	5,440	-25.8	50	247	19.6
450	30	6,189	-30.8	44	233	22.1
400	30	7,024	-36.2	41	233	23.3
350	30	7,939	-42.2	35	228	27.4
300	30	8,968	-48.0		242	26.8
250	30	10,158	-52.4		246	31.3
200	30	11,593	-54.5		256	28.9
175	30	12,450	-53.9		257	30.1
150	30	13,442	-53.1		258	25.3
125	30	14,616	-53.1		257	22.7
100	30	16,056	-52.4		255	21.0
80	29	17,494	-52.0		247	15.2
70	29	18,358	-52.1		246	14.0
60	29	19,354	-52.2		252	10.5
50	29	20,534	-52.0		244	6.6
40	29	21,982	-51.2		240	3.9
30	28	23,862	-49.8		148	1.4
25	28	25,057	-49.1		101	3.7
20	27	26,538	-48.7		85	5.2
15	27	28,431	-48.4		86	1.1
10	24	31,104	-47.0		80	11.1
7	12	33,473	-46.3			
5						

SALEM, OREG.
1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	61	6.4	92	169	3.1
1000	30	129			181	2.3
950	30	548	7.3	72	202	7.6
900	30	996	5.2	72	214	10.9
850	30	1,461	3.0	71	229	15.0
800	30	1,951	.5	71	237	16.7
750	30	2,460	-2.0	66	238	17.9
700	30	3,012	-5.1	61	243	18.6
650	30	3,585	-8.2	62	252	20.0
600	30	4,209	-12.0	60	252	22.3
550	30	4,861	-16.1	60	254	24.1
500	30	5,582	-20.8	59	258	28.0
450	30	6,345	-26.0	52	259	30.3
400	30	7,196	-32.0	49	263	33.4
350	30	8,125	-38.9	47	267	38.1
300	30	9,166	-46.1		268	40.4
250	30	10,358	-53.6		271	44.3
200	30	11,776	-57.9		280	39.0
175	30	12,615	-58.7		277	40.6
150	30	13,582	-59.3		282	37.1
125	30	14,721	-60.1		282	29.5
100	29	16,115	-59.2		284	25.6
80	29	17,516	-58.7		288	14.6
70	29	18,352	-59.4		295	12.4
60	29	19,317	-59.0		303	11.1
50	28	20,464	-58.9		335	7.[illegible]
40	28	21,865	-58.3		355	8.5
30	26	23,677	-57.8		17	9.9
25	25	24,835	-56.8		25	11.1
20	22	26,264	-55.6		37	13.4
15	21	28,103	-53.6		50	14.0
10	16	30,746	-50.7		31	13.2
7	6	33,045	-49.9			
5						

SALT LAKE CITY, UTAH
873 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	1,288	2.9	74	143	4.7
1000	30	177				
950	30	599				
900	30	1,042				
850	30	1,508	5.5	57	166	7.8
800	30	2,003	4.0	49	192	11.8
750	30	2,522	.9	50	225	11.1
700	30	3,076	-3.0	55	251	12.8
650	30	3,654	-6.1	55	263	16.5
600	30	4,283	-9.7	52	266	19.6
550	30	4,944	-13.8	52	267	22.7
500	30	5,668	-18.5	47	265	28.4
450	30	6,438	-23.5	49	268	32.1
400	30	7,298	-29.6	46	269	36.7
350	30	8,236	-36.8	43	270	40.6
300	30	9,285	-44.8		270	47.0
250	30	10,481	-53.2		274	52.1
200	29	11,900	-59.4		273	54.0
175	29	12,732	-61.3		271	53.2
150	29	13,685	-62.5		271	51.9
125	28	14,802	-63.3		272	44.1
100	28	16,172	-63.3		278	33.8
80	27	17,540	-63.0		281	24.9
70	27	18,363	-62.6		283	18.1
60	26	19,313	-61.9		290	13.0
50	26	20,444	-60.8		304	8.5
40	25	21,832	-60.3		329	6.6
30	22	23,637	-58.3		342	6.4
25	22	24,786	-57.2		340	5.8
20	21	26,202	-55.7		350	8.0
15	15	28,052	-53.7		343	8.5
10	8	30,687	-50.6			
7						
5						

SAN DIEGO, CALIF.
1002 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	124	12.2	88	9	1.4
1000	30	142			4	2.1
950	30	578	14.3	64	342	3.3
900	30	1,031	13.0	55	323	3.7
850	30	1,510	10.8	46	296	6.0
800	30	2,013	8.1	45	282	8.0
750	30	2,543	5.7	40	267	8.4
700	30	3,105	2.9	33	265	10.3
650	30	3,700	-.1	33	261	13.8
600	30	4,339	-3.6	30	259	16.5
550	30	5,015	-7.5	32	255	19.6
500	30	5,757	-12.8	31	252	24.7
450	30	6,547	-18.5	32	253	27.4
400	30	7,421	-25.1	34	252	29.3
350	30	8,378	-32.2	36	253	33.0
300	30	9,448	-40.0	36	250	38.7
250	30	10,671	-48.7		253	45.6
200	30	12,110	-56.8		259	54.4
175	29	12,948	-60.3		259	52.8
150	27	13,907	-64.1		256	49.9
125	27	15,014	-67.1		256	42.7
100	26	16,350	-68.6		256	33.2
80	25	17,692	-67.4		262	20.0
70	24	18,501	-66.2		263	16.5
60	24	19,438	-64.5		270	11.8
50	23	20,557	-62.7		285	7.4
40	22	21,942	-60.3		301	5.1
30	22	23,752	-56.1		276	7.6
25	22	24,915	-54.4		269	11.1
20	22	26,351	-52.2		267	17.7
15	22	28,223	-49.5		270	24.9
10	21	30,881	-47.4		274	33.8
7	21	33,249	-45.1		274	38.5
5	8	35,493	-43.8			

* SAN JUAN, P. R.
1011 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	6	23.2	89	292	2.7
1000	30	105	23.4	83	124	1.7
950	30	551	20.9	79	51	6.4
900	30	1,019	17.9	78	37	6.0
850	30	1,508	15.3	70	27	4.7
800	30	2,020	12.8	62	6	2.7
750	30	2,556	10.7	49	298	2.7
700	30	3,134	7.7	47	282	4.5
650	30	3,737	5.1	32	279	5.6
600	30	4,391	1.6	30	268	7.4
550	30	5,078	-2.6	25	272	8.2
500	30	5,837	-7.2	23	281	11.8
450	30	6,643	-12.4	22	277	14.8
400	30	7,542	-18.2	21	276	17.1
350	30	8,525	-25.2	19	287	21.6
300	30	9,626	-33.6	20	283	25.6
250	30	10,879	-43.2		277	31.1
200	30	12,345	-54.7		271	35.7
175	29	13,186	-60.8		273	36.3
150	29	14,129	-67.7		277	35.5
125	29	15,210	-73.7		283	30.1
100	29	16,498	-77.7		280	20.4
80	29	17,775	-75.9		290	11.8
70	29	18,554	-71.6		300	7.4
60	29	19,476	-65.7		304	5.1
50	29	20,597	-60.7		356	.4
40	29	21,997	-57.1		42	2.5
30	29	23,831	-53.5		75	7.4
25	28	25,016	-50.1		87	8.5
20	28	26,481	-47.6		92	13.2
15	25	28,397	-44.1		86	16.7
10	19	31,148	-39.7		93	21.0
7	10	33,582	-36.2			
5						

* SAULT STE. MARIE, MICH.
989 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	221	-1.0	83	6	2.5
1000	30	130				
950	30	539	-1.5	82	299	3.9
900	30	969	-3.1	84	292	6.6
850	30	1,421	-3.9	76	291	8.2
800	30	1,900	-4.7	72	276	10.3
750	30	2,406	-6.3	68	266	16.1
700	30	2,945	-8.5	66	266	20.4
650	30	3,515	-11.2	67	268	23.7
600	30	4,129	-14.6	65	263	25.1
550	30	4,779	-18.5	56	260	27.4
500	30	5,487	-23.1	53	259	31.3
450	30	6,246	-28.2	49	259	35.7
400	30	7,086	-33.9	49	258	39.4
350	30	8,008	-40.6	44	262	43.7
300	30	9,041	-47.8		262	46.4
250	30	10,227	-53.7		265	51.3
200	30	11,646	-57.3		269	47.8
175	30	12,491	-56.5		265	45.1
150	30	13,469	-56.6		270	43.5
125	30	14,624	-56.9		267	37.5
100	30	16,034	-57.6		267	31.7
80	30	17,440	-58.1		267	27.6
70	30	18,279	-58.7		273	25.1
60	30	19,246	-59.3		279	23.5
50	29	20,382	-59.7		275	22.1
40	29	21,776	-59.9		284	20.2
30	29	23,573	-59.6		286	20.4
25	28	24,715	-59.1		282	24.1
20	27	26,109	-58.5		288	24.9
15	27	27,921	-57.7		289	30.3
10	27	30,487	-56.1		289	39.6
7	24	32,763	-54.1		279	54.2
5						

SHEMYA, ALASKA
1007 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	38	3.4	83	189	10.1
1000	30	96			217	10.1
950	30	511	-.1	82	226	13.4
900	30	941	-2.3	84	230	14.2
850	30	1,393	-4.1	76	236	15.0
800	30	1,870	-6.2	64	241	16.7
750	30	2,374	-8.3	61	241	17.7
700	30	2,907	-10.7	55	241	19.4
650	29	3,473	-14.3	52	241	22.1
600	29	4,077	-17.9	49	234	25.1
550	29	4,721	-21.6	50	232	28.6
500	29	5,420	-26.1	47	229	32.2
450	29	6,171	-31.2	47	225	35.7
400	29	7,001	-36.8	46	225	33.0
350	29	7,914	-43.0	37	228	34.8
300	28	8,946	-48.5		239	37.7
250	28	10,134	-52.7		253	34.4
200	26	11,576	-55.7		245	37.5
175	26	12,432	-53.6		250	35.0
150	26	13,424	-53.1		245	30.3
125	26	14,599	-53.3		246	30.7
100	26	16,038	-52.4		238	25.1
80	25	17,479	-52.4		241	25.1
70	25	18,341	-52.1		239	19.2
60	25	19,339	-52.3		234	17.1
50	24	20,513	-52.1		236	12.8
40	23	21,963	-51.9		203	9.5
30	22	23,832	-50.6		162	7.4
25	21	25,020	-49.9		140	8.2
20	20	26,480	-49.4		127	10.3
15	17	28,374	-48.3		134	19.6
10	12	31,068	-45.5		107	24.7
7	10	33,456	-44.1			
5						

* SHREVEPORT, LA.
1012 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	79	10.9	87	155	1.2
1000	30	176	12.6	77	181	3.9
950	30	613	12.2	71	226	8.5
900	30	1,060	10.4	61	244	10.1
850	30	1,535	8.2	57	263	11.8
800	30	2,034	5.7	52	281	12.2
750	30	2,563	3.6	47	282	11.7
700	30	3,119	2.1	31	278	13.0
650	30	3,716	-1.1	32	279	17.5
600	30	4,349	-4.6	28	276	21.6
550	30	5,025	-8.7	28	275	27.0
500	30	5,762	-13.2	27	277	32.1
450	30	6,553	-18.2	32	278	37.9
400	30	7,428	-24.6	35	279	42.5
350	30	8,386	-31.8	36	273	47.8
300	30	9,457	-40.1	33	274	53.4
250	30	10,675	-49.9		274	59.8
200	30	12,102	-58.7		276	62.2
175	30	12,933	-62.4		274	58.5
150	30	13,876	-65.8		272	59.2
125	30	14,979	-67.6		277	49.1
100	29	16,322	-69.8		273	41.8
80	27	17,648	-70.1		279	26.8
70	27	18,444	-68.6		285	20.2
60	27	19,373	-66.1		284	12.8
50	26	20,488	-62.5		272	11.3
40	26	21,872	-59.6		281	10.3
30	25	23,678	-56.9		269	15.7
25	25	24,837	-54.7		267	21.8
20	24	26,275	-52.0		268	25.3
15	22	28,152	-49.3		269	32.4
10	19	30,847	-45.5		266	48.8
7	15	33,231	-43.6		264	66.2
5	6	35,446	-41.0			

SPOKANE, WASH.
931 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	717	.9	88	161	2.5
1000	30	136				
950	30	553				
900	30	989	3.3	74	183	6.8
850	30	1,452	1.9	68	222	12.4
800	30	1,939	-.8	69	234	15.5
750	30	2,450	-3.7	72	239	18.8
700	30	2,994	-6.8	73	249	22.1
650	30	3,568	-9.6	65	259	25.3
600	30	4,185	-13.0	64	263	28.0
550	30	4,841	-17.3	60	262	30.3
500	30	5,551	-22.1	61	264	33.8
450	30	6,312	-27.4	50	266	38.9
400	30	7,157	-33.1	47	271	42.9
350	30	8,082	-40.0	46	272	46.0
300	30	9,118	-47.3		272	51.5
250	30	10,305	-54.2		275	58.3
200	29	11,719	-57.5		277	56.7
175	29	12,562	-57.4		276	49.3
150	28	13,540	-57.1		278	44.5
125	28	14,692	-57.4		278	36.7
100	28	16,103	-57.6		281	29.5
80	27	17,510	-57.9		284	24.5
70	27	18,351	-58.0		290	19.8
60	27	19,321	-57.9		300	15.3
50	26	20,469	-57.7		310	14.4
40	26	21,877	-57.6		326	13.2
30	26	23,692	-57.6		353	14.0
25	25	24,848	-56.9		356	14.8
20	22	26,269	-55.6		1	15.7
15	21	28,110	-54.7		10	17.3
10	14	30,758	-52.7		12	19.8
7	8	33,210	-48.0			
5	5	35,478	-46.5			

SWAN ISLAND, W. I.
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	10	24.9	75	27	9.9
1000	30	120	24.5	72	28	13.2
950	30	574	21.1	77	38	15.3
900	30	1,036	17.4	79	36	13.8
850	30	1,523	14.5	75	35	12.2
800	30	2,034	12.1	68	26	11.1
750	30	2,578	10.4	54	32	9.1
700	30	3,147	8.1	45	29	8.2
650	30	3,757	5.2	39	31	6.2
600	30	4,406	2.3	35	34	4.5
550	30	5,099	-1.8	32	356	3.7
500	30	5,856	-6.4	27	339	4.7
450	30	6,668	-12.0	25	309	5.8
400	30	7,564	-18.3	23	303	9.7
350	30	8,547	-25.3	23	289	14.2
300	30	9,648	-34.0	24	272	16.7
250	30	10,899	-43.8		248	25.1
200	30	12,361	-55.1		240	29.3
175	30	13,201	-61.6		245	33.0
150	30	14,142	-67.7		247	34.6
125	30	15,224	-72.9		262	27.2
100	30	16,520	-76.0		281	13.4
80	30	17,804	-76.2		283	4.7
70	30	18,579	-73.2		298	3.5
60	30	19,494	-67.3		327	2.9
50	30	20,611	-60.9		315	1.0
40	30	22,013	-56.7		63	1.9
30	30	23,851	-53.5		78	7.2
25	25	25,026	-50.4		92	8.4
20	24	26,489	-47.5		78	9.5
15	17	28,388	-44.2		116	11.7
10	8	31,154	-40.1			
7						
5						

TAMPA, FLA.
1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	8	13.9	88	39	4.9
1000	30	170	16.1	78	48	9.3
950	30	603	15.0	69	54	8.0
900	30	1,063	12.7	62	35	4.7
850	30	1,541	10.1	61	19	3.1
800	30	2,044	8.5	45	339	5.6
750	30	2,577	7.5	33	325	7.4
700	30	3,143	4.9	31	304	8.5
650	30	3,744	1.8	29	294	10.5
600	30	4,386	-1.9	29	294	14.4
550	30	5,068	-6.1	24	290	17.5
500	30	5,813	-10.4	24	286	23.3
450	30	6,616	-16.1	26	283	27.0
400	30	7,494	-22.6	27	281	30.9
350	30	8,460	-29.8	28	280	36.5
300	30	9,540	-38.0	27	278	38.9
250	30	10,771	-47.1		276	44.3
200	30	12,218	-56.4		274	50.9
175	30	13,056	-60.9		271	51.9
150	30	14,004	-65.0		269	50.3
125	30	15,108	-67.7		274	44.5
100	29	16,436	-71.4		274	34.0
80	29	17,755	-70.7		280	24.3
70	29	18,551	-68.7		274	16.7
60	29	19,482	-64.8		268	12.2
50	29	20,606	-60.6		258	8.7
40	29	22,011	-56.2		273	9.5
30	29	23,850	-53.5		271	12.2
25	28	25,027	-51.4		265	16.3
20	26	26,482	-48.8		267	19.4
15	18	28,357	-46.5		265	34.0
10	9	31,012	-42.4			
7						
5						

TOPEKA, KANS.
987 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	269	2.6	82	347	1.0
1000	30	161				
950	30	577	5.9	67	228	6.4
900	30	1,023	6.4	57	255	12.2
850	30	1,491	5.4	54	264	14.2
800	30	1,985	3.7	47	270	16.5
750	30	2,502	1.0	45	275	16.9
700	30	3,059	-2.1	45	281	19.8
650	30	3,637	-5.3	41	280	22.9
600	30	4,270	-8.7	37	280	26.2
550	30	4,933	-12.6	35	283	30.5
500	30	5,661	-17.3	36	283	33.8
450	30	6,435	-22.8	34	284	37.7
400	30	7,296	-29.4	37	285	42.0
350	30	8,235	-36.6	37	284	47.0
300	30	9,286	-44.1		284	51.1
250	30	10,488	-51.8		285	57.9
200	30	11,910	-58.5		278	65.7
175	29	12,742	-60.0		277	67.8
150	29	13,703	-60.7		280	58.3
125	29	14,832	-62.4		278	49.3
100	29	16,203	-63.9		281	40.0
80	29	17,573	-63.1		277	27.4
70	29	18,395	-62.5		279	21.4
60	28	19,349	-62.2		284	15.5
50	28	20,477	-61.3		292	10.7
40	28	21,866	-60.0		291	9.5
30	28	23,670	-57.8		288	11.1
25	27	24,827	-56.2		281	14.6
20	26	26,251	-54.4		285	15.3
15	20	28,107	-52.4		282	18.8
10	13	30,742	-49.2			
7						
5						

TRUK, CAROLINE IS.
+ 1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	2	28.8	77	71	5.4
1000	30	86	28.0	73	73	6.2
950	30	536	23.8	75	76	8.2
900	30	1,013	21.0	70	82	8.9
850	30	1,506	18.4	63	83	8.5
800	30	2,025	15.8	57	87	8.7
750	30	2,573	13.3	51	84	9.5
700	30	3,150	10.3	49	86	11.5
650	30	3,765	6.9	48	89	12.4
600	30	4,418	3.1	47	91	13.4
550	30	5,115	-1.0	42	90	13.6
500	30	5,874	-5.0	38	84	13.4
450	30	6,693	-9.6	34	88	14.4
400	30	7,598	-15.1	31	81	13.8
350	30	8,595	-21.8	28	85	12.2
300	30	9,712	-30.0	23	81	8.9
250	30	10,984	-40.3	24	98	7.6
200	30	12,467	-52.6		96	7.6
175	30	13,315	-59.9		77	10.1
150	30	14,261	-67.6		78	11.3
125	30	15,336	-75.5		76	19.2
100	30	16,606	-81.2		79	23.1
80	30	17,868	-76.9		82	13.6
70	30	18,649	-70.2		320	1.2
60	30	19,574	-65.8		269	8.0
50	30	20,692	-62.0		266	12.6
40	29	22,084	-58.1		268	14.6
30	28	23,909	-54.3		266	11.8
25	28	25,084	-52.0		261	11.1
20	27	26,534	-49.5		245	9.5
15	23	28,417	-46.1		138	3.9
10	17	31,104	-42.8		96	28.9
7	12	33,518	-37.8			
5						

* TUCSON, ARIZ.
926 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	789	10.0	56	140	6.2
1000	30	146				
950	30	575				
900	30	1,032	14.9	39	143	6.8
850	30	1,515	13.6	38	172	4.3
800	30	2,022	10.8	37	208	8.7
750	30	2,555	7.6	35	223	12.0
700	30	3,122	4.1	37	233	15.5
650	30	3,715	.3	30	240	17.5
600	30	4,358	-3.3	26	244	19.8
550	30	5,036	-7.4	28	252	22.5
500	30	5,778	-12.0	28	259	24.7
450	30	6,572	-17.6	34	260	27.8
400	30	7,448	-23.9	35	259	32.4
350	30	8,409	-31.1	36	259	38.1
300	30	9,484	-39.3	34	260	45.1
250	30	10,707	-48.5		262	51.9
200	29	12,144	-57.7		271	53.4
175	29	12,978	-61.8		270	51.7
150	29	13,924	-65.0		270	48.4
125	29	15,026	-68.6		270	40.2
100	29	16,353	-70.5		269	34.0
80	29	17,678	-69.8		273	24.1
70	26	18,476	-68.1		277	17.9
60	26	19,404	-66.5		287	13.8
50	26	20,512	-64.5		294	9.9
40	26	21,885	-61.3		293	9.1
30	25	23,695	-56.5		275	8.5
25	25	24,857	-54.6		263	14.0
20	21	26,296	-52.4		267	17.7
15	18	28,172	-49.9		271	24.7
10	17	30,842	-46.9		271	40.0
7	14	33,232	-45.2		269	47.0
5	8	35,545	-43.1			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

* VANDENBERG AFB, CALIF.
1006 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	100	11.0	86	121	2.7
1000	30	147	12.0	81	116	2.3
950	30	582	12.3	69	181	1.2
900	30	1,031	11.4	57	234	3.1
850	30	1,506	9.1	53	246	6.0
800	30	2,007	7.0	44	252	9.1
750	30	2,532	4.1	42	253	10.7
700	30	3,093	1.[illegible]	42	251	12.0
650	30	3,681	- 2.1	39	250	13.4
600	30	4,318	- 6.0	38	252	16.5
550	30	4,987	-10.0	38	256	17.5
500	30	5,722	-14.9	35	256	21.4
450	30	6,503	-20.3	37	255	24.1
400	30	7,374	-26.5	38	257	27.2
350	30	8,325	-33.5	39	258	29.3
300	30	9,390	-41.2	39	259	34.0
250	30	10,605	-49.6		259	37.1
200	30	12,040	-57.4		259	46.8
175	30	12,878	-60.3		260	47.0
150	30	13,833	-62.7		259	42.3
125	30	14,949	-65.4		255	37.1
100	30	16,300	-67.1		261	28.9
80	30	17,646	-66.4		264	18.8
70	29	18,460	-64.6		270	13.6
60	28	19,406	-64.0		270	10.1
50	27	20,525	-62.9		297	5.2
40	27	21,906	-60.6		338	5.6
30	27	23,707	-57.8		302	4.3
25	27	24,862	-56.0		275	6.4
20	26	26,284	-53.8		276	13.8
15	24	28,142	-51.3		269	22.5
10	20	30,801	-48.7		269	40.8
7	15	33,177	-46.9			
5						

VICTORIA, TEXAS
1016 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	33	14.5	85	35	2.9
1000	30	166	16.8	80	92	4.5
950	30	600	15.1	76	162	6.0
900	30	1,060	13.2	64	195	8.4
850	30	1,540	11.2	53	204	8.2
800	30	2,044	9.[illegible]	48	222	7.6
750	30	2,573	7.1	36	253	7.4
700	30	3,143	5.5	21	286	9.5
650	30	3,740	2.4	22	285	12.2
600	30	4,388	- 1.2	23	286	14.4
550	30	5,070	- 5.6	22	282	16.3
500	30	5,817	-10.7	23	278	20.0
450	30	6,616	-16.[illegible]	21	277	22.5
400	30	7,498	-22.4	22	275	25.4
350	30	8,464	-29.9	27	278	29.3
300	30	9,54[illegible]	-38.4	28	278	33.4
250	30	10,772	-47.6		282	39.8
200	29	12,208	-58.[illegible]		284	43.7
175	29	13,040	-62.5		286	43.1
150	29	13,980	-66.6		280	40.4
125	27	15,076	-69.9		276	36.5
100	27	16,395	-71.7		276	31.9
80	27	17,708	-72.1		283	21.4
70	27	18,496	-70.7		285	16.7
60	27	19,415	-67.[illegible]		283	11.5
50	26	20,522	-63.7		278	9.1
40	26	21,906	-59.0		267	11.1
30	26	23,725	-55.[illegible]		270	15.9
25	25	24,888	-53.4		270	20.0
20	25	26,330	-51.3		273	24.3
15	24	28,203	-48.3		271	34.2
10	22	30,895	-44.5		269	46.0
7	15	33,265	-41.8		269	63.5
5						

* WAKE IS., PACIFIC AREA
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	5	26.0	76	45	12.2
1000	30	120	25.0	76	52	14.0
950	30	566	21.[illegible]	82	60	15.2
900	30	1,036	17.4	85	61	15.2
850	30	1,524	14.9	76	63	12.6
800	30	2,037	13.7	[illegible]	67	9.3
750	30	2,577	12.5	37	54	7.8
700	30	3,157	10.[illegible]	29	43	7.8
650	30	3,765	6.8	27	30	8.7
600	30	4,423	3.0	24	29	8.5
550	30	5,12[illegible]	- 1.2	21	25	6.6
500	30	5,877	- 6.1	22	5	8.0
450	30	6,688	-11.8	21	357	10.3
400	30	7,586	-17.7	20	351	9.3
350	30	8,571	-24.5	[illegible]	332	12.0
300	30	9,576	-32.6	20	324	14.4
250	29	10,936	-42.4		321	17.5
200	29	12,406	-53.8		318	17.9
175	29	13,252	-59.[illegible]		317	18.1
150	29	14,200	-66.7		318	17.7
125	29	15,283	-73.4		334	14.6
100	25	16,566	-79.1		1	8.5
80	20	17,818	-79.1		45	6.6
70	19	18,581	-74.0		79	5.2
60	19	19,450	-68.4		75	4.3
50	18	20,595	-63.7		132	2.5
40	16	21,973	-60.2		331	3.1
30	16	23,785	-55.7		207	1.0
25	15	24,951	-52.6		121	2.1
20	15	26,404	-48.9		67	3.5
15	15	28,307	-44.9		85	1.9
10	12	31,046	-40.4		43	3.9
7	11	33,502	-37.3		46	5.1
5	8	35,817	-37.9			

* WALLOPS IS. VA. NASA
1022 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	[illegible]	6.[illegible]	79	302	2.3
1000	30	178	9.4	67	288	4.3
950	30	602	7.9	61	287	8.4
900	30	1,048	6.1	56	[illegible]	9.7
850	30	1,51[illegible]	4.4	52	[illegible]	9.1
800	30	[illegible]	2.9	42	254	12.6
750	30	2,531	.8	41	253	15.3
700	30	3,080	- 2.1	42	254	14.8
650	30	3,663	- 5.4	36	256	17.3
600	30	4,290	- 9.2	36	262	21.0
550	30	4,953	-13.6	39	262	23.5
500	30	5,677	-18.4	37	[illegible]	25.1
450	29	6,446	-24.0	39	268	27.8
400	29	7,301	-30.0	34	269	31.5
350	29	8,239	-36.6	36	272	34.4
300	29	[illegible]	-44.0		271	36.[illegible]
250	[illegible]	[illegible]	-51.1		271	41.8
200	28	11,716	-57.3		277	47.[illegible]
175	27	12,750	-58.6		275	46.8
150	26	13,721	[illegible]		268	42.2
125	26	[illegible]	-61.9		268	39.0
100	26	16,234	-62.5		262	28.2
80	26	17,609	-62.6		261	21.2
70	26	18,433	-61.7		259	17.1
60	26	[illegible]	-61.0		260	16.9
50	26	20,523	-60.2		260	15.3
40	26	[illegible]	-59.2		261	14.4
30	[illegible]	23,724	-57.5		264	16.9
25	25	24,879	-56.2		267	18.1
20	24	26,295	-54.5		265	23.5
15	23	28,141	-52.8		265	36.3
10	18	30,764	-50.2		268	57.9
7	15	33,123	-46.8		267	84.7
5	7	35,405	-44.0			

WASHINGTON, D. C.
1011 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	85	2.8	88	237	[illegible].1
1000	30	175			287	2.1
950	30	600	6.3	64	[illegible]	7.8
900	30	1,039	[illegible]	62	[illegible]	10.5
850	30	1,504	3.4	58	273	12.2
800	30	1,595	2.2	49	265	13.2
750	30	2,518	- .5	49	259	14.[illegible]
700	30	[illegible]	- 3.1	48	262	17.1
650	30	3,649	- 6.0	50	[illegible]	20.8
600	30	[illegible]	- 9.7	[illegible]	261	23.5
550	30	4,934	-14.0	46	259	[illegible]
500	30	5,653	-18.8	43	260	24.7
450	30	6,426	-24.3	42	[illegible]	28.6
400	30	7,278	-30.8	38	[illegible]	29.9
350	30	8,213	-37.3	39	270	35.5
300	30	[illegible]	-44.1		269	40.6
250	30	[illegible]	-51.8		271	47.2
200	30	[illegible]	-58.[illegible]		274	54.2
175	30	[illegible]	-59.1		273	50.3
150	30	[illegible]	-60.0		269	41.2
125	30	14,828	-61.0		263	37.5
100	30	16,211	-61.9		263	31.5
80	30	17,591	-61.7		266	22.1
70	30	18,417	-61.7		265	18.6
60	30	19,373	-61.4		263	15.0
50	30	20,506	-60.3		259	[illegible]
40	30	21,901	-59.0		271	14.2
30	29	23,713	-57.8		269	15.5
25	28	24,859	-56.7		272	20.2
20	[illegible]	26,278	-55.2		[illegible]	27.8
15	24	28,111	-53.3		269	40.2
10	12	30,646	-51.6			

WINNEMUCCA, NEV.
870 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,310	1.0	68	189	4.3
1000	30	171				
950	30	590				
900	30	1,037				
850	30	1,497	5.7	57	189	4.7
800	30	1,992	3.7	53	216	8.0
750	30	2,510	.5	56	238	12.6
700	30	3,065	- 2.7	59	244	15.9
650	30	3,645	- 6.1	60	249	21.0
600	30	4,273	- 9.4	57	255	22.5
550	30	4,936	-13.4	47	256	26.8
500	30	5,659	-17.8	45	264	28.0
450	30	6,432	-23.1	41	268	27.8
400	30	7,291	-29.5	42	264	[illegible]
350	30	8,230	-36.5	44	269	32.2
300	30	9,281	-44.4		268	36.7
250	30	10,479	-52.6		271	45.1
200	30	11,898	-58.6		269	49.9
175	30	12,733	-60.4		270	47.4
150	30	13,690	-61.3		269	42.9
125	30	14,819	-62.2		271	39.4
100	29	16,194	-62.7		274	26.8
80	28	17,574	-62.1		279	18.3
70	28	18,398	-62.0		287	14.0
60	28	19,352	-60.9		307	8.9
50	25	20,489	-60.2		340	7.4
40	23	21,887	-59.4		23	8.0
30	20	23,691	-57.4		30	6.6
25	20	24,848	-55.7		354	5.4
20	17	26,285	-53.8		340	6.6
15	5	28,178	-50.5			
10						
7						
5						

WINSLOW, ARIZ.
853 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,492	1.2	75	143	2.9
1000	30	194				
950	30	617				
900	30	1,060				
850	30	1,524			144	3.5
800	30	2,021	7.2	45	214	5.2
750	30	2,549	4.6	46	234	11.3
700	30	3,110	1.3	41	234	15.3
650	30	3,698	- 1.2	33	245	18.1
600	30	4,338	- 4.8	31	247	21.0
550	30	5,008	- 9.3	31	253	23.9
500	30	5,747	-14.0	33	256	26.8
450	30	6,533	-19.4	38	264	28.6
400	30	7,405	-25.7	42	263	33.0
350	30	8,360	-32.6	40	263	37.7
300	30	9,427	-40.7	33	265	42.5
250	30	10,645	-49.5		264	50.7
200	30	12,078	-57.8		266	62.0
175	30	12,913	-61.1		265	57.1
150	30	13,864	-63.9		268	50.9
125	30	14,973	-67.3		267	44.9
100	30	16,310	-68.8		272	34.8
80	30	17,651	-67.3		273	23.7
70	30	18,457	-66.3		274	17.3
60	29	19,394	-65.0		288	14.4
50	29	20,511	-63.1		287	9.3
40	29	21,891	-60.5		294	6.0
30	27	23,694	-57.5		290	7.0
25	27	24,850	-55.5		279	9.5
20	27	26,279	-53.3		275	14.4
15	25	28,150	-51.0		276	22.3
10	18	30,805	-49.0		273	44.9
7	7	33,209	-47.5			
5						

YAKUTAT, ALASKA
1008 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	12	- 5.3	84	95	1.9
1000	30	76			61	4.7
950	30	484	- .8	62	101	5.6
900	30	917	- 3.5	62	102	4.7
850	30	1,367	- 6.3	66	107	4.3
800	30	1,839	- 8.7	68	98	2.1
750	30	2,340	-11.0	63	129	.8
700	30	2,865	-13.7	60	271	2.9
650	30	3,425	-16.8	59	281	6.0
600	30	4,022	-20.6	53	287	7.8
550	30	4,661	-24.3	49	295	10.3
500	30	5,351	-28.7	47	290	12.6
450	30	6,099	-33.3	43	289	15.7
400	30	6,918	-38.6	42	299	21.2
350	30	7,824	-44.2	42	304	26.0
300	30	8,846	-49.[illegible]		304	33.0
250	29	10,038	-51.4		306	36.3
200	29	11,487	-51.3		311	26.0
175	29	12,353	-51.6		308	23.9
150	29	13,353	-51.7		301	23.5
125	29	14,536	-51.7		303	20.6
100	29	15,984	-51.6		306	18.5
80	28	17,434	-51.1		305	18.3
70	28	18,300	-51.5		311	16.9
60	28	19,301	-52.1		308	16.1
50	27	20,490	-52.0		327	14.6
40	26	21,935	-51.9		335	15.3
30	23	23,811	-51.5		351	15.0
25	22	24,989	-51.5		349	15.7
20	21	26,438	-51.3		3	20.8
15	17	28,323	-50.3		11	25.6

YAP, CAROLINE IS.
+ 1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	17	28.8	81	74	5.1
1000	30	83	28.1	79	77	6.6
950	30	531	24.1	77	69	12.2
900	30	1,010	21.1	73	95	13.4
850	30	1,504	18.6	69	96	13.8
800	30	2,022	16.0	62	96	12.6
750	30	2,564	13.4	52	92	13.0
700	30	3,147	10.2	48	95	13.2
650	30	3,753	7.0	45	91	15.2
600	30	4,415	3.1	45	97	15.3
550	30	5,106	- .9	42	96	17.1
500	30	5,871	- 5.0	35	91	18.1
450	30	6,685	- 9.8	33	92	16.7
400	30	7,593	-15.6	32	95	16.1
350	30	8,587	-22.3	27	90	16.7
300	30	9,702	-30.5	26	84	15.7
250	30	10,972	-40.7	31	78	14.2
200	30	12,449	-53.2		75	15.7
175	30	13,296	-60.4		76	17.5
150	30	14,239	-67.9		75	22.3
125	30	15,313	-75.5		79	28.6
100	30	16,584	-81.0		84	28.6
80	30	17,841	-78.5		87	17.1
70	30	18,614	-71.5		104	4.9
60	30	19,535	-66.4		298	3.9
50	30	20,651	-61.8		268	6.6
40	30	22,046	-57.9		271	9.5
30	30	23,872	-54.8		264	6.2
25	29	25,043	-52.4		[illegible]	3.3
20	28	26,494	-48.7		145	3.1
15	21	28,383	-45.1		101	11.8
10	19	31,106	-40.7		95	29.9
7	16	33,536	-36.1		88	44.1
5	6	35,825	-34.4			

YUCCA FLAT, NEV.
883 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	1,196	1.6	52	329	1.6
1000	30	177				
950	30	595				
900	30	1,040				
850	30	1,508	8.0	43	300	1.0
800	30	2,006	5.5	43	193	6.4
750	30	2,531	2.9	45	208	8.9
700	30	3,087	.1	40	229	10.5
650	30	3,670	- 2.9	42	243	14.2
600	30	4,307	- 6.7	42	254	15.7
550	30	4,972	-11.1	43	260	18.6
500	30	5,706	-15.9	42	258	23.7
450	30	6,456	-21.2	35	265	24.3
400	30	7,352	-27.1	36	265	28.7
350	30	[illegible]	-34.1	[illegible]	264	33.0
300	30	9,362	-42.0	36	257	40.2
250	30	10,572	-50.6		264	45.5
200	30	[illegible]	-57.7		267	49.3
175	30	12,836	-60.3		265	51.7
150	30	13,792	-62.4		263	48.2
125	30	14,909	-65.1		264	43.5
100	29	16,267	-66.1		266	34.4
80	29	17,621	-65.1		272	22.3
70	28	18,439	-64.3		274	14.6
60	26	19,391	-63.3		285	8.9
50	25	20,508	-62.2		305	6.2
40	25	21,892	-60.6		352	3.9
30	23	23,695	-58.0		330	3.7
25	20	24,846	-55.8		299	6.2
20	17	26,280	-53.6		278	14.0
15	12	28,136	-51.2		275	15.9
10	5	30,824	-49.0			

YUMA, ARIZ.
1000 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	20	131	14.0	42	15	1.2
1000	20	129			27	2.5
950	20	568	18.4	32	350	5.2
900	20	1,030	15.8	35	343	3.7
850	20	1,511	12.9	37	295	2.5
800	20	2,018	10.2	32	244	5.8
750	20	2,549	7.2	31	241	10.3
700	20	3,116	4.3	28	245	13.6
650	20	3,708	1.4	26	245	16.9
600	20	4,355	- 2.5	28	240	21.0
550	20	5,031	- 6.8	29	246	25.4
500	20	5,777	-12.0	31	244	28.2
450	20	6,563	-17.9	34	243	31.5
400	20	7,443	-24.5	38	245	35.7
350	20	8,401	-31.9	36	245	43.3
300	20	9,471	-40.3	36	247	51.3
250	20	10,689	-49.3		250	51.3
200	19	12,128	-57.4		254	57.9
175	18	12,975	-61.4		258	55.9
150	16	13,910	-64.7		263	52.3
125	15	15,014	-67.6		267	43.3
100	6	16,344	-70.4			

Note: All observations scheduled at 1200, G C T Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes "Number of observations" refers to those of dynamic height only Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i e, elevation angles less than 6° above the horizon, or any obstruction above the horizon

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available

Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of 98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun. NOVEMBER 1966

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	ALBUQUERQUE, N. MEX.								
	Air mass								
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Nov.									
1-----	----	----	----	----	1.42	1.30	1.15	1.01	0.86
2-----	1.10	1.15	1.26	1.39	1.48	----	----	----	----
5-----	.81	.92	1.10	1.27	1.35	1.25	1.00	.81	.73
6-----	.81	----	----	1.25	1.39	1.26	----	.94	.83
8-----	----	.91	----	1.28	1.36	----	----	----	----
9-----	----	----	----	----	----	----	1.24	1.12	1.01
10----	----	----	----	1.42	1.46	----	----	----	----
11----	1.04	1.14	1.26	1.40	----	----	----	----	----
12----	1.01	1.10	----	----	1.46	----	1.23	1.10	.99
13----	----	----	----	1.42	----	----	----	----	1.03
14----	1.03	1.11	1.25	1.39	1.46	1.39	1.28	1.17	1.06
18----	1.05	1.13	1.26	1.39	1.43	----	----	1.07	.97
20----	----	----	----	----	----	1.37	1.19	----	.99
26----	1.05	1.12	1.24	----	----	1.40	1.24	1.14	1.04
27----	1.11	1.21	1.31	1.43	1.49	1.44	1.24	1.11	.99
28----	----	----	----	----	1.40	----	1.20	1.16	----
29----	1.00	1.12	1.22	1.36	1.42	----	1.20	1.10	1.00
30----	1.00	1.10	1.19	1.35	1.41	1.34	1.22	1.11	.99
Averages	1.00	1.09	1.23	1.36	1.43	1.34	1.20	1.07	0.96
	BLUE HILL OBS., MASS.								
	Air mass								
	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Nov.									
4-----	0.87	0.96	1.08	1.25	1.28	1.22	1.01	0.87	0.75
5-----	.70	.82	.96	1.08	1.12	1.06	.82	.66	.57
11----	----	----	1.03	1.18	1.21	1.21	1.03	.86	.74
13----	.94	1.07	1.22	----	1.39	----	1.22	1.07	.98
15----	.87	.96	1.06	----	1.23	----	1.08	.96	.87
16----	----	----	1.01	----	1.17	----	----	----	----
20----	.99	1.08	1.20	----	1.30	----	1.08	.96	.84
21----	1.01	1.07	1.18	----	1.32	----	1.08	.94	.84
22----	.87	.96	1.11	----	1.23	----	1.04	.89	.72
23----	1.00	1.10	1.21	----	1.33	----	1.13	.89	.77
24----	.93	.99	1.04	----	----	----	----	----	----
Averages	0.91	1.00	1.10	1.17	1.26	1.16	1.05	0.90	0.79
	OMAHA, NEBR.								
	Air mass								
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Nov.									
2-----	HS0.97	HS1.03	HS1.18	HS1.32	HS1.34	HS1.30	HS1.13	HS0.95	†
3-----	HM .78	HM .92	HM1.04	HS1.26	HS1.31	HS1.30	HS1.12	----	----
5-----	----	----	----	HS1.30	----	----	----	----	----
10----	HM .64	HM .70	HM .82	HM1.16	----	----	----	----	----
14----	HS .90	HS1.04	HS1.13	----	----	----	----	----	----
15----	----	----	HS1.12	----	HS1.12	----	HS1.03	HS .87	HS0.75
20----	HS .89	HS1.01	HS1.14	----	----	----	HS1.03	HS .87	----
25----	HS .84	HS .96	HS1.08	----	HS1.23	----	HM1.11	HM .96	HM .88
28----	HS .98	HS1.08	----	----	----	----	----	----	----
30----	----	----	HS1.10	----	1.28	----	----	----	----
Averages	0.86	0.96	1.08	1.26	1.26	1.30	1.08	0.91	0.82

S Slight haze - indeterminable
I Intense haze - indeterminable
* Values corresponding to true solar noon
HS Slight haze
HM Moderate haze
† Surface-based obstruction

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
	MADISON, WIS.								
	Air mass								
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Nov.									
12----	----	----	----	----	----	----	S 1.10	S 1.00	S 0.89
14----	S 0.87	S 0.97	S 1.10	----	S 1.25	----	----	----	----
20----	----	----	----	----	----	----	I .74	I .57	I .51
28----	----	----	----	----	----	----	S 1.14	S .99	S .92
Averages	0.87	0.97	1.10	----	1.25	----	0.99	0.85	0.77
	TUCSON, ARIZ.								
	Air mass								
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Nov.									
1-----	0.87	0.95	0.93	----	1.27	1.18	1.05	0.88	0.78
2-4---				Pyrheliometer inoperative					
5-----	.43	.52	.66	0.96	1.30	----	----	----	----
6-15--				Pyrheliometer inoperative					
16----	.98	1.05	1.15	1.32	----	----	1.12	----	----
17----	----	----	----	----	----	----	----	----	.96
18----	.96	1.05	1.13	1.31	1.37	----	----	1.02	.95
19----	1.01	1.07	1.17	1.30	1.36	1.35	1.15	1.06	.95
20----	.97	1.08	1.18	1.32	1.34	1.29	1.15	1.02	.90
21----	----	----	----	----	----	1.23	1.00	.98	.86
26----	----	----	----	----	----	----	1.11	.98	.89
27----				Pyrheliometer inoperative					
28----	----	----	----	1.32	----	----	----	----	----
29----	.90	.95	1.09	1.23	1.32	1.29	1.12	1.00	.92
30----	.92	.99	.97	1.22	1.29	1.24	1.05	.91	.83
Averages	0.88	0.96	1.04	1.25	1.32	1.26	1.09	0.98	0.89
	MAUNA LOA OBS., HAWAII								
	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Nov.									
2-----	1.12	1.22	1.32	1.44	----	----	----	----	----
8-----	1.12	1.20	1.29	1.42	----	----	----	----	----
9-----	----	----	----	1.45	1.56	1.44	1.31	1.23	1.14
10----	1.18	1.26	1.37	1.50	----	----	----	----	----
11----	1.20	1.27	1.37	1.48	1.58	----	----	----	----
12----	1.17	1.26	1.35	1.47	----	----	----	----	----
14----	1.08	1.17	1.27	1.40	1.52	----	----	----	----
15----	1.11	1.21	1.31	1.43	----	----	----	----	----
16----	1.10	1.18	1.28	1.40	----	----	----	----	----
19----	1.12	1.22	1.32	1.45	----	----	----	----	----
29----	1.14	1.23	1.33	----	----	----	----	----	----
30----	1.13	1.22	1.32	1.44	----	----	----	----	----
Averages	1.13	1.22	1.32	1.44	1.55	1.44	1.31	1.23	1.14
	GUAM, M. I.								
	Air mass								
	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
					No observations due to cloudiness				

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

NOVEMBER 1966

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	370	434	350	402	409	398	119	327	199	380	360	390	380	390	361	343	333	382	381	368	179	266	105	53	293	361	359	320	334	---		322
ANNETTE ALASKA	108	25	15	139	156	39	145	20	122	101	27	27	81	32	34	96	92	17	13	53	105	19	15	25	33	20	84	26	78	80		61
APALACHICOLA FLORIDA	371	224	451	441	395	408	---	---	---	343	342	234	160	384	375	368	374	366	358	270	330	363	329	377	373	301	189	378	378	341		342
ARGONNE NAT. LAB.	156	141	259	277	148	210	178	13	45	34	178	184	257	254	233	168	120	181	109	114	197	79	65	139	56	51	22	73	129	143		140
ATLANTA GEORGIA	208	38	335	384	296	328	281	191	57	81	119	250	209	321	337	343	320	306	192	108	123	334	327	322	254	217	64	110	315	296		236
ASTORIA OREGON	235	250	240	198	57	206	131	199	44	190	22	144	37	45	68	107	55	48	90	66	45	79	62	131	45	60	94	48	27	13		101
BARROW ALASKA †	17	32	33	5	2	6	2	---	---	2	0	0	4	0	0	---	---	0	---	---	---	---	---	---	---	---	---	---	---	---		9
BETHEL ALASKA	48	75	39	29	51	15	45	96	21	44	24	69	89	23	42	14	73	8	12	17	2	11	9	11	21	46	49	38	32	40		36
BISMARCK N.DAK.	135	231	223	89	145*	75	176	98	244	108	235	176	227	213	180	69	211	174	197	313	146	185	50	119	115	76	183	172	41	62		150*
BLUE HILL MASS.	205	80	40	293	274	17	231	114	67	145	251	58	277	212	246	218	161	102	209	245	245	228	239	212	174	100	62	87	170	147		170
BOISE IDAHO	297	242	276	274	118	115	126	272	61	186	36	127	91	70	110	178	102	---	---	---	---	---	202	219	145	207	215	32	78	138		157
BOSTON MASSACHUSETTS	178	69	34	290	265	14	232	94	51	156	247	45	276	210	246	195	158	84	207	254	246	228	211	192	145	104	58	50	152	146		161
BROWNSVILLE TEXAS	351	520	474	369	374	369	916	307	396	275	276	345	169	319	421	390	445	360	400	429	396	369	412	311	408	373	427	444	429	347		373
CANTON ISLAND P.I.	590	253	654	676	623	651	620	677	595	656	645	632	658	633	669	---	634	639	630	631	656	672	658	677	680	665	667	632	670	627		633
CAPE HATTERAS N.C.	---	58	363	383	322	347	344	302*	310	279	297	167	123	329	---	313	313	300	171	268	312	304	274	308	279	280	244	91	290	297		275*
CARIBOU MAINE	50	30	18	104	251	166	204	66	52	15	176	23	84	92	76	204	69	14	159	209	192	214	189	28	37	41	48	45	35	100		100
CHARLESTON S.C.	307	172	405	432	386	397	367	283	210	334	313	207	354	385	393	368	351	326	331	266	348	315	339	358	321	309	319	224	305	338		325
CLEVELAND OHIO	49	12	115	132	35	179	78	27	83	25	48	131	242	219	225	76	83	104	36	209	209	184	153	78	17	200	63	27	36	40		104
COLUMBIA MISSOURI	118	383	320	101	200	163	282	146	49	338	264	242	315	290	307	238	187	73	297	58	222	217	190	115	133	83	113	290	295	216		208
DAVIS CALIFORNIA	340	279	224	306	252	45	286	321	254	277	149	220	172	120	73	235	233	208	47	160	130	295	290	287	270	248	157	40	117	88		204
DODGE CITY KANSAS	229	390	360	205	377	360	298	225	237	304	345	323	324	308	321	207	201	127	306	297	212	231	141	57	234	247	306	256	167	212		260
E. LANSING MICHIGAN	123	101	170	174	148	193	76	23	27	28	28	130	211	202	225	107	84	138	58	74	236	108	56	37	40	192	20	76	83	159		111
EL CENTRO CALIF. NPF	315	314	301	192	289	292	145	294	315	315	305	271	289	284	276	265	265	272	271	189	275	249	279	276	275	249	250	213	249	241		267
EL PASO TEXAS	473	468	452	353	433	446	104	335	360	431	425	420	381	404	388	397	398	400	399	381	245	340	198	248	110	396	389	386	350	375		363
ELY NEVADA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---
EPPLEY NEWPORT R.I.	183	101	59	296	276	91	264	73	128	94	254	65	278	247	256	243	160	84	168	251	242	196	238	201	147	97	122	89	199	128		174
FAIRBANKS ALASKA	86	61	79	65	49	26	18	22	50	33	83	55	72	67	52	15	14	9	13	7	9	3	8	6	6	22	23	23	18	6		33
FLAMING GORGE UTAH	308	298	248	297	---	153	119	39	213	174	220	170	270	213	227	126	152	225	242	84	---	90	137	235	248	---	215	167	73	206		191
FORT WORTH TEXAS	---	---	---	---	---	347	348	262	128	385	377	314	344	353	358	340	336	309	233	321	316	222	237	199	248	62	362	337	299	329		295
FRESNO CALIFORNIA	319	245	301	266	273	38	236	272	278	270	243	251	234	185	154	102	222	276	203	230	254	109	267	262	242	235	162	62	219	111		217
GAINESVILLE FLORIDA	400	248	495	480	365	---	380	340	312	368	360	287	246	386	384	380	375	422	440	331	261	415	365	412	---	360	---	---	---	---		367
GLASGOW MONTANA	235	165	165	253	95	57	134	188	195	129	230	133	204	199	95	28	195	173	191	165	---	---	---	166	67	176	180	134	135	68		154
GRAND JUNCTION COLO.	395	369	321	347	341	288	286	69	416	124	205	191	321	272	273	269	167	287	272	165	232	176	219	289	232	221	284	281	113	263		256
GREAT FALLS MONTANA	182	220	136	201	48	116	114	211	135	112	207	182	68	151	83	40	140	133	160	157	164	22	176	158	59	182	66	57	---	73		129
GREENSBORO N.C.	245	115	304	357	235	334	266	189	136	110	249	131	261	328	304	289	292	276	114	313	222	304	301	272	205	235	247	74	137	215		235
INDIANAPOLIS INDIANA	139	35	361	340	102	264	143	69	114	37	109	114	298	295	251	267	228	171	233	217	270	89	142	130	49	31	29	99	62	213		163
INYOKERN CALIFORNIA	362	309	318	313	326	261	108	335	345	328	275	334	317	311	282	219	323	313	325	92	319	330	325	281	321	---	221	178	298	297		288
ITHACA NEW YORK	59	33	132	191	62	61	114	51	53	85	25	33	207	199	46	106	52	29	126	221	212	202	158	46	36	14	50	9	66	45		91
LAKE CHARLES LA.	68	461	445	---	338	343	235	321	260	343	106	73	261	388	374	384	281	335	341	263	197	278	98	313	266	204	349	384	368	349		287
LAKELAND FLORIDA	350	211	408	475	343	378	396	380	435	405	396	400	387	409	348	370	357	397	399	399	---	---	---	---	---	---	---	---	---	---		---
LANDER WYOMING	343	262	308	185	125	308	190	155	337	244	259	193	235	267	255	228	213	244	269	164	257	248	165	265	251	173	251	163	103	222		229
LARAMIE WYOMING	---	---	214	186	229	196	249	134	277	140	184	233	250	181	227	236	75	230	235	166	174	173	142	234	232	75	233	211	115	201		194
LAS VEGAS NEVADA	394	367	340	293	368	311	271	123	359	359	227	346	350	321	290	268	328	299	321	110	337	235	313	318	316	315	289	145	296	291		297
LITTLE ROCK ARKANSAS	87	377	389	188	28	195	197	89	163	366	---	327	253	343	315	314	301	250	141	151	377	181	177	195	192	63	140	---	---	289		225
LOS ANGELES, CALIF.	383	342	286	129	209	109	29	74	330	321	256	314	328	241	230*	161	257	316	300	76	314	279	291	267	310	297	173	94	312	262		243*
MADISON WISCONSIN	189	309	223	---	191	107	64	81	37	70	162	296	197	269	106	198*	129	218	223	191	185	54	31	22	79	54	19	233	239	168		150*
MANHATTAN KANSAS	240	326	321	65	314	277	223	38	89	295	261	252	270	252	184	234	183	236	268	208	186	210	212	24	228	69	259	232	175	195		211
MATANUSKA ALASKA	39	55	24	41	9	36	12	27	114	27	46	89	84	64	56	49	9	46	66	60	24	10	6	7	11	26	46	37	35	40		40
MEDFORD OREGON	299*	262	239	259*	116	212	61	242	84	102	149	129	110	76	58	249	135	102	55	108	87	233	179	97	54	89	126	47	100	139		140*
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		---
MIDLAND TEXAS	423	436	430	264	201	392	326	351	306	403	395	394	358	256	371	370	376	364	224	361	319	336	225	278	267	178	368	361	330	348		334
NASHVILLE TENNESSEE	45	113	422	380	31	234	293	141	59	141	104	336	219	330	291	323	276	243	248	310	173	68	288	285	123	139	85	60	307	241		210
NEW YORK N.Y.U	260	35	158	297	268	160	99	194	127	87	215	42	289	199	260	207	169	80	175	231	227	207	211	184	129	113	124	8	126	147		168
NORTH OMAHA NEBRASKA	315	363	349	209	324	314	275	52	45	282	130	303	289	---	249	216	175	114	276	275	163	208	30	29	258	---	---	269	199	258		217

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

† Sun below horizon November 19 - 30, inclusive.

I Indicates [illegible] sites.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
OAK RIDGE TENNESSEE	55	45	278	362	139	196	305	107	41	47	184	327	140	234	296	303	285	209	153	292	39	184	236	238	113	83	19	60	60	212		175
OKLAHOMA CITY OKLA.	260	349	331	178	305	259	271	308	130	351	325	278	281	284	281	275	280	257	271	252	201	253	213	73	77	20	284	234	211	263		245
PAGE ARIZONA	306	307	242	266	293	289	228	69	301	262	215	277	276	261	225	196	191	252	236	168	248	205	259	259	247	260	256	---	---	245		244
PHOENIX ARIZONA	360	355	325	325	316	336	184	248	333	305	302	313	313	304	295	281	276	290	284	272	255	193	276	285	273	291	292	265	270	262		289
PROSSER WASHINGTON	225	196	211	196	82	179	182	163	90	211	19	186	---	22	69	171	129	207	62	149	175	229	186	---	---	---	---	45	63	47		140
RAPID CITY S.DAK.	216	197	158	185	174	197	128	107	265	211	241	191	221	129	195	116	137	190	200	152	107	181	34	137	189	96	190	172	108	63		163
RENO NEVADA	425	269	217	305	185	208	139	253	227	206	171	253	158	87	119	166	227	222	215	224	218	257	245	256	246	191	180	50	216	198		211
RICHLAND 25 NW WASH.	231	229	229	---	103	202	---	197	73	190	67	135	100	29	69	163	142	166	109	134	154	173	146	164	61	163	76	47	52	37		130
RIVERSIDE CALIFORNIA	374	375	336	193	259	52	14	19	351	307	284	281	335	276	243	61	139	307	299	78	230	202	320	296	290	298	202	136	270	256		236
RUSTON LOUISIANA	38	369	299	338	271	273	---	300	194	326	66	285	305	---	302	288	233	247	131	169	282	238	240	282	181	133	293	305	292	279		249
SAINT CLOUD MINN.	245	298	173	76	145	199	34	69*	88*	314*	244*	296*	289*	210*	250*	170*	36*	270*	170*	223	55	102	152	33	74	102	209	208	81	86		163*
SALT LAKE CITY	354	310	294	333	263	68	34	130	191	77	135	276	294	236	161	108	243	251	277	124	254	245	233	304	290	127	276	137	82	109		207
SAN ANTONIO TEXAS	230	471	456	410	314	375	372	408	248	378	294	405	280	393	390	351	235	353	332	350	345	290	268	164	351	219	397	384	772	363		340
SANTA MARIA CALIF.	345	274	276	197	125	43	70	---	296	311	151	292	255	215	249	73	172	290	248	219	228	220	284	272	283	274	91	63	270	260		219
SAULT STE MARIE MICH	127	162	57	158	151	84	22	23	26	33	74	88	47	76	42	35	33	33	216	71	140	15	25	28	68	25	10	31	30	73		67
SEATTLE TACOMA WASH.	165	241	220	113	37	90	83	179	55	211	57	170	31	30	104	66	72	161	52	65	93*	71	72	56	39	80	76	35	46	24		93*
SPOKANE WASHINGTON	245	258	229	225	80	125	---	233	96	190	208	141	54	53	57	72	---	75	108	78	136	200	108	123	34	---	61	64	31	24		122
STATE COLLEGE PENN.	154	73	123	311	91	117	58	74	167	61	66	178	295	274	269	172	133	16	150	284	270	282	258	129	101	175	77	2	74	181		154
STERLING VIRGINA	308	73	288	361	291	313	197	230	194	52	313	126	314	322	295	259	252	85	109	307	219	275	288	247	134	263	127	15	140	138		218
SWAN ISLAND W.I.	286	377	320	475	307	432	407	509	520	442	483	504	326	447	432	450	271	285	167	400	469	284	445	375	395	452	476	461	118	469		393
TAMPA FLORIDA	343	160	260	475	343	389	386	418	428	386	384	388	384	336	396	342	378	331	347	377	250	400	364	332	403	384	393	373	---	---		362
TUCSON ARIZONA	421	432	377	349	355	401	158	131	311	358	360	384	381	376	370	369	336	371	361	352	288	275	278	188	315	346	336	324	320	319		331
WAKE ISLAND,PACIFIC	331	321	345	---	---	305	333	290	377	303*	364	398	405	336	313	154	381	373	387	308	374	335	290	327	337	369	346	330	319	322		335*

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values in parentheses are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont. NOVEMBER 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	110	42	62	42	36	-19	18	-4	-49	13	51	57	15	42	67	13	-12	46	59	56	47	45	72	-3	-27	16	24	83	42	45		330

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Huntley Exp. Station. The instrument with which they were measured has not been checked by the Weather Bureau.

TOTAL OZONE DATA

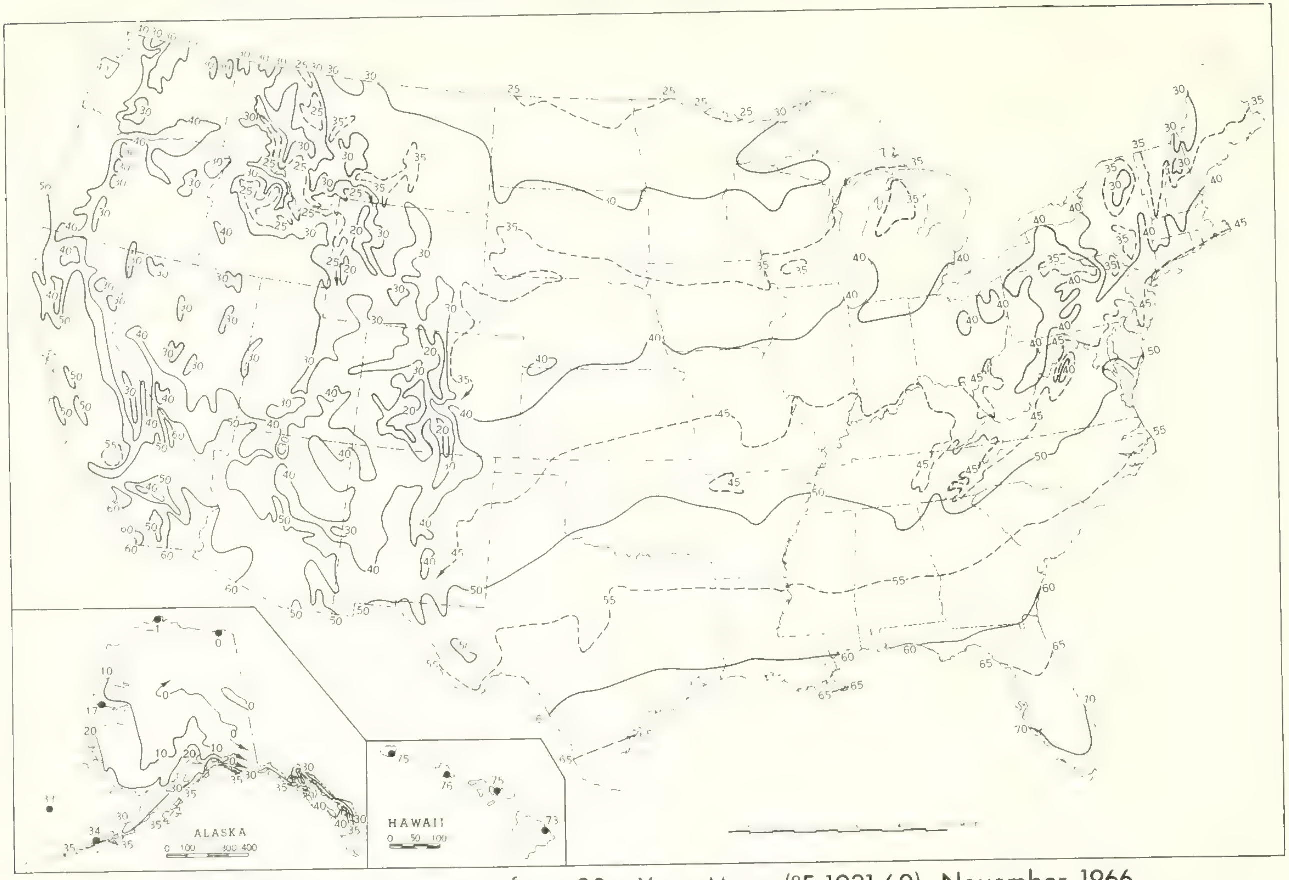
These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units· Milli-atmo-cms.

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), November



B. Temperature Departure from 30 - Year Mean (°F 1931-60), November 1966.

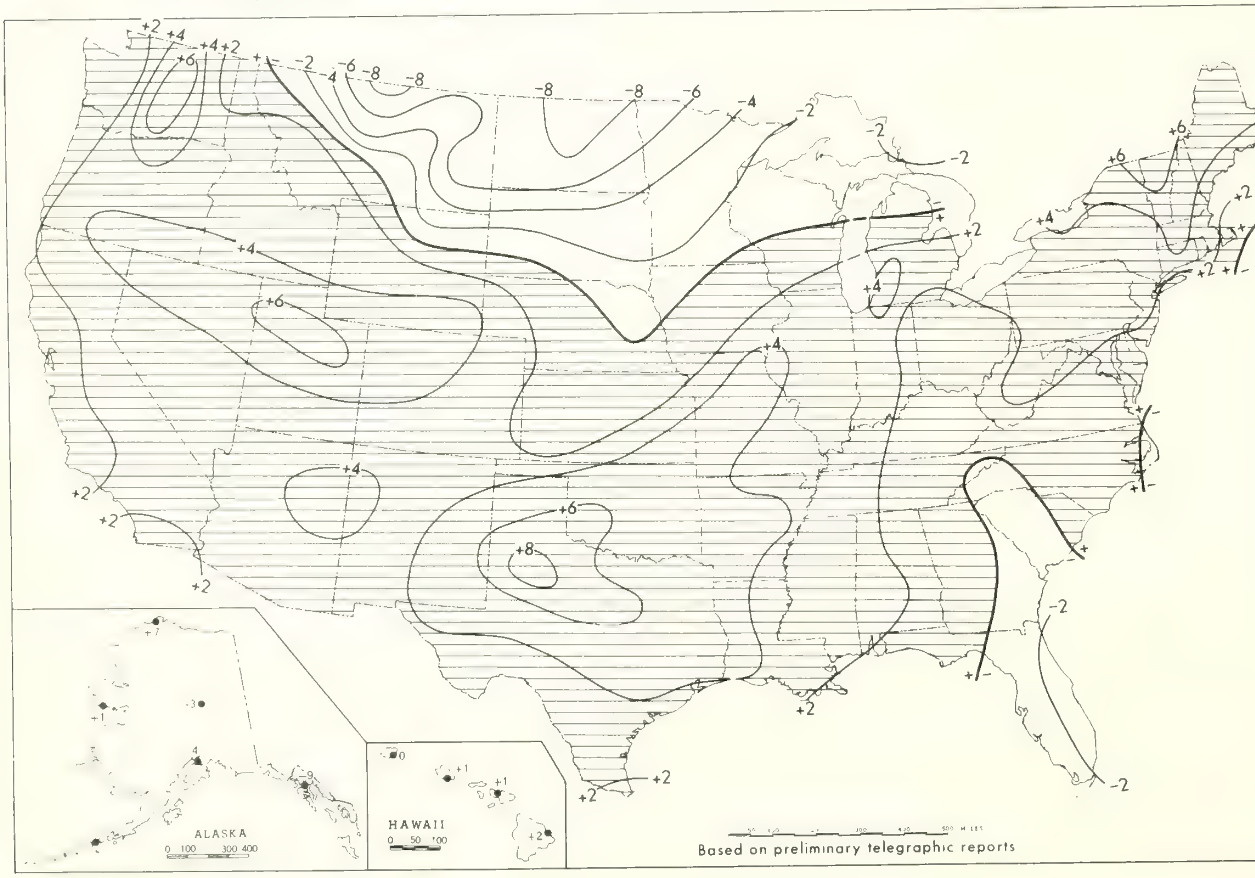
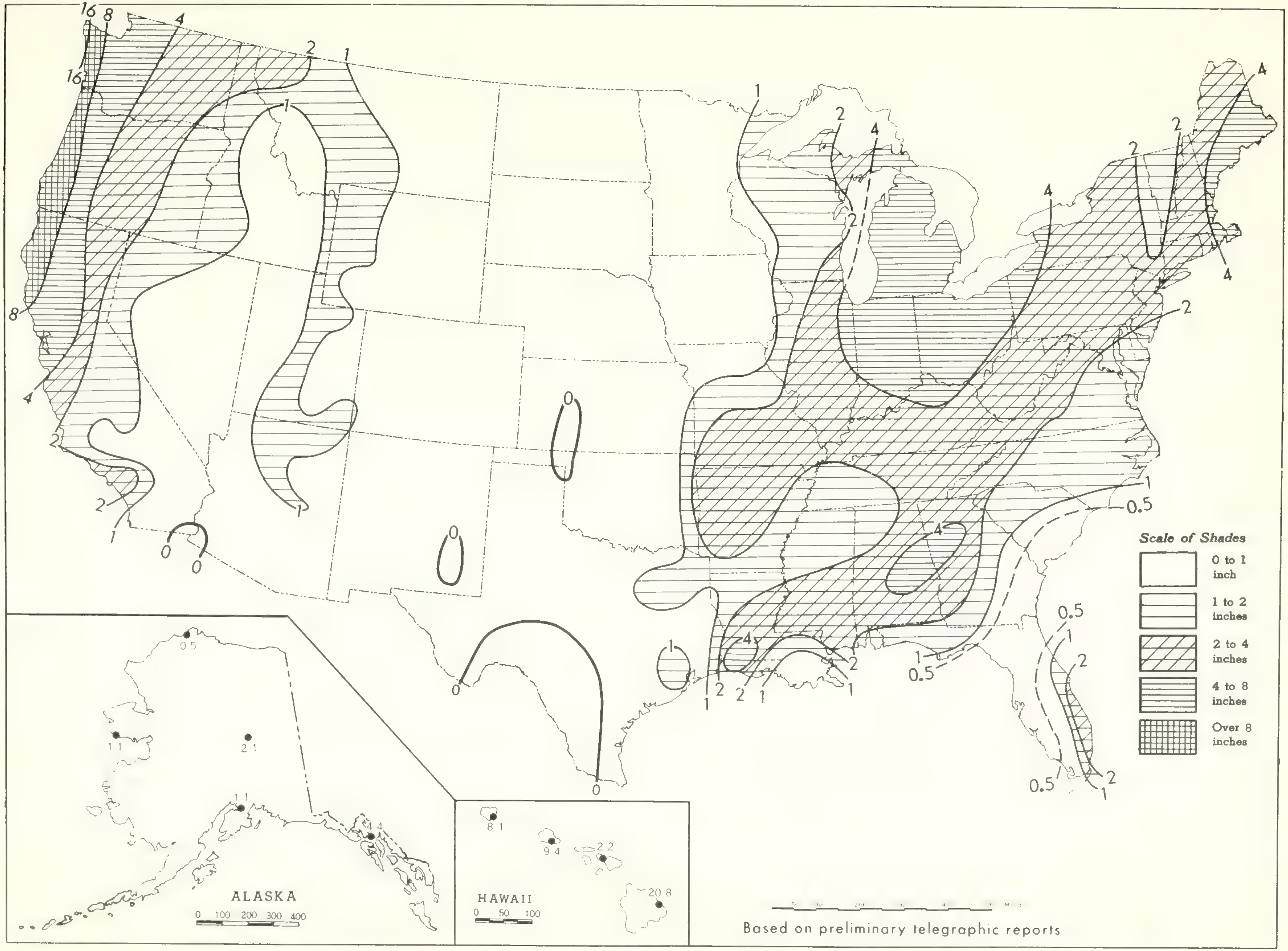
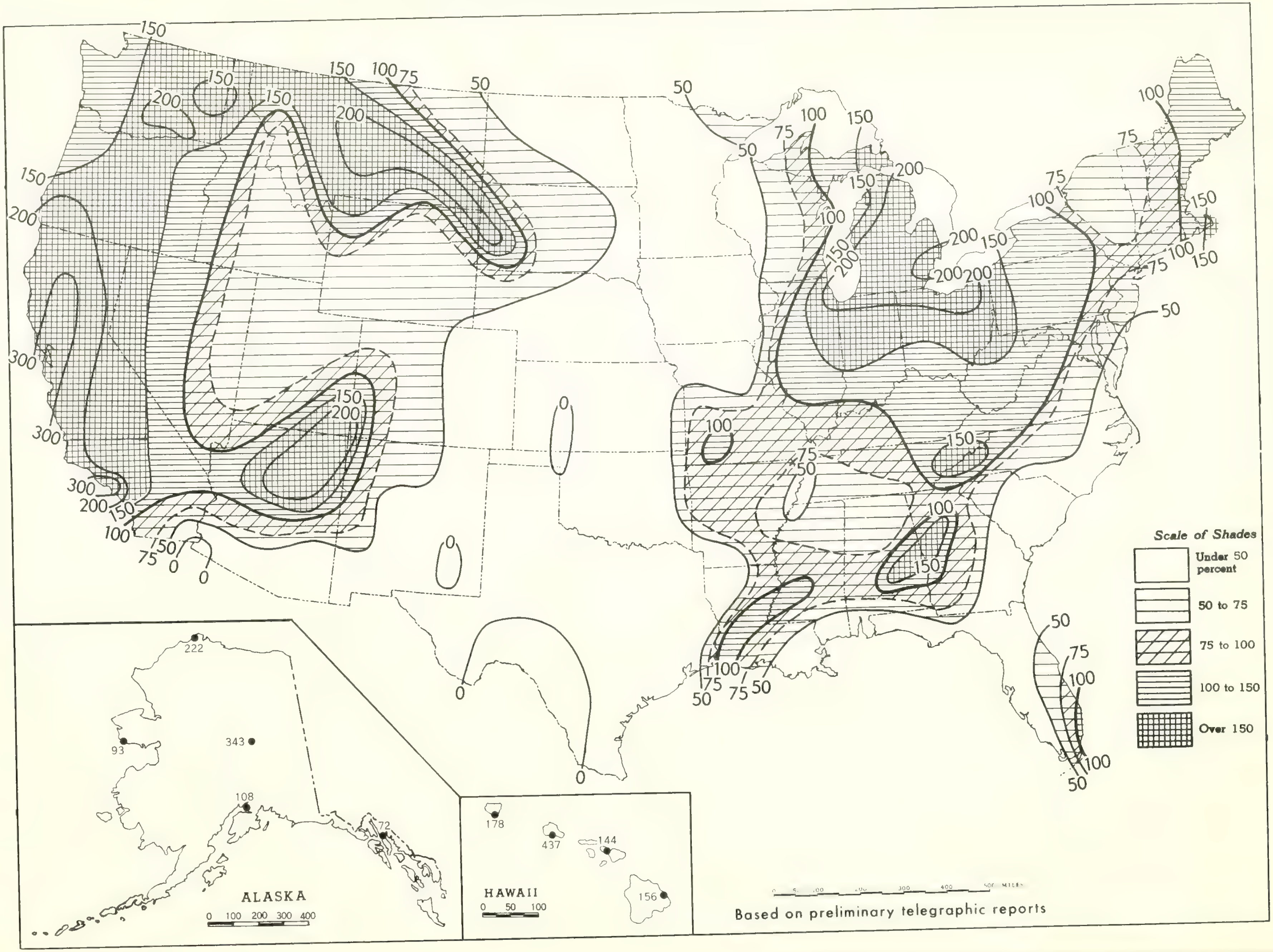


Chart II. Total Precipitation (Inches), November 1966.



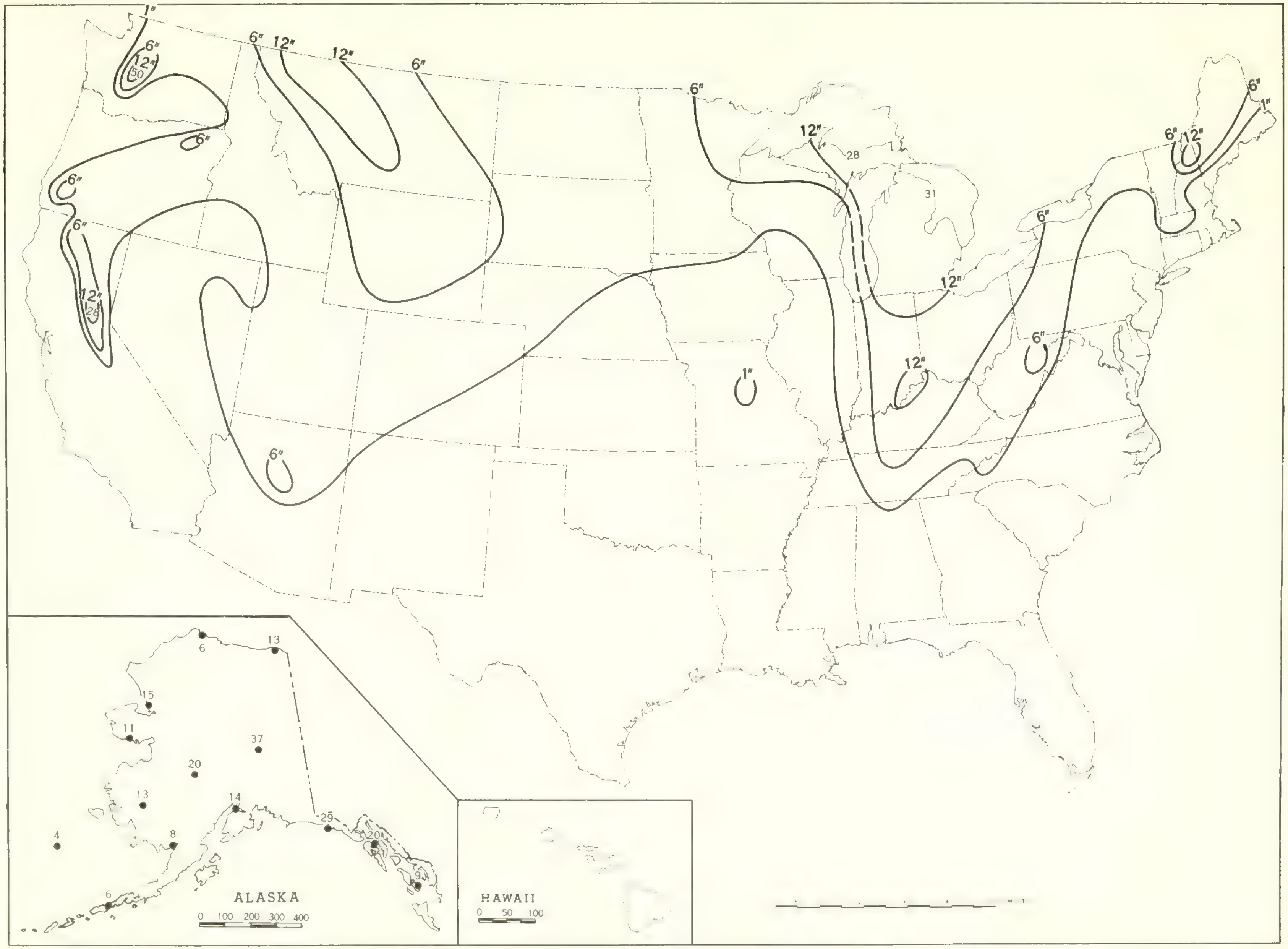
Based on preliminary telegraphic reports

Chart III. Percentage of Normal Precipitation, November 1966.



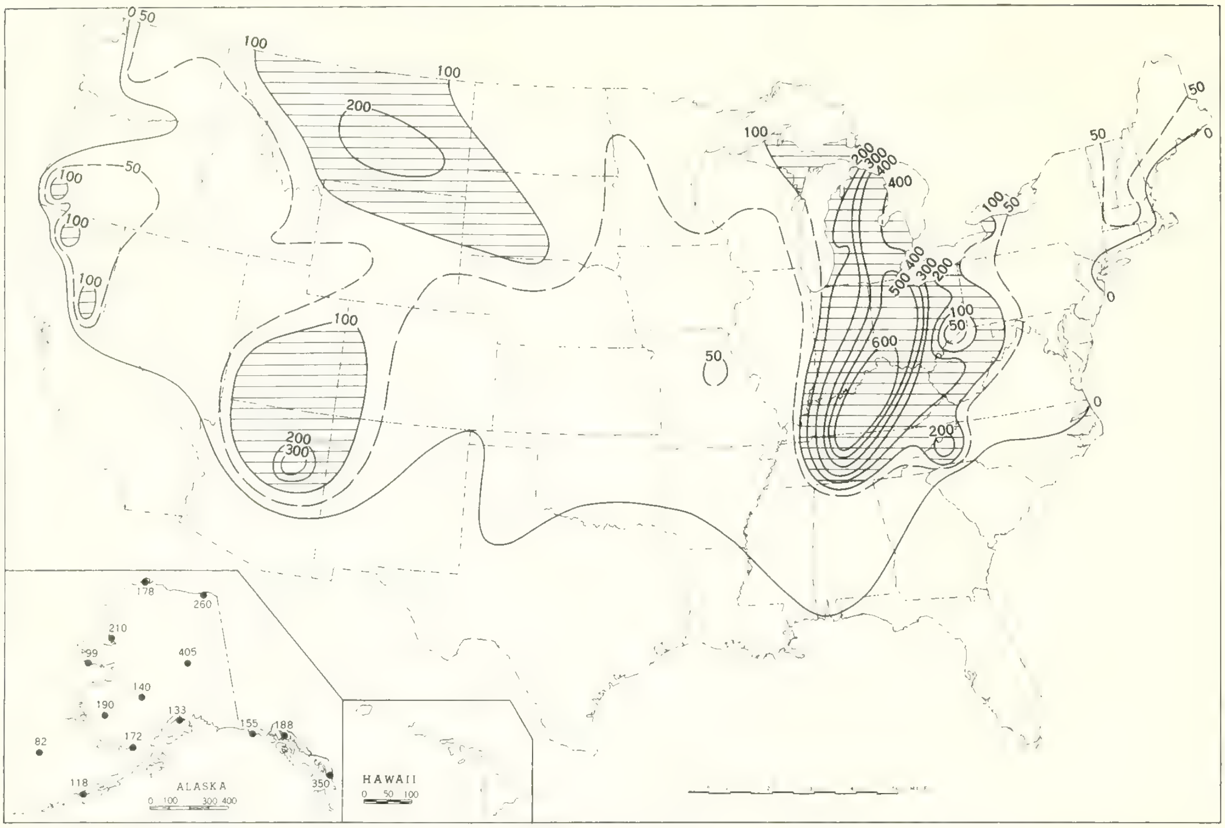
Based on preliminary telegraphic reports

Chart IV. Total Snowfall (Inches), November 1966.

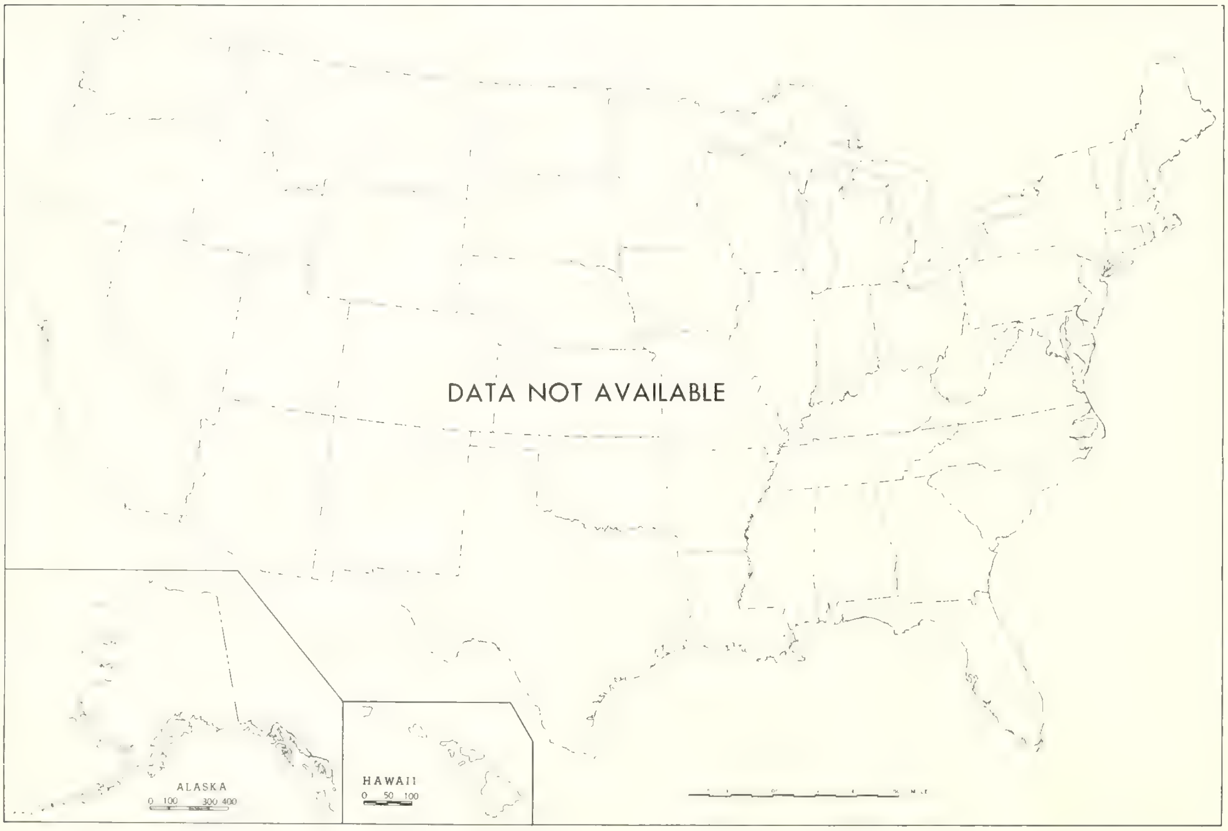


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, November 1966.

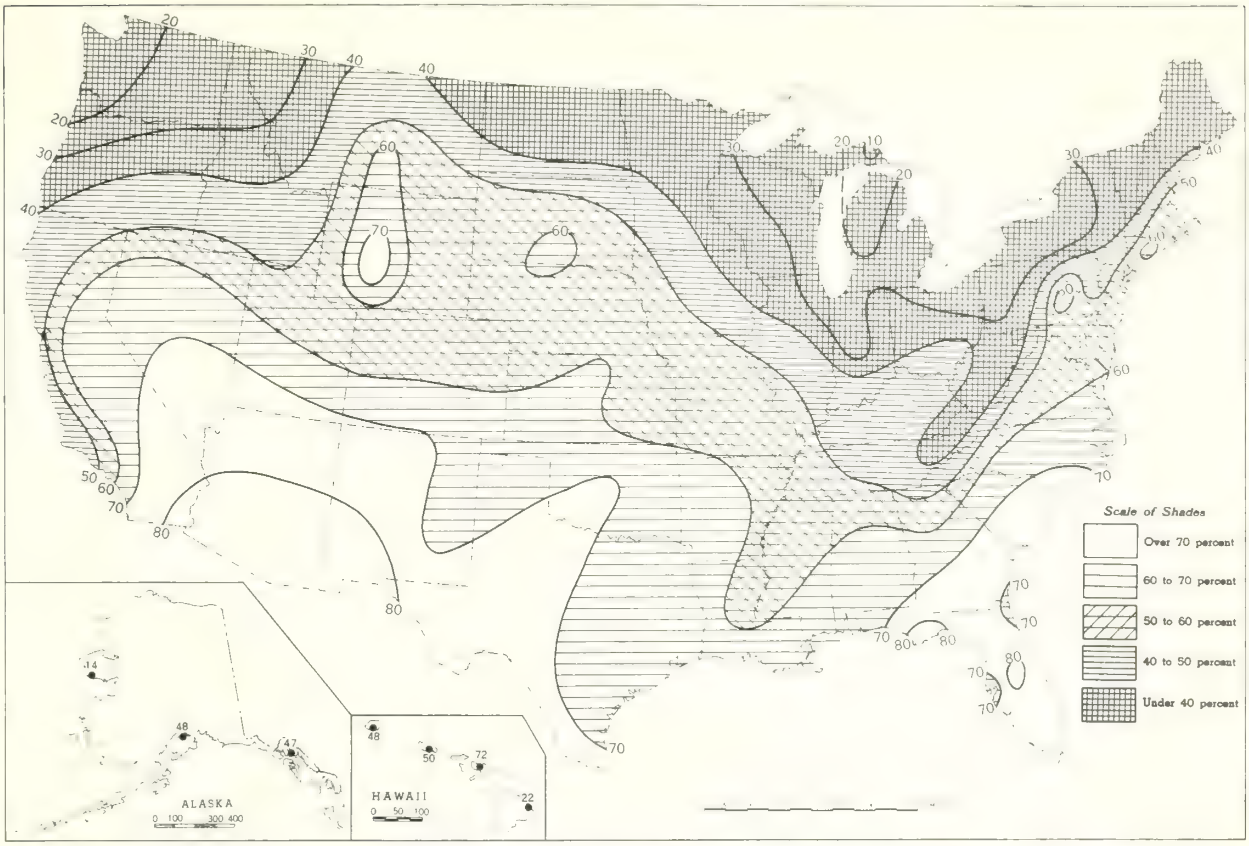


B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., November 1966.

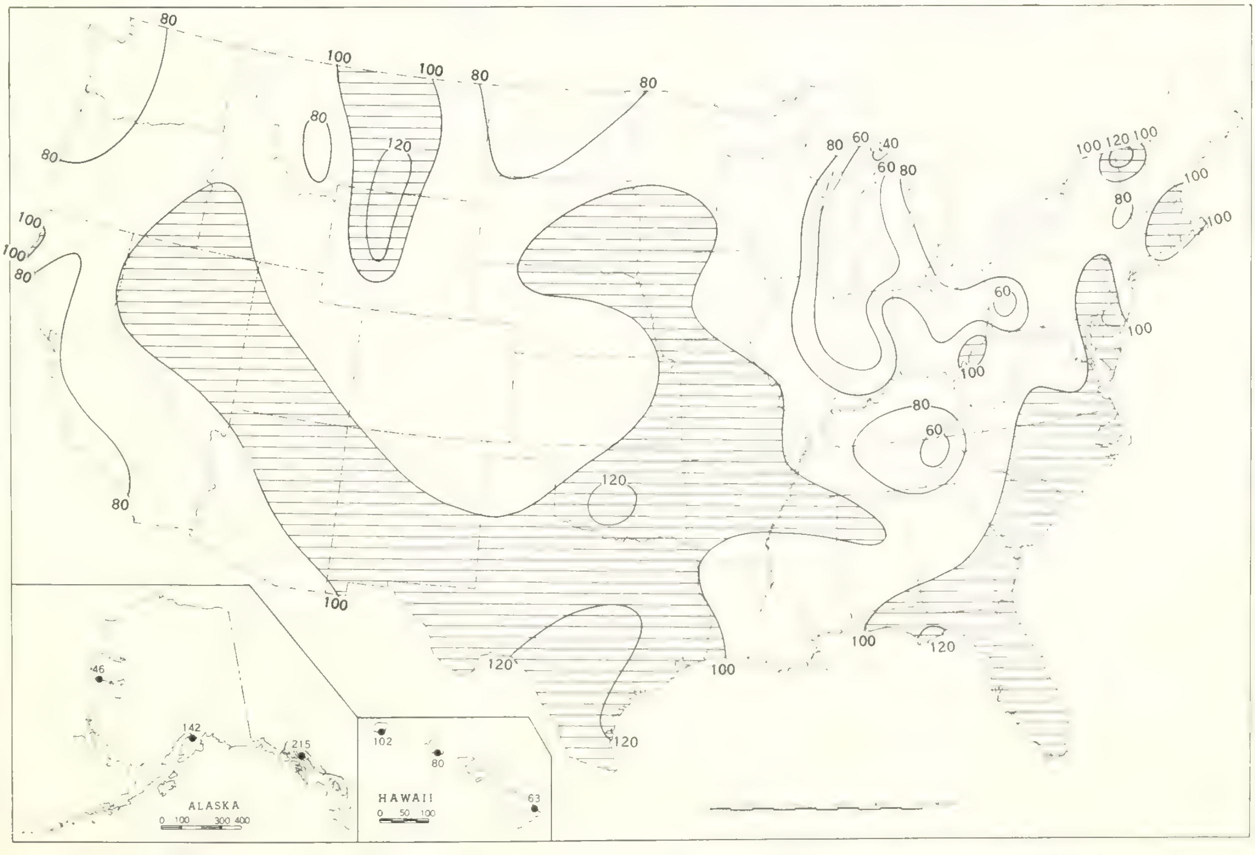


A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a. m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, November 1966.

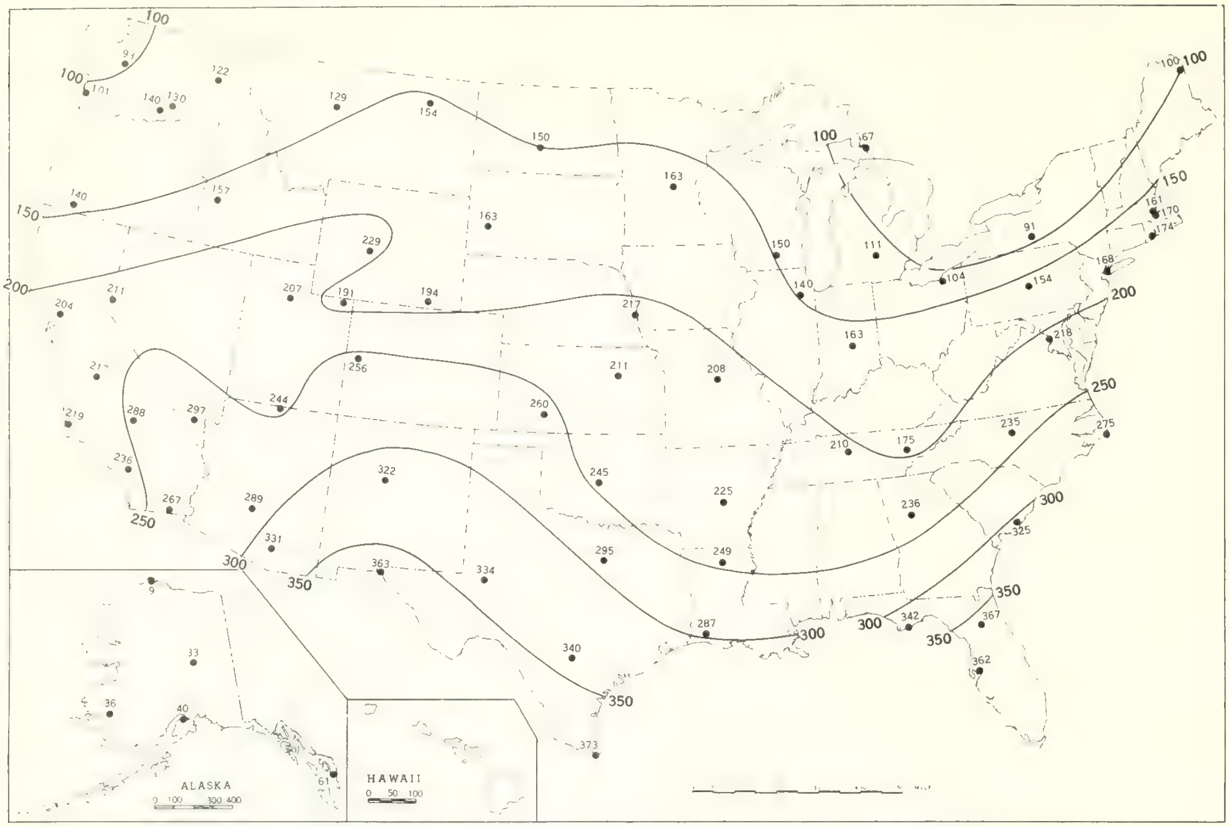


B. Percentage of Mean Monthly Sunshine, November 1966.

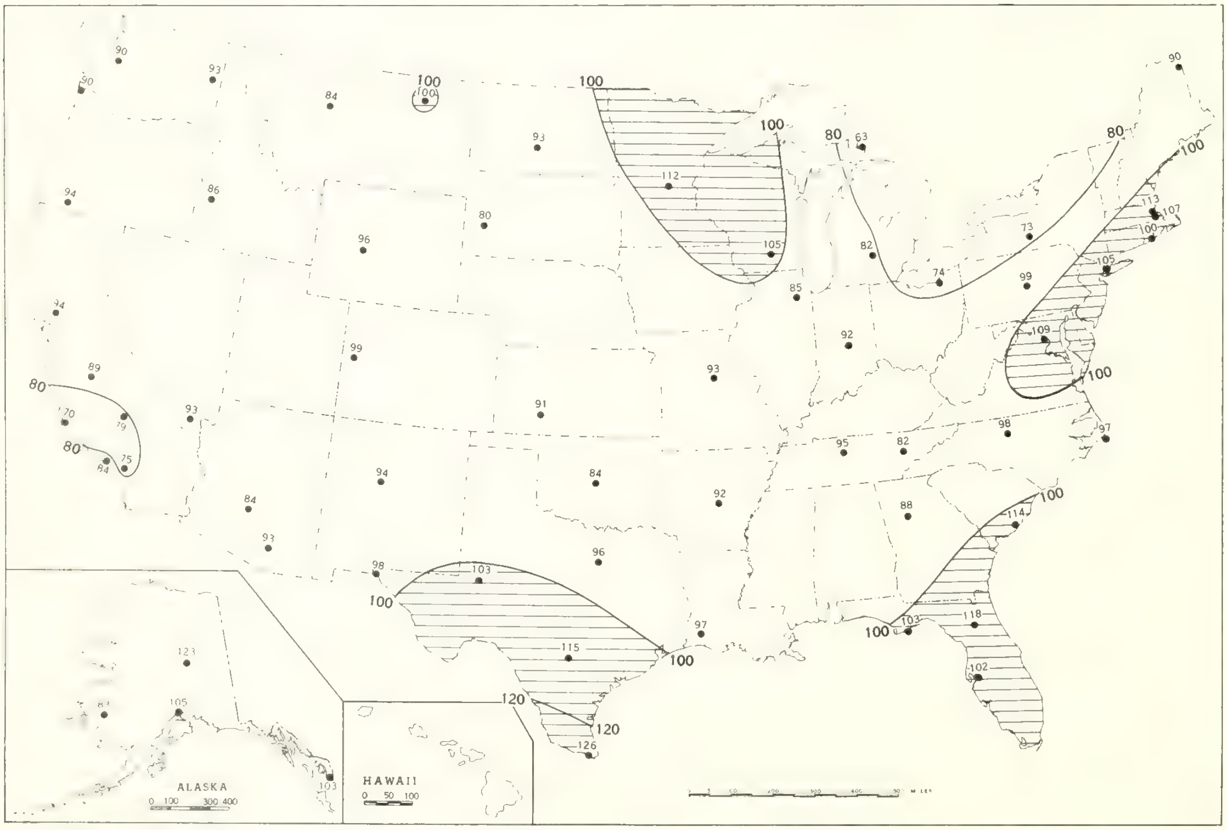


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, November 1966.

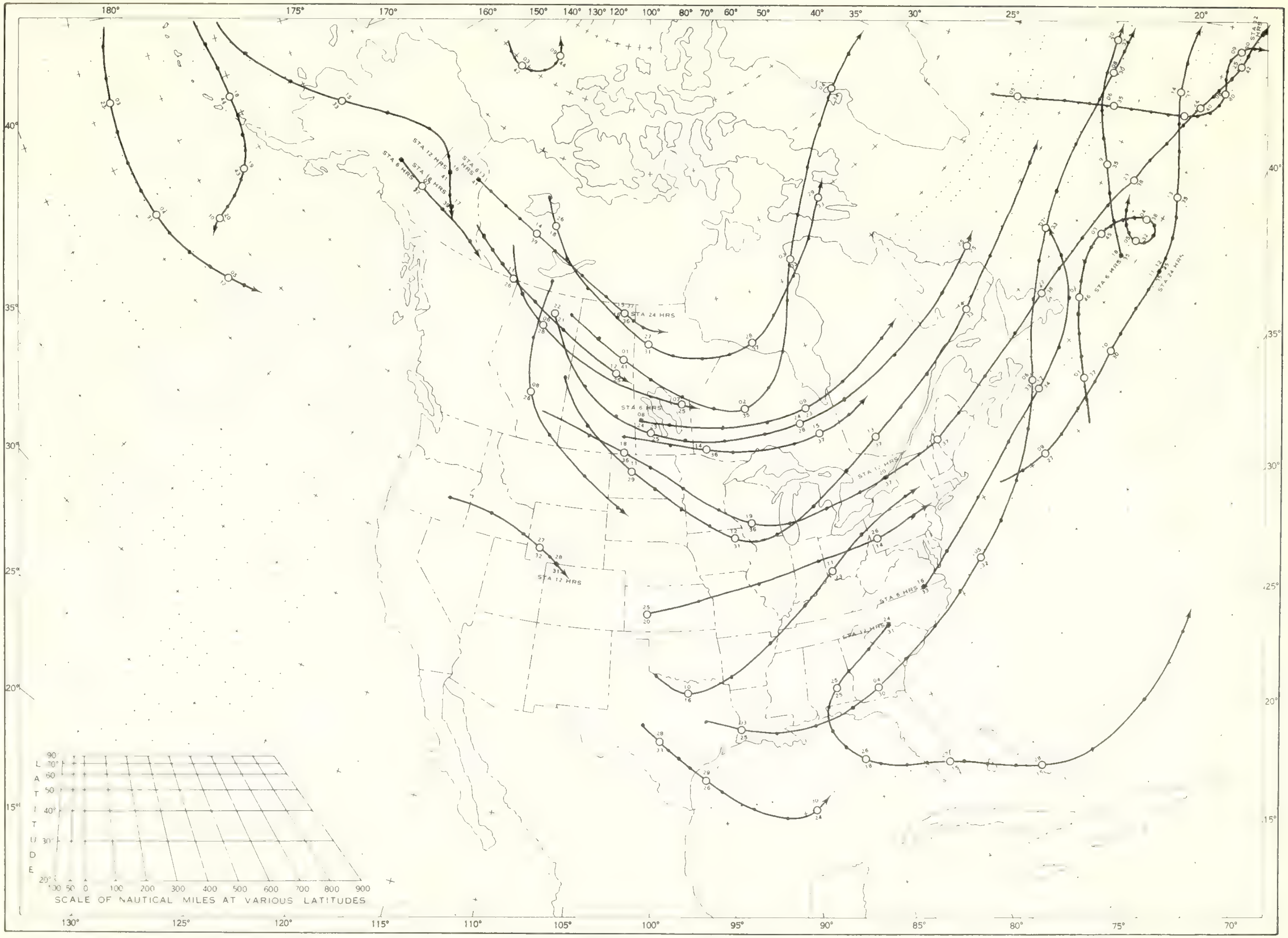


B. Percentage of Mean Daily Solar Radiation, November 1966.



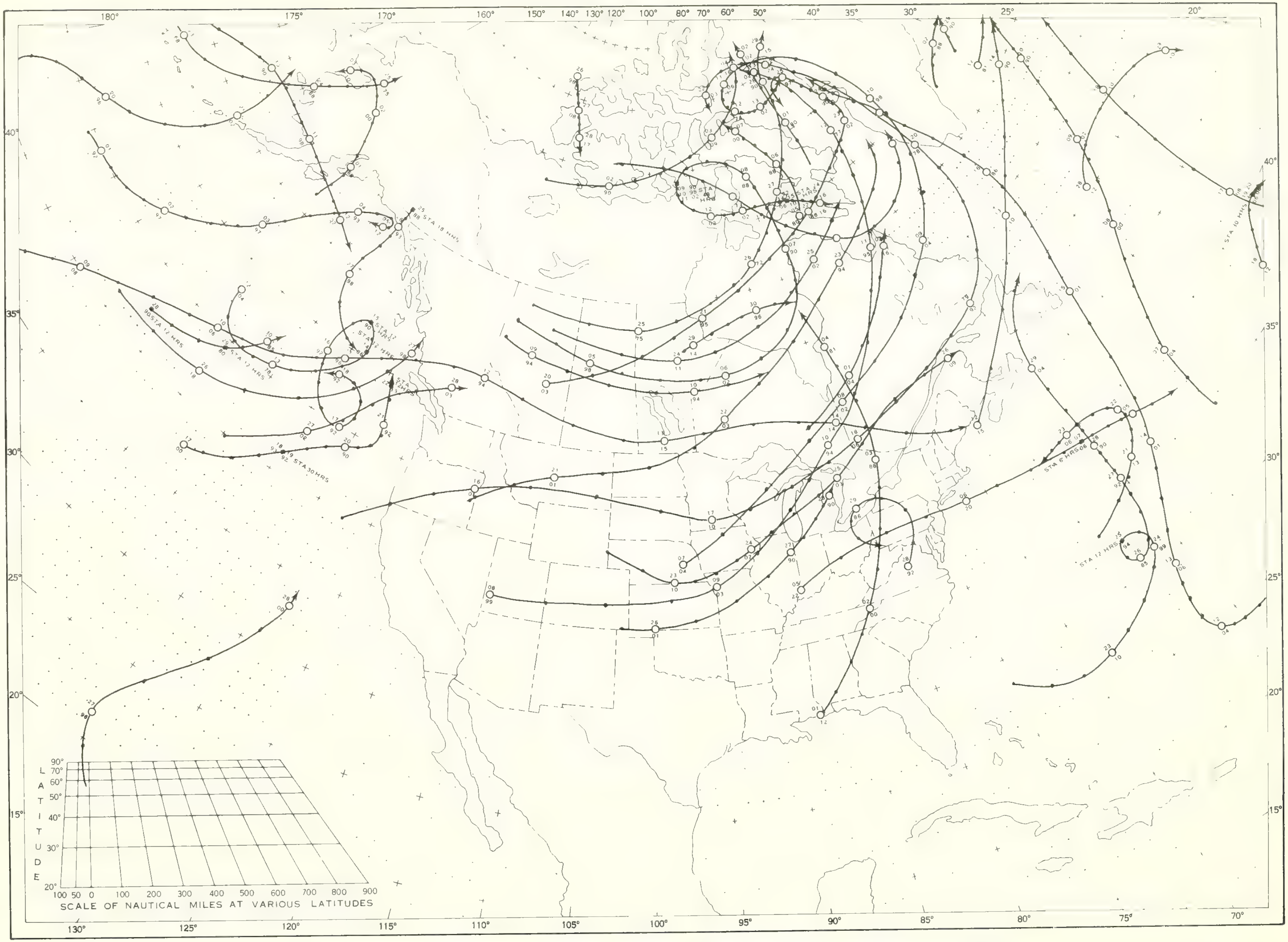
Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, November 1966.



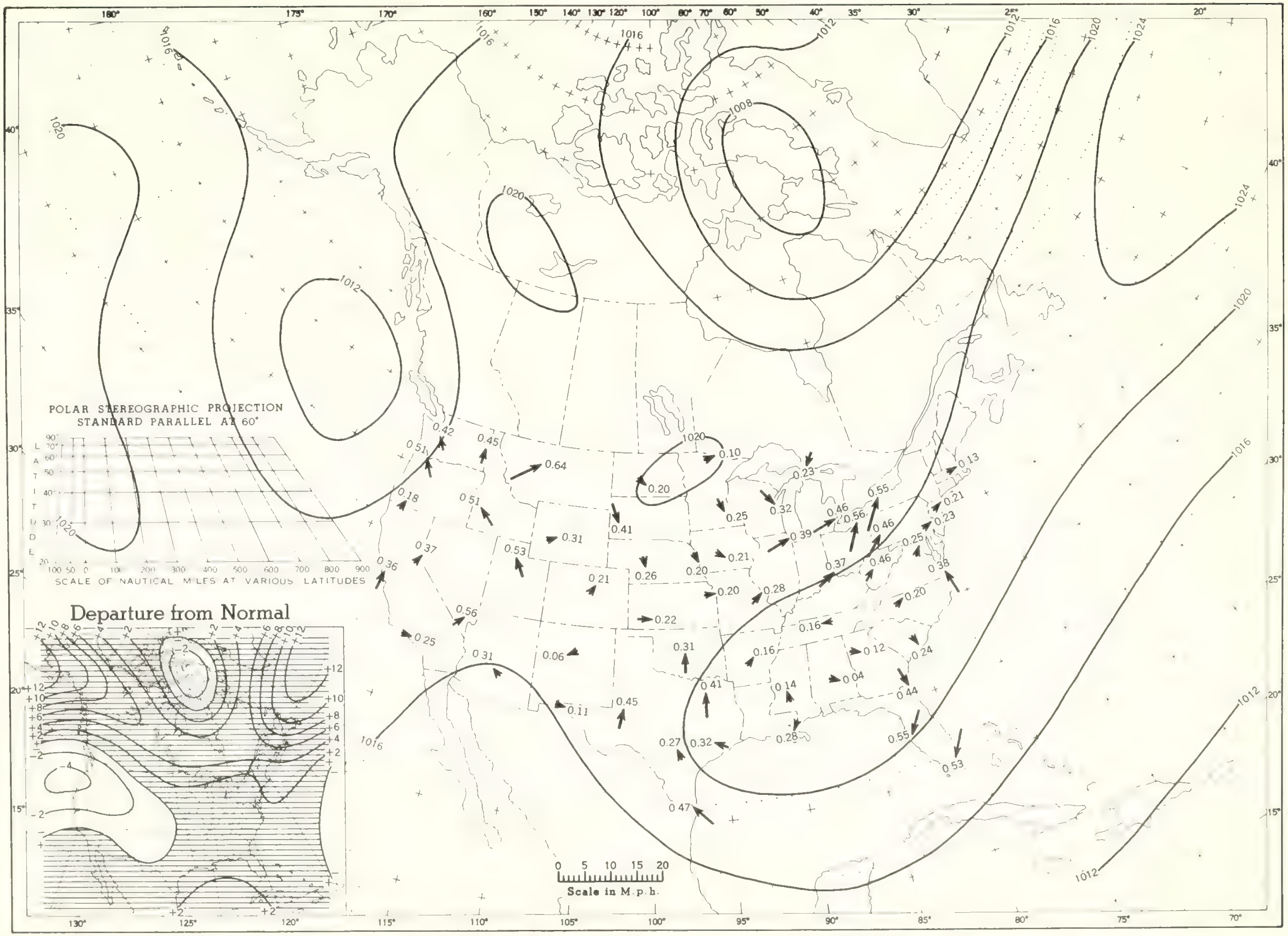
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, November 1966.



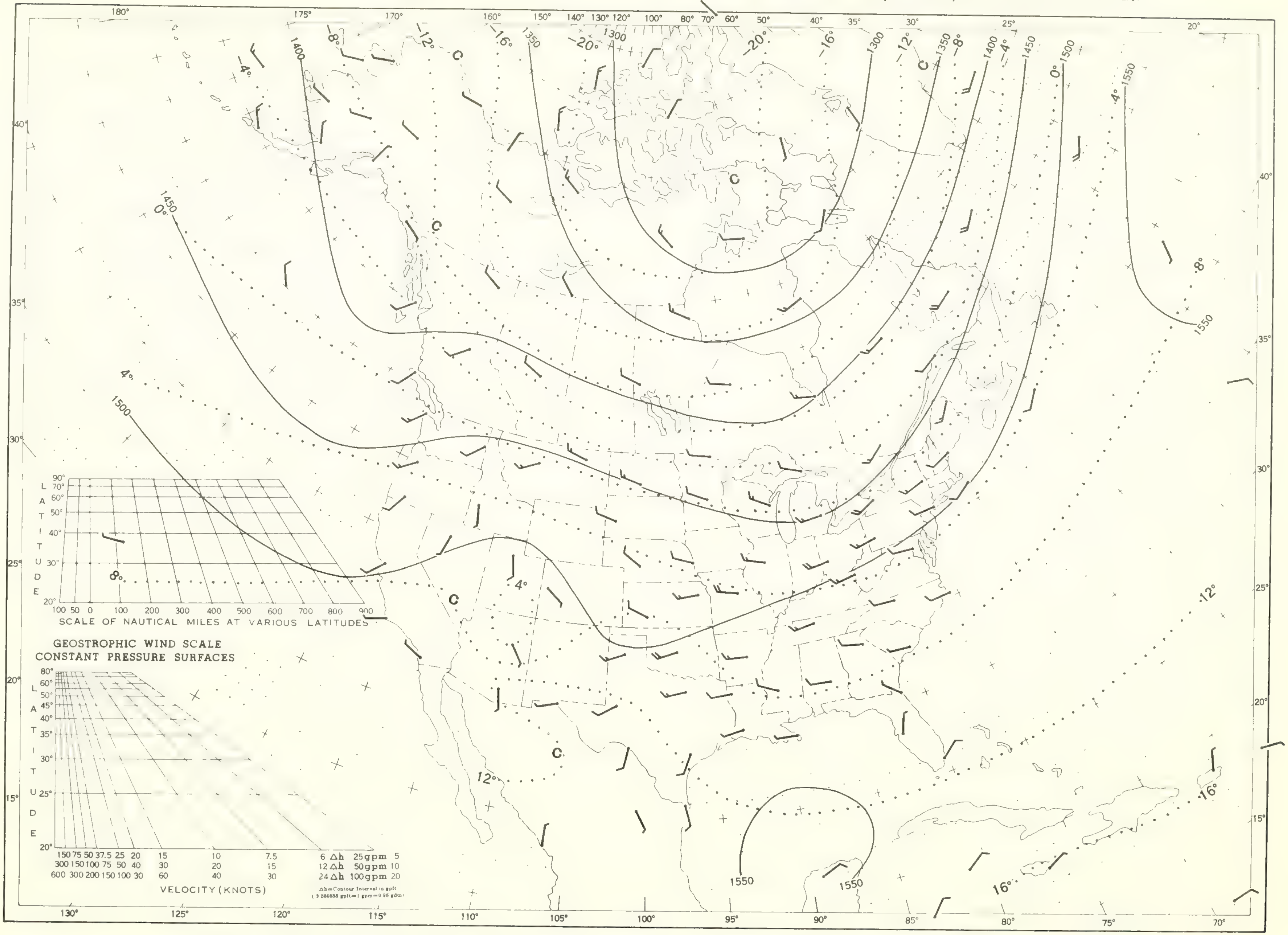
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, November 1966. Inset: Departure of Average Pressure (mb) from Normal, November 1966.



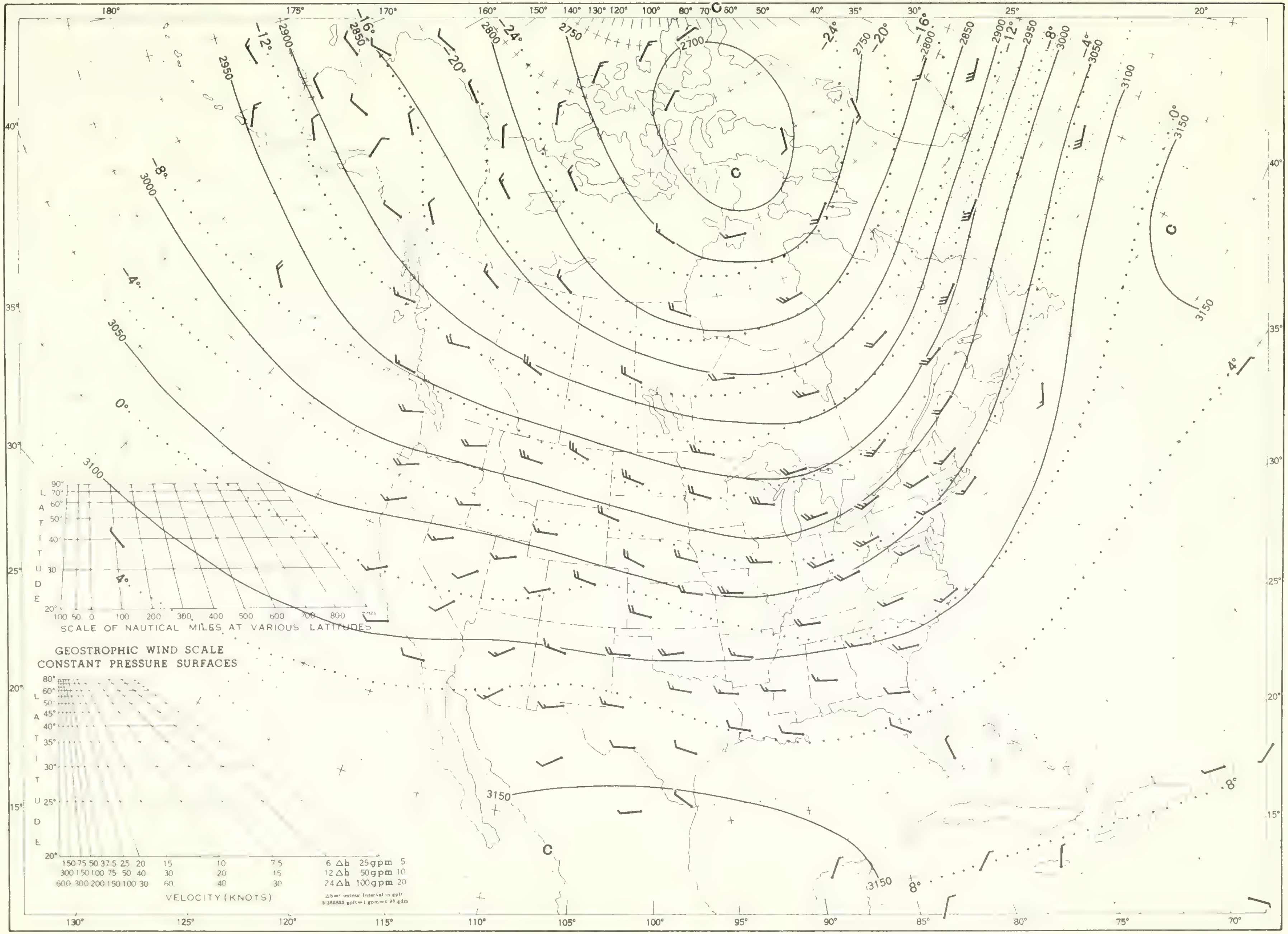
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, November 1966. Average Height and Temperature, and Resultant Winds.



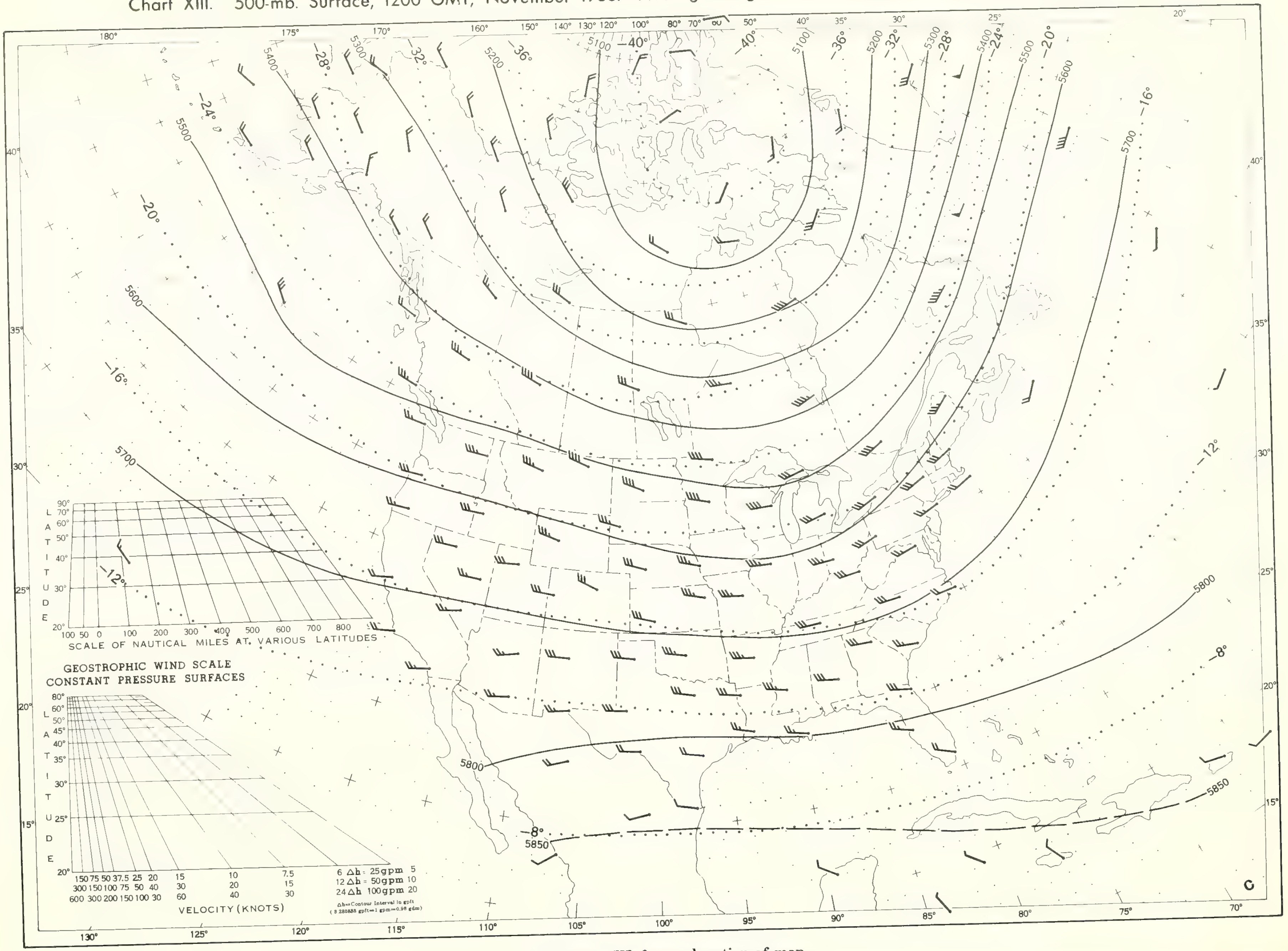
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, November 1966. Average Height and Temperature, and Resultant Winds.



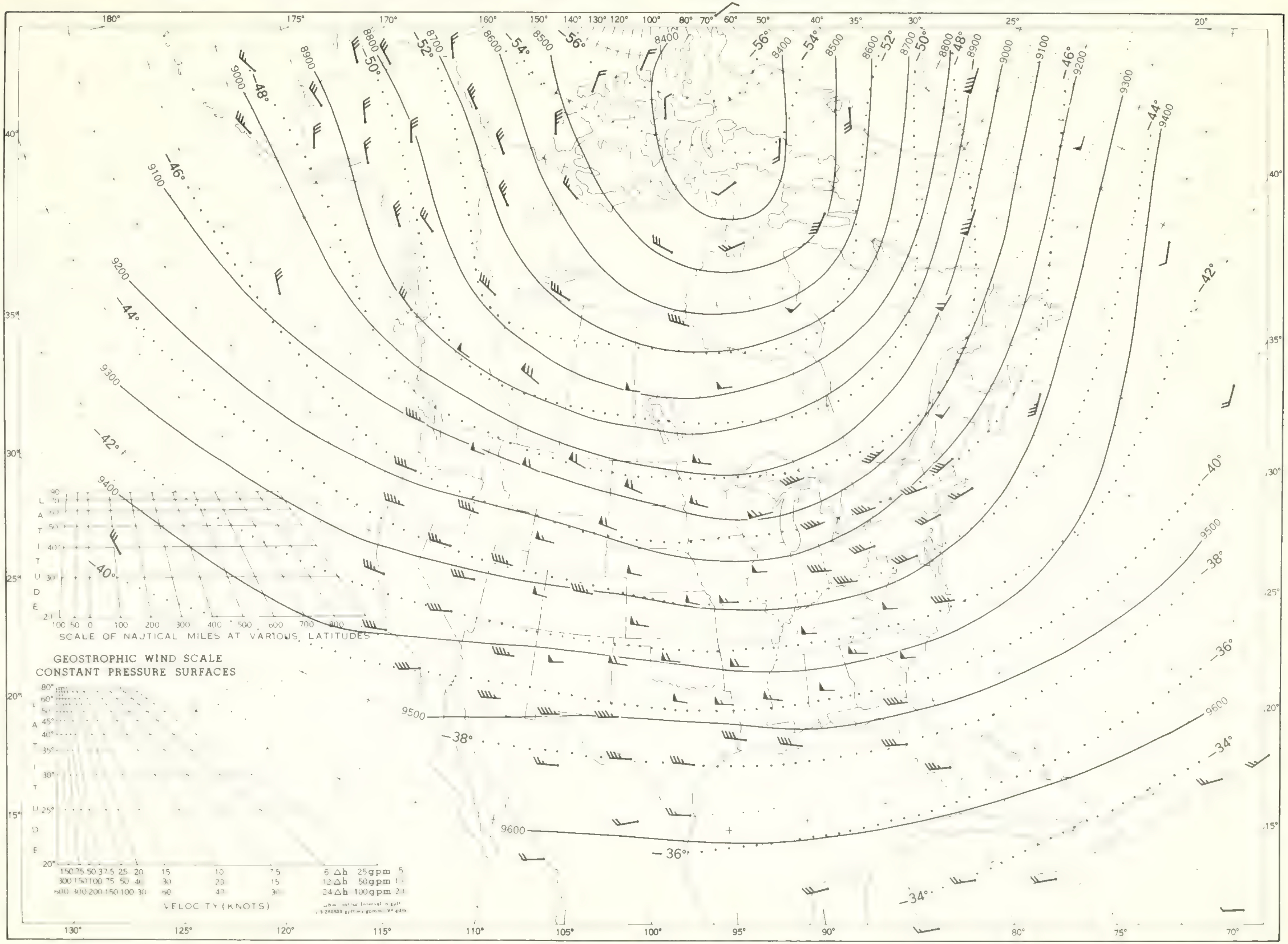
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, November 1966. Average Height and Temperature, and Resultant Winds.



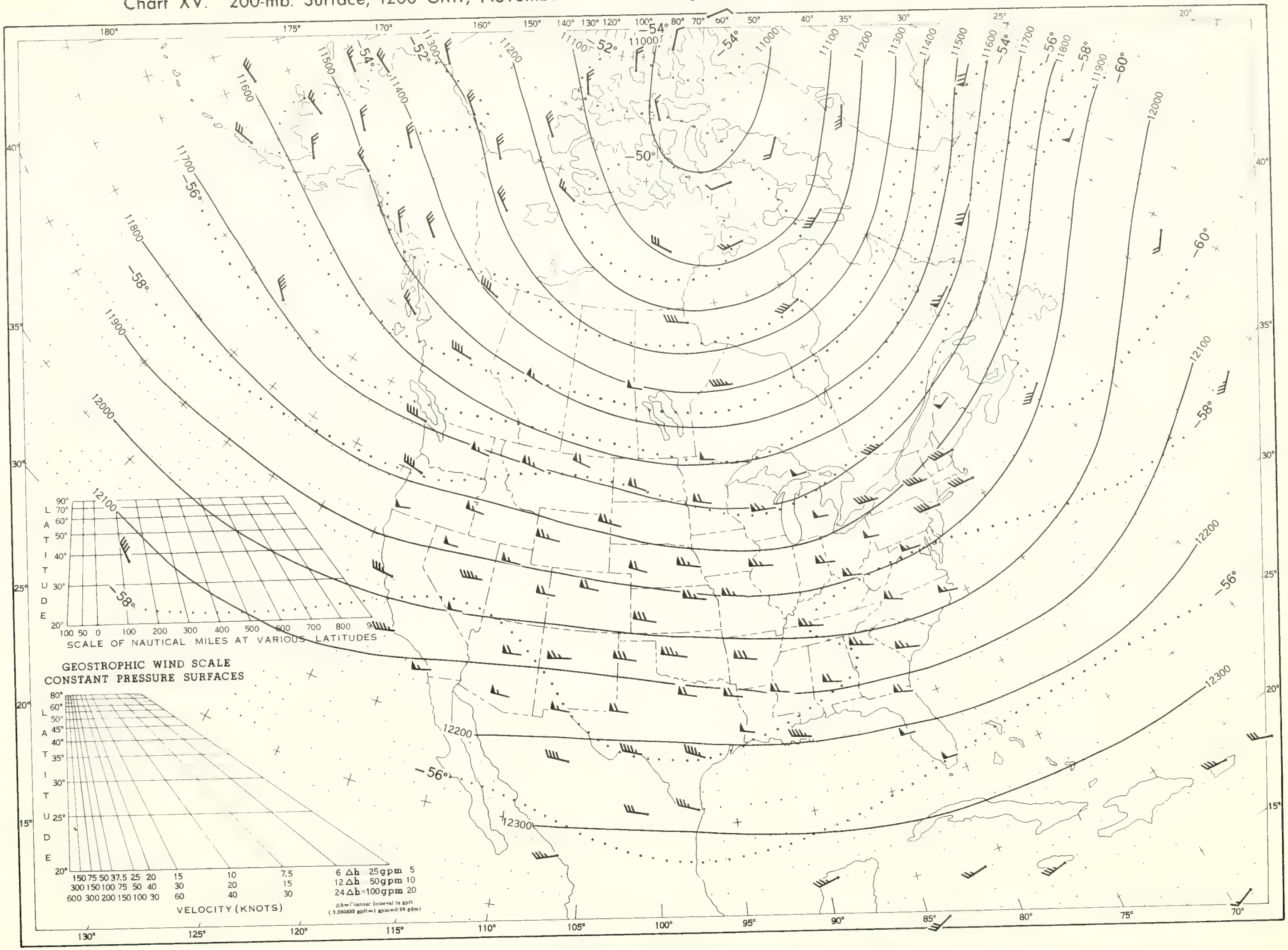
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, November 1966. Average Height and Temperature, and Resultant Winds.



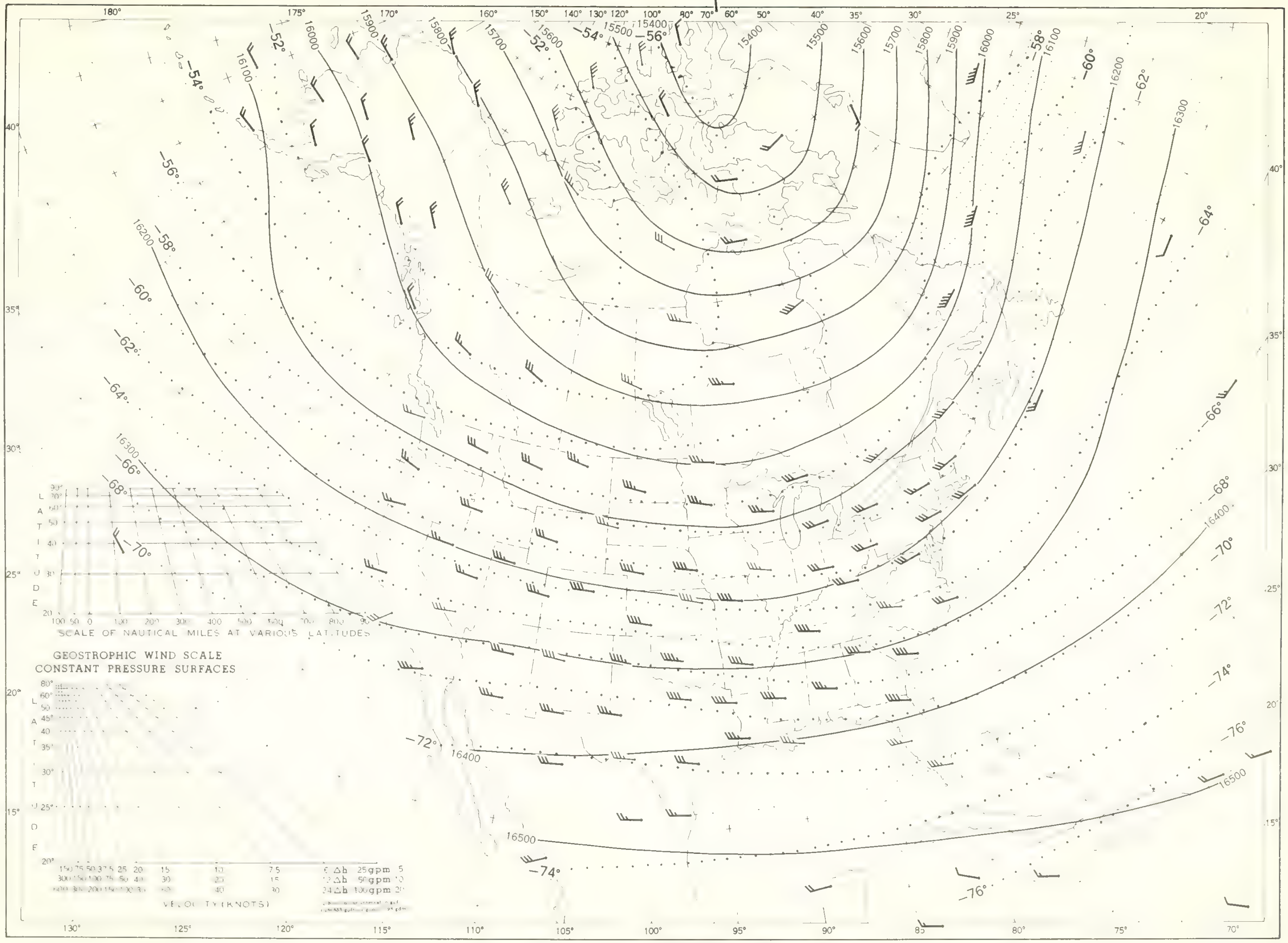
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, November 1966. Average Height and Temperature, and Resultant Winds.



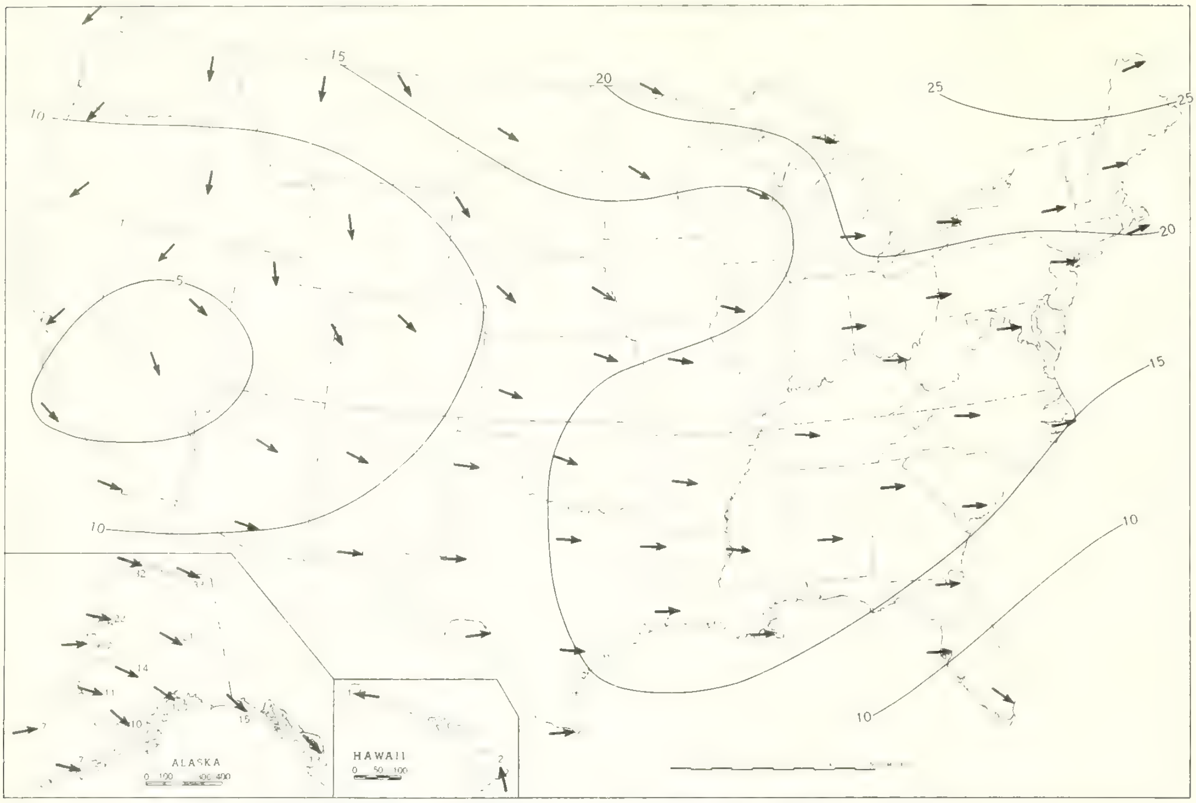
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, November 1966. Average Height and Temperature, and Resultant Winds.

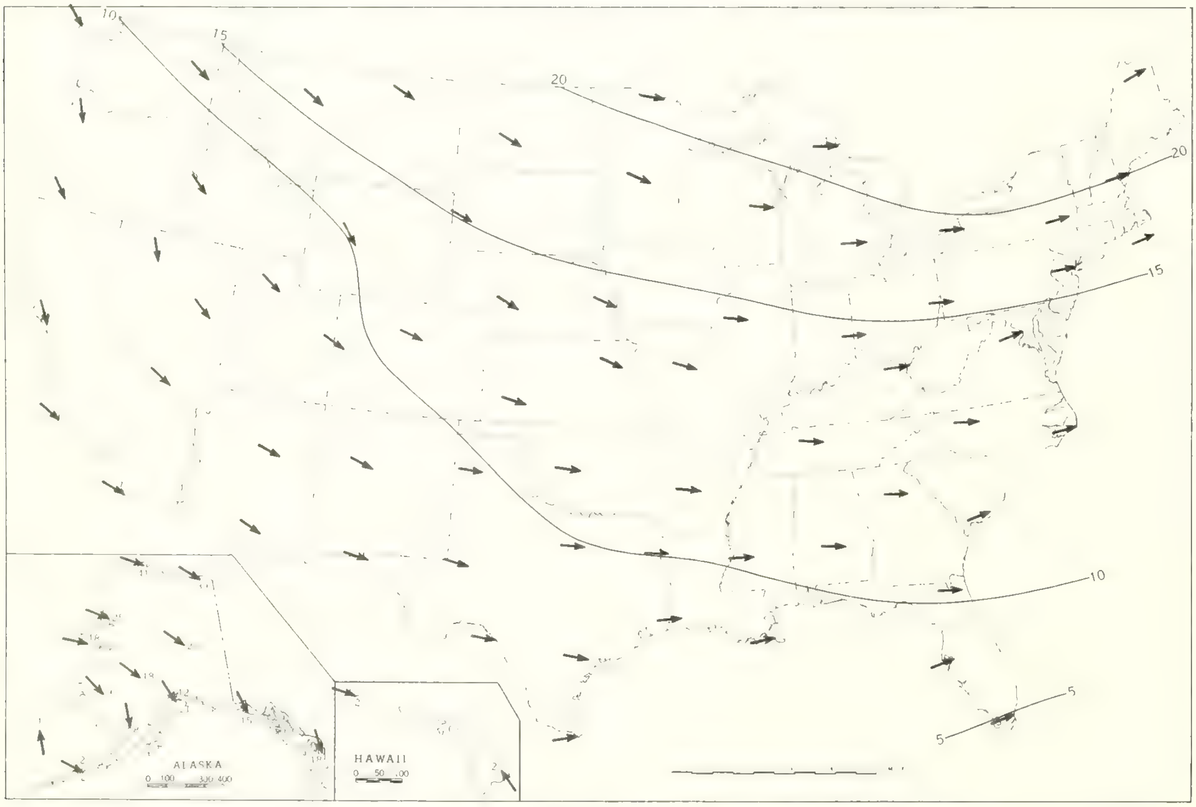


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, November 1966. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, November 1966. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

USCOMM-ESSA-Asheville, N. C. -2/21/67-1900

U. S. DEPARTMENT OF COMMERCE
ALEXANDER B TROWBRIDGE Acting Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

CLEMSON UNIVERSITY
S. C. TECH. & AGR. DIV.

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

DECEMBER 1966
Volume 17 No. 12

ASHEVILLE: 1967

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NOTE: Delayed data and corrections will be carried in the June and December issues of this publication.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 7 No. 12 DECEMBER 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

HIGHLIGHTS:

1. Heavy snowfall many areas.
2. Warmest December weather of century Northeast second week.
3. White Christmas North and also in some southern areas.
4. Tornado outbreak in Midwest 7th.

TEMPERATURES.--Temperatures fluctuated widely during December 1966, but averaged near normal - slightly above in parts of both the Far West and northeast quarter of the 48 States and slightly below in most central and sotheastern areas. Above normal temperatures were most persistent in the Pacific Northwest, particularly in central Washington, where only about 6 days were colder than normal, flowers were still in bloom at Yakima at the end of the month, and monthly average temperatures were as much as 6° above normal. The last decade was unusually cold in the southern portion of the Far West, with freezing occurring nearly everywhere except along the coast.

December began cold east of the Rockies, warmed up to above normal except in the northern Great Plains the second week, was cold only in the Gulf States the third week, and warm only along the northwest Canadian border the rest of the month. During the first 4 days of the month the East was in the grip of a cold wave, with freezing to central Florida and almost to the southern tip of Texas, and subzero minima in north-central and northeastern interior areas. On the first day the temperature did not rise above -6° at International Falls, Minn.

A warming trend began east of the Rockies on the 5th, with temperatures rising to record levels for December in some areas. Syracuse, N. Y., registered 69° on the 8th and 70° on the 10th, the latter the record highest for December. On the 9th, 10th, and 11th a cold front moved from the Great Plains to the Atlantic. This was followed by a surge of cold air from Canada depressing temperatures far below zero in the northern Great Plains. Freezing extended to Brownsville, Tex., on the 12th and 13th, and temperatures in the South were below normal for several days.

Late in the third week chinook winds raised maxima into the 50's and 60's in the western Great Plains for 2 or 3 days. Even in the rest of the Country unseasonably mild weather was the rule until the beginning of the fourth week when an arctic air mass began pushing into the north portion of the 48 States.

The last 10 or 12 days were cold everywhere except the northwest Canadian border area, where temperatures were above normal. During this period subzero temperatures were common in the central and northern Great Plains, and minimum readings in the 20's were reported as far south as southeastern Arizona and in the Everglades of Florida.

Scattered stations reported record high temperatures for various dates during the first half of the month. Among these were Yuma, Ariz., 83° on the 6th; Cairo, Ill., 71° on the 7th; Tulsa, Okla., 80° on the 7th; Boston, Mass., 70° on the 9th; Richmond, Va., 75° on the 10th; and Cleveland, Ohio, 67° on the 8th. Several date lows occurred among which were 19° at El Paso, Tex., on the 17th; 26° at Phoenix, Ariz., on the 29th; 21° at San Antonio, Tex., on the 11th; and 4° at Richmond, Va., on the 27th.

PRECIPITATION.--Precipitation was near to above normal except below in the lower Great Plains and southern Florida. West of the Continental Divide, precipitation occurred most of the first 10 days of the month and continued nearly all month in the Pacific Northwest. In the southern portion of California's Central Valley flooding along the Tule River Valley near Porterville at the beginning of the month caused damage - based on early estimates - of $2 million, and in the northwestern part of the State minor flooding was reported along the Eel River. Monthly totals of 2 inches or more exceeded 200 percent of normal in western Colorado, Utah, northern Arizona, and parts of Nevada. For Milford, Utah, 2.11 inches was the greatest December total recorded there in the past 61 years.

Precipitation was well above normal in the Mississippi Valley and Great Lakes region, with monthly totals ranging from 150 to 250 percent of normal in Indiana, Lower Michigan, northwestern Ohio, eastern Illinois, and south-central Wisconsin. Heaviest amounts (storm totals up to 7 inches locally) fell in this area during the latter part of the first decade and caused considerable flooding in Ohio, Indiana, and Tennessee.

In most of Texas and New Mexico, extreme southern Arizona, eastern Colorado, and western Oklahoma, precipitation was less than 50 percent of normal and some stations reported no measurable amounts. This was the third consecutive dry month in most of these areas, and winter grains needed more moisture. At Roswell, N. Mex., only a trace of precipitation was recorded during a 102-day period ending December 31.

SNOW.--Snowfall was abnormally heavy in many northern sections where snowfall is a common December phenomenon. In the Northeast record December totals were recorded by a number of stations among which were Burlington, Vt., 36.2 inches; Reading, Pa., 27.1; and Lynchburg, Va., 17.9 inches. Washington, D. C., measured 16.1 inches for the month, only 0.1 inch below the December record. Heavy snow fell at most northeastern stations at least three times during the month. Burlington, Vt., reported heavy snowfall December 1-2, 24-25, and 29, and Roanoke, Va., on the 13th, 23d-24th, and 28th. The heaviest and most widespread falls occurred on the 24th and 25th when over a foot was reported by scattered stations in the Appalachians and from southeastern Pennsylvania northward through New York and New England. Philadelphia, Pa., measured 12.4 inches on the 24th and Albany, N. Y., 18.3 inches on the 24th and 25th. On Christmas Day snow covered most of the northern half of the Nation.

Snowfall on December 1-2 over northeastern Ohio reached depths ranging between 26 and 30 inches in the northeast portion of Ashtabula County, 10 to 18 inches in Lake County, and 12 to 14 inches in the northern portion of Geauga County. Erie, Pa., measured a total of 16.5 inches for the 1st and 2d. Falls during this storm on the 1st and 2d were extremely heavy just south of Buffalo, N. Y., in Chautauqua, Cattaraugus, and southern Erie Counties. Mayville, N. Y., located in Chautauqua County about 8 miles from Lake Erie, measured 54 inches during the storm; more than 200 persons were stranded and the New York State Thruway was closed from Silver Creek, N. Y., to the Pennsylvania line for 13 hours.

In central and upper portions of the Great Plains and Mississippi Valley moderate to heavy snow fell on the 10th and 11th and light falls were frequent from the 23d until the end of the month. On the 23d and 24th some stations in the Ozark region of Arkansas and Missouri reported up to a foot or more of snow. A storm swept out of the Southwest on the 27th and moved over the lower Great Plains to the middle Mississippi Valley and across the Great Lakes by the 30th, leaving a heavy snow cover in the central and lower Rockies. Blizzard conditions developed over the central Great Plains, and snowfall ranged from 8 to 12 inches over parts of Kansas and Nebraska and northeastward across southern Iowa and northern Missouri to southern Wisconsin and northern Illinois.

Snowfall in the Far West was also normal or above in many sections. Falls were frequent in the Cascades and occurred at intervals in the Sierras and Rockies. At the beginning of the month snow depths ranged up to 40 inches in the Sierras, 50 in the Cascades, and to as much as 2 feet in the Rockies. Depths doubled during the month in the Cascades and Rockies, but remained about the same in the Sierras.

SEVERE STORMS.--During a frontal passage in the Midwest on December 7, damaging tornadoes occurred in Missouri, Illinois, and Indiana. Other storms during the month were of the wintertype - snow, glaze, and occasional high winds.

CONDENSED CLIMATOLOGICAL SUMMARY

DECEMBER 1966

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In.		In.
Alabama	5 Stations	79	10+	4 Stations	9	25	Waterloo	9.15	Brookwood	2.24
Alaska	Data will be delayed									
Arizona	San Carlos	85	2	Maverick	-25	28	Jinipine	10.68	9 Stations	.00
Arkansas	Booneville	83	7	Gilbert	-13	24	Hamburg	9.26	Parks	1.64
California	2 Stations	95	7+	White Mountain 1	-13	27	Johnsondale	30.61	2 Stations	.00
Colorado	Two Buttes 1NW	74	20	Fraser	-38	29+	Wolf Creek Pass 4W	D12.35	Penrose 3NNW	.00
Connecticut	Colchester	68	9	West Thompson Dam	-6	28	Saugatuck Reservoir	4.36	North Branford	2.53
Delaware	3 Stations	75	10	Middletown 1WSW	2	28	Georgetown 5SW	D 4.93	Selbyville	3.39
Florida	Melbourne	88	31	Milton Exp Station	19	25	Wewahitchka	7.07	De Soto City 8SW	.08
Georgia	Homerville 3WSW	86	9	2 Stations	9	25	Hamilton 4W	6.82	Savannah Beach	.67
Hawaii	Data will be delayed									
Idaho	Caldwell	56	5	Leadore No 2	-28	23	Sandpoint Exp Station	6.89	2 Stations	.06
Illinois	2 Stations	72	8	2 Stations	-4	3	Albion	7.72	La Salle 1S	1.59
Indiana	Bedford	72	8	Farmland 5NNW	-7	3	Logansport Cicot St Br	7.08	Hobart	3.18
Iowa	Keobuk L&D 19	65	8	Inwood 2SW	-11	10	Dubuque L&D No 11	3.46	Storm Lake 2E	.39
Kansas	3 Stations	80	7	Mound Valley 3WSW	-16	24	Pittsburg	2.99	Bird City 11S	.16
Kentucky	Cumberland	79	9	Somerset 2N	-7	25	Golden Pond 8N	7.24	Jeremiah	1.32
Louisiana	Book	85	7	Ashland 2S	10	25	Boothville WB City	11.62	St Francisville 6SE	1.47
Maine	2 Stations	64	11	Van Buren 2	-12	31	Woodland	3.91	Presque Isle	1.88
Maryland	Baltimore WB City	76	9	Oakland 1SE	-7	4	Aberdeen Phillips Fld	4.44	Cumberland Police Bks	D 1.16
Massachusetts	2 Stations	72	9	Birch Hill Dam	-11	28	Beechwood	4.46	Weston	1.75
Michigan	Kalamazoo State Hosp	68	9	Champion Van Riper Pk	-20	30	Hesperia	5.54	Cornell	.99
Minnesota	Beardsley	49	17	2 Stations	-28	22+	Thief River Falls AP	2.45	Ortonville	.24
Mississippi	3 Stations	82	9+	3 Stations	12	25	Alcorn A&M College	8.74	Centreville 4ESE	1.40
Missouri	2 Stations	77	7	Monett	-15	24	Dexter	5.67	Harrisonville	.25
Montana	do	63	18+	Ingomar 11NE	-29	9	West Glacier	5.03	Scobey	.00
Nebraska	3 Stations	68	15+	Anselmo	-20	23	Beaver City	1.35	Enders Dam	.05
Nevada	Sunrise Manor Las Vegas	76	2	Currie Highway Sta	-25	28	Pioche	7.71	Desert Natl WL Range	.15
New Hampshire	3 Stations	65	10+	Mount Washington	-14	3	Mount Washington	6.66	Lakeport 2	1.96
New Jersey	4 Stations	74	11+	3 Stations	-4	29+	Flemington 1NE	5.67	New Monmouth	2.05
New Mexico	3 Stations	78	8+	Gavilan	-33	29	Dulce	5.29	13 Stations	.00
New York	do	70	10	Canton 3SE	-18	28	Adams Center	7.23	Canisteo	.65
North Carolina	Oriental	83	10	Grandfather Mountain	-2	25	Cape Hatteras WB	6.58	Carthage 1SSE	1.34
North Dakota	Alexander 16SW	56	19	3 Stations	-28	10	Grafton	1.31	Ambrose 3N	T
Ohio	2 Stations	74	9+	Millport 2NW	-12	3	Napoleon Water Works	6.91	Senecaville Dam	.94
Oklahoma	Anadarko	89	7	Hulah Dam	-12	24	2 Stations	3.80	2 Stations	T
Oregon	2 Stations	66	15+	Rockville 5N	-7	27	Valsetz	26.94	McDermitt 26N	.61
Pennsylvania	Morgantown	76	10	Clermont 4NW	-17	4	Pittsfield 9WSW	D 5.80	Wellsboro 3S	.83
Puerto Rico	Ponce, P.R.	94	4	2 Stations, P.R.	52	24+	Rio Blanco Upper, P.R.	19.67	Yauco 1S, P.R.	.00
Rhode Island	Greenville	67	9	Kingston	0	28	Providence WBAP	3.04	Woonsocket	2.32
South Carolina	Yemassee 1W	81	9	2 Stations	11	25	Georgetown Marine Dks	4.89	Fort Mill 4NW	1.82
South Dakota	2 Stations	63	16	do	-24	10	Deerfield 4NW	1.15	2 Stations	T
Tennessee	Waverly	79	9	Livingston Radio WLIV	-7	25	Shelbyville 3	8.76	Conasauga 1N	2.08
Texas	Rio Grande City 3W	90	7	Stratford	-6	28	Texarkana Dam	6.68	74 Stations	.00
Utah	Saint George	69	1	Woodruff	-27	9	Orderville	D 8.07	Hanksville	.14
Vermont	Waterbury 1NNE	68	11	Mount Mansfield	-22	27	Mount Mansfield	4.72	Bloomfield	1.32
Virginia	Grundy 3NW	79	9	Partlow 3WNW	-7	27	Peaks of Otter	5.73	Parramore Beach L B S	.75
Washington	3 Stations	62	19+	Chesaw 4NNW	1	9	Spruce	34.58	Royal City	D .55
West Virginia	2 Stations	79	10	Bayard	-13	4	Richwood	D 7.39	Berkeley Springs	.71
Wisconsin	Kenosha	59	8	Gordon 2ESE	-24	27+	Plymouth	3.77	Superior 7SE	.56
Wyoming	3 Stations	61	16+	Bondurant 3NW	-37	9	Bedford 2SE	D 2.68	Worland FAA AP	.03

+ And also on an earlier date or dates

NOTE: Dates in the above Condensed Climatological Summary apply to the period 24 hours prior to time of observation In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
ALABAMA																																
BIRMINGHAM	620	998.0	1021.1	54	34	44.3	-3.0	70	7	15	25	0	13	36	74	2.34	-2.68	1.27	9	0	T	T	0.3	9	29	SE	28	5	9	17	7.4	37
HUNTSVILLE	600	997.3	1021.0	51	32	41.2	-2.4	67	21+	10	25	0	19	34	77	3.17	-1.74	1.42	10	0	0.7	1	1.4	11	26	13	27+	3	10	18	7.6	
MOBILE	211	1012.5	1020.4	62	44	53.2	-0.9	76	8+	27	25	0	3	44	75	4.60	-0.86	1.37	10	0	0.0	0	2.6	6	25	35	23	7	5	19	7.3	
MONTGOMERY	194	1013.5	1021.1	58	39	48.3	0.1	75	9+	20	25	0	7	39	73	5.11	0.30	2.07	9	1	0.0	0	0.7	1	24	5	28	8	4	19	6.8	37
ALASKA												B																				
ANCHORAGE PRK STRIP	85			18	5	11.7	-2.6	33	27+	-20	10+	0	31			0.81	-0.13	0.25	6		10.0	12										
ANCHORAGE	114	998.6	1003.7	18	4	10.8		33	28+	-21	10	0	31	4	74	1.06		0.41	6	0	13.4	18	3.2	2	37	1	2	12	1	18	5.9	48
ANNETTE	110	999.7	1003.8	43	35	38.9	2.9	52	23	17	7	0	8	31	74	9.45	-2.66	1.95	26	0	5.8	1	7.1	13	33	16	16	1	1	29	9.5	
BARROW	31	1016.3	1016.8	-7	-18	-12.2	-1.0	25	3	-35	24	0	31	-19	73	0.23	0.06	0.10	7	0	2.8	10	0.6	33	33	27	1	2	2	2		
BARTER ISLAND	39	1013.9	1015.7	-5	-17	-10.7	-0.3	24	3	-38	22	0	31	-21	59	0.58	0.29	0.43	5	0	7.3	11	8.7	27	56	26	1	2	2	2		
BETHEL	125	1001.4	1007.3	10	-4	3.2	-1.6	34	29	-19	22+	0	31	-2	76	0.55	-0.47	0.14	11	0	6.9	8	7.3	4	32	18	28	8	4	19	7.0	
COLD BAY	96	997.0	1000.9	32	24	27.7	-1.1	41	28+	9	8	0	28	24	86	2.09	-0.50	0.53	19	0	12.8	9	2.3	4	62	12	24	2	4	25	8.5	
FAIRBANKS	436	993.9	1012.7	-12	-28	-20.1	-12.4	19	28	-53	9	0	31	-27	69	0.16	-0.38	0.08	3	0	2.9	28	0.9	2	14	20	28	9	6	16	6.4	
JUNEAU	12	1004.4	1005.0	31	22	26.5	-1.9	41	14	1	8	0	30	21	83	4.48	0.26	0.63	22	0	19.6	14	7.3	9	36	12	30	3	2	26	8.9	17
KING SALMON	43	1001.4	1003.2	16	2	8.9	-4.3	37	25	-21	15	0	30	2	71	0.54	-0.48	0.23	9	0	6.1	4	5.7	2	35	7	16	9	11	11	5.5	
KOTZEBUE	10	1012.5	1013.0	-1	-14	-7.9	-4.3	22	29	-38	23+	0	31	-13	77	0.15	-0.14	0.05	6	0	4.4	19	4.2	10	31	10	26+	10	1	20	6.8	
MC GRATH	349	997.3	1011.1	-5	-23	-14.2	-7.2	33	30	-50	10	0	31	-21	67	0.11	-0.90	0.08	3	0	8.1	15	0.9	31	17	29	17	10	4	17	5.9	
NOME	13	1009.1	1009.9	11	-7	1.9	-4.4	29	3	-34	21	0	31	-3	78	0.14	-0.85	0.12	3	0	1.6	12	5.0	3	28	36	27+	9	4	18	6.2	38
ST. PAUL ISLAND	22	1001.4	1002.3	32	23	27.7	1.3	38	7	12	31	0	28	23	81	1.05	-0.78	0.25	14	0	5.9	2	12.0	7	59	8	25+	1	5	25	8.5	
SHEMYA	122	992.6	996.3	37	29	33.2	1.8	42	4+	21	31	0	25	29	83	1.48	-0.66	0.43	20	0	9.6	3	6.5	9	52	13	20	0	7	24	8.6	
YAKUTAT	28	999.7	1000.7	31	19	25.1	-3.0	40	1	-6	7	0	31	20	83	10.62	-1.65	2.00	20	0	34.2	8	5.7	10	32	14	26	3	4	24	8.3	
ARIZONA																																
FLAGSTAFF	6993	786.3	1019.3	42	17	29.7	-0.7	59	17	-12	28	0	28	18	67	6.17	4.52	3.04	8	1	13.4	8	0.8	16	29	23	7	15	6	10	4.5	
PHOENIX	1117	977.3	1016.7	67	37	52.0	0.4	79	6	25	31	0	9	32	53	0.52	-0.33	0.46	4	1	0.0	0	2.4	10	26Y	NW	26+	17	3	11	4.2	81
TUCSON	2584	927.2	1015.9	66	39	52.4	0.5	80	2	23	29+	0	8	25	40	0.19	-0.73	0.18	2	0	T	0	4.5	14	43	SE	24	13	9	9	4.6	79
WINSLOW	4895	854.0	1021.8	47	20	33.1	0.6	69	1	0	31	0	26	20	66	0.26	-0.26	0.10	4	1	1.4	1	3.5	21	52	22	6	17	4	10	4.2	
YUMA	194	1009.5	1016.9	69	45	57.2	2.2	83	6+	31	31	0	1	29	38	0.02	-0.30	0.02	1	0	0.0	0	3.6	1	30	SW	6	18	6	7	3.6	77
ARKANSAS																																
FORT SMITH	447	1002.7	1019.8	52	29	40.4	-1.9	81	7	12	24	0	21	30	71	1.96	-0.86	0.81	7	1	1.0	1	1.2	5	26	S	8+	8	7	16	6.1	49
LITTLE ROCK	257	1010.8	1020.5	52	34	43.2	1.3	78	7	19	24	0	13	34	73	4.21	0.12	3.07	10	0	0.2	T	1.4	1	26	N	23	6	6	19	7.3	41
TEXARKANA	372	1006.4	1020.0	54	36	44.8	2.1	80	7	17	24	0	14	38	79	5.77	1.22	2.87	14	5	T	0	1.2	17				7	1	23	7.4	
CALIFORNIA																																
BAKERSFIELD	494	1002.4	1020.4	52	40	46.3	-2.5	69	6	29	28	0	4	40	80	1.58	0.61	0.84	5	0	0.0	0	0.3	3	29	35	6	4	8	19	7.7	
BISHOP	4108	875.0		54	26	39.9	0.6	65	18	13	28	0	28			5.79	4.61	3.35	5		0.0	0										
BLUE CANYON	5280			46	34	39.6	-0.7	62	19+	21	27	0	16			12.35	2.11	2.94	11		37.0	18			40	21	2	8	6	17	6.7	
EUREKA U	43			55	44	49.5	0.6	67	12	32	27	0	1			6.52	-0.19	2.34	14		0.0	0			42	S	4	2	11	18	7.3	52
FRESNO	328	1008.1	1020.1	50	40	45.2	-1.8	62	10+	26	28	0	5	43	92	3.04	1.07	1.40	6	0	0.0	0	1.5	13	30	NW	6	5	4	22	8.1	29
LONG BEACH	34	1016.3	1017.5	67	45	56.3	0.3	77	18+	34	27	0	0	42	64	3.91	1.94	1.64	5	0	0.0	0	1.5	28	23	33	26+	13	9	9	4.8	
LOS ANGELES	97	1013.2	1017.0	66	49	57.5	0.6	76	15	40	29+	0	0	42	62	3.67	1.28	1.68	5	0	0.0	0	1.0	31	39Y	SW	6	14	6	11	4.8	
LOS ANGELES U	270			70	52	60.7	2.5	83	19	42	29+	0	0			5.26	2.39	1.81	5		0.0	0			27	N	26	18	7	6	3.7	66
MT SHASTA R	3544			44	30	37.0	1.1	63	18	20	27+	0	25			6.92	0.70	2.69	11		9.2	2										
OAKLAND	6	1019.0	1019.3	55	45	50.3	0.8	65	30	34	28	0	0	43	79	3.51	-0.07	1.06	8	0	0.0	0	2.6	10	35	15	2	9	7	15	6.2	
RED BLUFF	342	1006.4	1019.4	55	42	48.5	1.4	68	31	30	28	0	2	38		3.08	-1.13	1.54	8	0	0.0	0	1.3	16	45	SE	4	3	6	22	7.9	40
SACRAMENTO	17	1019.0	1019.6	51	41	46.1	-0.3	60	30+	28	27	0	5	41	85	3.53	0.29	1.25	8	0	0.0	0	1.1	13	33	SE	4	3	7	21	8.1	35
SANDBERG R	4517	863.2		48	36	42.0	-0.7	61	20	22	27	0	10			1.68	-0.81	0.70	6		0.7	T			53	22	6	11	7	13	5.4	
SAN DIEGO	13	1015.9	1017.1	66	49	57.2	0.1	75	13	38	29+	0	0	46	70	3.22	1.17	1.73	5	1	0.0	0	1.3	26	29	N	30	17	5	9	4.5	75
SAN FRANCISCO	8	1018.6	1019.2	55	43	49.3	-1.1	61	30+	32	28	0	1	41	77	3.96	-0.13	1.26	8	0	0.0	0	1.3	10	48	5	2	7	8	16	6.6	
SAN FRANCISCO U	52			56	47	51.3	-1.2	63	30	41	20+	0	0			3.87	-0.40	1.12	10		0.0	0			36	SW	2					48
SANTA CATALINA	1568			62	52	57.1	1.0	72	19	44	27	0	0			5.00	2.43	3.15	6	0	0.0	0						16	7	8	4.2	
SANTA MARIA	236			62	38	49.9	-2.5	73	19	23	28	0	5			2.86	0.28	1.41	5		0.0	0						15	5	1	4.5	
STOCKTON	22	1019.3	1020.3	52	42	46.9	1.0	63	10	28	28	0	4	43	87	3.86	1.20	1.53	9	0	0.0	0	3.1	14	35	14	2	4	2	25	8.4	
COLORADO																																
ALAMOSA	7536	769.4		38	4	20.9	1.7	58	2	-28	29	0	30			0.35	0.10	0.21	5		4.9	2						15	8	8	4.1	
COLORADO SPRINGS	6145	808.7	1019.1	43	16	29.4	-2.3	62	20+	-4	27	0	31	8	48	0.17	-0.07	0.17	2	0	2.9	3	4.0	3	31	25	5	9	8	14	5.6	
DENVER	5283	834.1	1016.5	46	18	31.9	0.3	67	5	3	28	0	31	14	57	0.17	-0.30	0.10	3	0	1.9	1	2.0	19	25	SW	5	7	10	14	6.3	61

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
COLORADO																																
GRAND JUNCTION	4855	853.7	1021.6	39	21	29.5	0.4	55	2	-3	29	0	26	21	75	1.78	1.21	0.98	10	0	6.3	5	1.6	13	27	SW	2	10	9	12	5.4	62
PUEBLO	4684	854.4	1018.6	46	13	29.6	-3.6	66	20	-6	28	0	31	11	50	0.14	-0.16	0.11	3	0	2.6	2	1.1	1	36	N	22+	10	11	10	5.2	78
CONNECTICUT																																
BRIDGEPORT	7	1017.6	1018.2	40	28	33.8	0.6	62	9	12	28	0	22	25	72	2.80	-0.71	1.01	12	0	14.0	8	7.1	31	45	1	24	7	9	15	6.4	
HARTFORD	169	1011.2	1018.0	40	24	31.8	2.9	64	11	10	5+	0	24	23	71	3.60	0.13	1.30	13	0	20.0	10	4.3	33	34	W	25	5	8	18	7.0	52
NEW HAVEN	6	1018.0		41	26	33.3	0.9	60	11+	9	28	0	25			2.89	-1.13	0.95	14		12.5	7			38	N	25	7	7	17	6.4	60
DELAWARE																																
WILMINGTON	78	1016.6	1019.6	43	27	34.8	-0.3	72	10+	12	28+	0	23	26	72	3.81	0.78	1.14	10	1	21.5	12	4.3	30	24	29	29+	12	7	12	5.6	
DIST.OF COLUMBIA																																
WASH NATL AP	14	1018.3	1020.7	45	31	37.6	-0.5	72	8	16	4	0	20	27	67	3.28	0.50	1.02	9	0	16.1	7	3.3	29	28	NW	2	9	7	15	6.3	46
FLORIDA																																
APALACHICOLA U	13			61	47	53.9	-1.9	71	9+	29	25	0	1			3.99	1.03	2.37	8	0	0.0	0			27	N	24	7	8	16	6.4	44
DAYTONA BEACH	31	1019.3	1020.6	69	48	58.4	-1.9	80	31+	30	25	0	1	49	75	1.60	-0.35	0.97	7	0	0.0	0	2.6	32	23	27	24	9	8	14	6.0	
FORT MYERS	15	1019.6	1019.9	74	52	62.8	-2.2	82	31+	35	25	0	0	52	74	0.29	-1.00	0.09	7	0	0.0	0	3.2	5	23	21	24	14	12	5	4.5	
JACKSONVILLE	20	1019.6	1020.8	65	43	53.9	-2.2	80	8	28	25	0	2	44	73	1.14	-1.08	0.78	7	0	0.0	0	2.5	33	31	W	24	5	11	15	6.7	52
KEY WEST	4	1018.0	1018.7	74	65	69.6	-1.0	80	31+	54	25	0	0	60	74	1.35	-0.34	0.48	7	0	0.0	0	7.7	6	27	SE	9+	12	12	7	4.6	76
LAKELAND U	214			70	51	60.2	-2.2	80	9+	32	25	0	1			0.85	-1.01	0.48	9		0.0	0						10	11	10	5.1	63
MIAMI	7	1018.6	1018.8	76	57	66.6	-1.5	84	29	41	25	0	0	57	74	0.74	-0.93	0.53	9	0	0.0	0	3.3	6	24	7	5	12	12	7	4.9	
ORLANDO	108	1016.3	1020.4	71	49	60.1	-0.8	81	31	33	25	0	0			0.99	-0.90	0.75	6	0	0.0	0	2.3	34	23	29	24+	9	8	14	5.7	
PENSACOLA	112	1016.6	1020.8	61	44	52.2	-2.1	74	9+	26	25	0	3	44	78	6.01	1.79	2.31	12		0.0	0	2.9	5	37	SE	30	6	5	20	7.1	43
TALLAHASSEE	55	1018.6	1020.9	64	40	51.7	-2.4	78	8	26	15	0	8	43	78	3.99	0.55	1.15	8	0	0.0	0	1.5	1	21	18	8	7	8	16	6.5	
TAMPA	19	1019.6	1020.0	70	48	59.2	-3.1	81	9+	31	25	0	1	49	74	0.94	-0.95	0.52	6	0	0.0	0	2.4	6	22	32	24+	9	10	12	5.5	49
WEST PALM BEACH	15	1018.6	1019.5	75	55	64.8	-3.4	82	29	39	25	0	0	55	73	1.02	-1.55	0.48	7	0	0.0	0	2.2	7	28	9	4	10	12	9	5.4	
GEORGIA																																
ATHENS	802	990.9	1020.4	55	35	44.5	-0.1	75	9	19	25	0	14	34	72	4.74	0.21	2.65	9	0	T	0	1.5	31	20	29	24+	12	2	17	6.0	
ATLANTA	1010	983.1	1020.7	53	34	43.4	-1.4	70	9	16	25	0	11	33	72	4.60	0.22	1.79	10	0	0.0	0	1.8	32	33	NW	24	10	5	16	6.2	46
AUGUSTA	145	1015.2	1020.6	59	33	45.7	-1.5	80	9	18	25	0	19	35	72	3.32	-0.01	1.19	10	0	T	0	1.6	29	20	29	24	10	7	14	6.1	
COLUMBUS	385			59	38	48.6	0.9	77	9	20	25	0	9	40	77	6.74	2.18	2.60	11		0.0	0	1.1	1	21	30	24	8	6	17	6.4	
MACON	354	1008.1	1021.3	59	36	47.9	-1.1	79	8	20	25	0	12	35	67	3.98	-0.07	1.28	11	0	T	0	1.3	33	26	S	9	11	9	11	5.6	61
ROME	637			52	31	41.9	-0.5	69	9	12	25	0	17			3.61	-1.52	1.11	9		T	T										
SAVANNAH	46	1019.3	1021.0	62	37	49.5	-1.9	79	9	22	25	0	13	39	72	1.93	-0.88	0.61	7	0	0.0	0	1.0	31	25	NW	24+	7	10	14	6.3	55
HAWAII																																
HILO	27	1015.6	1016.6	81	68	74.3	2.8	88	6+	63	28	0	0	66	79	15.09	-0.09	3.90	24	3	0.0	0	0.6	19	24	E	30	4	14	13	6.6	37
HONOLULU	7	1015.6	1016.2	81	68	74.6	1.0	85	2	62	10+	0	0	65	73	2.98	-0.01	0.95	13	1	0.0	0	8.1	7	35	NE	27	8	17	6	5.4	49
KAHULUI	48	1013.9	1016.2	80	68	74.1	1.4	86	1	57	11	0	0	62	68	1.16	-1.54	0.40	12	2	0.0	0	8.4	6	32	NE	29	9	17	5	5.3	63
LIHUE	103	1012.2	1017.4	77	68	72.3	0.1	83	3	60	9+	0	0	66	81	3.69	-1.49	1.50	17	0	0.0	0	7.5	6	32	NE	28	4	14	13	6.6	45
IDAHO																																
BOISE	2838	918.1	1021.0	38	25	31.3	-0.9	51	4+	2	27	0	26	26	84	1.41	0.09	0.33	15	0	9.0	4	3.9	13	32	NW	5	3	9	19	7.8	56
IDAHO FALLS 42NW R	4790			28	2	15.1	-3.7	42	1	-20	30	0	31			1.31	0.70	0.67	7				1.5	29	39	SSW	5					
IDAHO FALLS 46W R	4932			29	5	17.3	-3.5	43	1	-11	30	0	30			0.88	0.29	0.42	10		5.1	4	2.7	24	42	SW	5					
LEWISTON	1413			46	34	39.8	4.9	52	19+	26	9	0	11			1.70	0.33	0.57	11		0.1	T						2	3	26	8.9	
POCATELLO	4454	864.2	1022.3	33	15	24.0	-3.4	50	1	-1	26	0	31	19	82	0.72	-0.28	0.14	13	0	5.5	2	3.6	22	43	S	5	2	7	22	8.0	37
ILLINOIS																																
CAIRO U	314			45	32	38.4	-1.1	71	7	18	25+	0	18			4.97	1.30	1.92	10		1.7	2			30	S	8	6	7	18	7.2	39
CHICAGO O HARE	658	993.9	1019.4	34	20	27.1	-0.3	61	8	2	3+	0	26	21	77	1.88	0.05	0.72	13	2	8.4	4	3.2	26	29	21	6	5	7	19	7.2	
CHICAGO MIDWAY	607	995.9		34	23	28.7	-0.4	63	8	5	2	0	25	21	74	2.65	0.75	1.08	12	0	6.7	4	4.3	26	26	E	28+	7	4	20	7.5	32
MOLINE	582	997.3	1019.6	35	21	28.1	1.2	60	8	3	3	0	27	21	76	2.52	0.87	0.81	10	3	7.2	5	2.7	27	28	SW	28	6	9	16	6.9	41
PEORIA	652	994.9	1020.0	36	23	29.2	0.1	62	8	4	3	0	26	22	78	3.00	1.06	1.37	9	3	3.8	2	1.7	26	35	SW	28	6	6	19	7.2	38
ROCKFORD	724	991.2	1019.2	32	18	24.8	-0.8	54	8	-3	1	0	27	20	80	2.16	0.46	0.77	8	2	7.8	5	2.2	27	22	22	28+	8	6	17	6.7	
SPRINGFIELD	588	997.0	1020.0	37	24	30.5	-1.5	63	8+	4	3	0	23	25	82	2.62	0.73	1.28	9	1	2.0	1	2.3	24	34	SW	8	8	4	19	7.1	39

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

DECEMBER 1966

State and Station	Elevation (ground)	Pressure		Temperature								No. of days			Average relative humidity	Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
		Station ∅	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INDIANA																																
EVANSVILLE	381	1006.4	1020.8	43	27	35.0	- 1.1	69	8	12	3	0	26	27	76	5.52	2.44	1.62	10	0	0.6	1	1.2	21	26	SW	28	7	4	20	7.3	39
FORT WAYNE	791	988.5	1019.7	35	23	28.8	0.4	63	8	4	2	0	26	23	80	4.94	2.85	2.14	14	1	7.3	3	5.0	24	34	W	29	2	6	23	8.3	32
INDIANAPOLIS	792	989.8	1020.0	39	26	32.7	1.6	66	8	4	3	0	24	23	68	5.23	2.55	1.72	11	1	3.3	2	2.3	24	32	S	8	7	3	21	7.5	23
SOUTH BEND	773	989.8	1018.9	35	25	29.9	1.2	65	8	7	2	0	25	24	79	4.73	2.54	2.16	17	2	18.2	7	4.8	24	25	24	8	2	6	23	8.5	
IOWA																																
BURLINGTON	692			36	22	29.0	0.6	63	8	5	3	0	27	22	78	2.18	0.58		9	2	4.4		2.7	31	23	32	1	7	7	17	6.6	
DES MOINES	938	984.1	1020.2	33	16	24.8	- 0.5	56	6	1	11	0	30	19	80	0.49	- 0.65	0.41	6	0	7.1	7	2.2	34	27	NW	19	11	5	15	6.2	49
DUBUQUE	1056	978.3		31	18	24.6	1.1	52	6	1	3	0	29			2.65	0.75	1.28	11		11.1	10						8	8	15	6.6	
SIOUX CITY	1095	978.7	1020.3	33	13	23.1	- 1.9	55	16	- 6	29	0	31	18	82	0.82	0.08	0.59	5	0	8.6	8	1.3	35	32	NW	28	10	3	18	6.6	52
WATERLOO	868	986.5	1019.6	31	14	22.6	- 0.6	52	6	- 1	3	0	30	17	80	0.80	- 0.33	0.29	8	0	6.4	6	2.2	31	28	33	1	11	5	15	6.0	
KANSAS																																
CONCORDIA	1470	964.8	1019.6	40	18	28.8	- 3.2	63	19	- 2	30	0	29	19	71	0.89	0.18	0.75	4	0	15.1	13	1.8	32	28	NW	28	14	3	14	5.4	60
DODGE CITY	2582	925.5	1019.3	40	18	28.9	- 5.8	68	20	1	10	0	29	17	68	0.53	0.16	0.39	5	0	8.2	7	3.6	31	32	N	22	8	9	14	6.2	60
GOODLAND	3650	888.3	1019.2	41	14	27.4	- 3.0	65	14	- 2	23	0	31	15	68	0.24	- 0.20	0.13	4	0	7.0	3	3.5	27	28	33	31+	6	11	14	6.5	
TOPEKA	876	987.1	1020.0	43	19	30.7	- 2.7	69	7	- 2	30	0	28	20	68	0.79	- 0.60	0.66	4	0	8.3	7	1.4	1	32	NE	9	9	7	15	6.0	59
WICHITA	1321	970.2	1019.6	44	21	32.7	- 3.1	75	7	2	29	0	27	19	63	0.43	- 0.51	0.31	6	0	5.0	4	1.2	36	29	N	22+	11	8	12	5.3	61
KENTUCKY																																
COVINGTON	869	988.2	1020.6	41	27	33.6	0.3	65	8	9	3	0	23	27	78	3.31	0.56	1.36	10	0	1.6	1	2.6	24	29	20	8	6	2	23	7.9	
LEXINGTON	966	984.4	1020.9	42	29	35.5	- 0.4	66	8	12	3	0	20	27	72	4.60	1.15	1.94	8	0	0.3	T	2.8	19	27	19	8	4	5	22	7.4	
LOUISVILLE	477	1002.4	1020.6	42	29	35.6	- 0.7	67	8	13	3	0	23	26	71	4.33	1.11	1.53	8	0	0.5	T	1.3	22	27	SW	8+	6	5	20	7.5	35
LOUISIANA																																
ALEXANDRIA	92	1015.6	1020.0	59	39	48.8	- 2.5	79	7	18	25	0	8	43	85	5.46	- 0.27	2.50	11	3	0.0	0	1.6	3	35	32	28	4	5	22	7.7	
BATON ROUGE	64	1017.3	1020.1	63	43	53.0	- 0.7	82	7	24	25	0	5	43	72	2.53	- 2.57	0.68	12	2	0.0	0	1.8	8	30	18	28	5	4	22	7.5	
LAKE CHARLES	9	1019.0	1019.9	64	45	54.5	- 0.1	82	8	29	14	0	6	48	82	3.78	- 1.98	2.14	8	3	0.0	0	2.4	8	25	35	23	5	9	17	7.3	
NEW ORLEANS	3	1019.0	1020.0	62	45	53.3	- 2.1	80	8+	26	25+	0	5	48	84	5.44	1.34	1.58	12	3	0.0	0	2.2	5	25	31	23	7	7	17	7.0	
SHREVEPORT	254	1010.2	1019.5	56	38	46.9	- 2.7	81	7	20	25+	0	13	40	82	3.63	- 1.31	0.95	14	2	T	T	0.8	15	24	29	23	5	7	19	7.5	43
MAINE																																
CARIBOU	624	991.9		28	15	21.1	5.6	54	11	- 3	20+	0	29			2.17	- 0.26	0.81	18		24.2	17						8	2	21	7.5	
PORTLAND	47	1014.2	1016.7	36	17	26.7	0.9	60	11	0	16	0	29	19	70	3.46	- 0.39	1.78	11	0	14.7	5	3.5	30	28	SW	25	7	7	17	6.6	41
MARYLAND																																
BALTIMORE	148	1014.6	1020.2	43	28	35.6	- 0.2	73	9+	12	28	0	22	24	64	3.53	0.54	1.04	10	0	20.4	9	5.0	29	37	W	29	10	5	16	6.2	48
MASSACHUSETTS																																
BLUE HILL OBS R	629			38	24	30.9	0.9	68	9	9	4	0	26			3.56	- 0.40	1.34	9		13.8	7			68	S	29					55
BOSTON	15	1016.3	1017.3	41	28	34.2	0.9	70	9	14	4	0	21	22	62	3.03	- 0.60	1.40	10	0	9.9	5	7.9	30	47	NE	24	9	8	14	6.1	59
NANTUCKET	43	1016.6	1016.8	43	30	36.1	0.0	58	9	13	28	0	23	28	73	3.02	- 0.91	0.95	11	0	6.4	1	5.2	31	55	S	25	5	6	20	7.6	30
PITTSFIELD	1170			34	18	25.8	0.5	61	11+	1	4	0	28			3.34	0.09	1.13	17		27.7	17										
WORCESTER	986	979.3	1017.4	35	21	28.0	0.8	66	9	7	4	0	27	20	72	3.05	- 0.54	1.81	10	0	13.6	7	6.1	29	36	30	25	9	7	15	6.2	
MICHIGAN																																
ALPENA	689	991.2	1017.4	31	15	22.6	- 1.5	51	8	- 6	28	0	28	16	74	2.38	0.54	1.03	16	1	15.2	17	2.3	25	30	SE	28	1	7	23	8.6	21
DETROIT	119	994.9	1018.5	35	24	29.5	- 0.4	64	8	10	3+	0	27	21	72					0			5.0	27	24	26	14					
DETROIT M WAYNE ([illegible])	633	993.6	1018.7	35	22	28.7	- 1.2	66	8	6	31+	0	26	24	81	4.53	2.61	1.68	12	0	14.9	6	4.8	25	30	SW	29+	5	3	23	7.9	24
DETROIT WILLOW RUN	711	989.8	1019.1	34	20	26.7	- 2.7	65	8	5	31	0	27	20	75	4.23	2.25	1.43	12	0	15.4	6	6.1	25	32	20	8	4	5	22	8.1	
FLINT	770	989.5	1018.3	33	18	25.6	- 0.3	62	8	2	4+	0	28	20	76	1.76	- 0.04	0.53	14	1	10.4	4	5.3	25	28	27	29+	2	4	25	8.6	
GRAND RAPIDS	784	988.2	1018.2	36	22	29.2	2.2	64	8	6	3	0	27	23	80	4.01	1.98	1.62	15	1	17.6	8	3.1	24	31	SW	29	2	7	22	8.2	26
HOUGHTON LAKE	1149	974.3	1017.8	30	16	23.0		53	8	0	28+	0	29	20	84	3.46		1.67	16	1	15.4	7	3.3	26	31	9	28	3	4	24	8.5	
LANSING	841	985.1	1018.1	33	18	25.8	- 1.7	65	8	- 4	4+	0	28	19	73	2.46	0.47	0.88	15	1	10.0	7	4.5	24	34	W	29	3	6	22	8.2	35
MARQUETTE U	677			29	19	23.9	- 0.2	43	6	- 3	1	0	31			2.79	0.87	0.68	19		32.6	26			30	SW	15	4	0	27	8.6	25
MUSKEGON	627	994.6	1018.3	34	24	29.1	- 0.8	56	8	7	4	0	25	24	82	3.01	1.01	0.72	21	1	31.6	11	1.6	27	31	29	29	0	2	29	9.4	
SAULT STE MARIE	721	989.8	1017.5	25	13	18.9	- 2.0	41	8	- 9	30	0	29	13	78	2.65	0.37	0.83	18	0	20.4	11	1.3	6	28	SE	6	4	7	20	7.7	32
MINNESOTA																																
DULUTH	1428	965.1	1019.5	22	[illegible]	13.5	- 0.5	37	6	-15	11	0	31	8	76	1.56	0.40	0.51	13	0	15.4	13	3.9	29	32	NW	15+	9	4	18	6.7	39

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
MINNESOTA	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
INTERNATIONAL FALLS	1179	974.6	1020.4	17	-3	6.9	-2.5	36	16	-22	27+	0	31	3	79	0.92	0.08	0.20	9	0	12.0	10	1.5	27	28	27	6	10	4	17	6.6	
MINNEAPOLIS	834	988.2	1020.2	25	11	18.1	0.0	42	16	-9	11	0	31	12	77	1.02	0.16	0.32	11	0	12.7	8	2.2	32	26	SE	6+	9	5	17	6.4	46
ROCHESTER	1297	969.9	1019.8	26	13	19.4	0.8	44	16	-1	26+	0	30	14	79	0.96	-0.01	0.53	9	0	10.3	8	3.1	28	29	31	1	9	9	13	6.0	
ST CLOUD	1034	980.0	1019.9	24	6	15.0	-1.6	39	6	-13	11	0	31		74	0.79	0.06	0.31	8		8.3	6						7	7	17	6.7	
MISSISSIPPI																																
JACKSON	310	1008.1	1020.4	57	36	46.5	-2.9	81	8	14	25	0	10	41	85	4.83	-0.47	1.12	13	2	T	0	1.6	11	39	S	28	5	4	22	7.8	26
MERIDIAN	290	1009.5	1021.0	59	38	48.5	0.2	78	8	16	25	0	9	41	80	5.87	0.56	2.63	10	1	T	0	0.2	8	23	34	23	6	4	21	7.5	
VICKSBURG U	234			56	40	47.9	-2.4	79	7	22	24	0	7			6.33	1.39	2.72	14		T	0			26	NW	28+	5	4	22	7.6	39
MISSOURI																																
COLUMBIA	778	990.2	1019.4	43	26	34.3	0.5	72	7	12	29	0	24	24	72	2.29	0.33	0.89	8	1	1.6	1	0.7	26	37	W	8	7	5	19	6.9	49
KANSAS CITY	742	991.9	1019.7	44	26	34.8	-1.0	65	6	8	29	0	21	23	66	0.91	-0.62	0.68	5	1	7.2	6	0.7	33	25	NE	22	10	4	17	6.3	52
SAINT JOSEPH	811			41	18	29.8	-1.7	63	6	-5	30	0	27			0.71	-0.65	0.47	4	0	7.3	7	1.7	35	21	34	9	9	9	13	5.6	
ST LOUIS	535	999.3	1020.4	43	27	34.8	0.0	73	7	13	3	0	23	27	77	2.49	0.52	0.97	7	2	0.1	T	1.3	28	32	SW	8	8	6	17	6.9	51
SPRINGFIELD	1268	972.9	1019.7	45	23	33.9	-2.8	74	7	-8	24	0	26	24	73	2.15	-0.04	0.76	10	2	8.1	8	2.2	17	29	NE	23+	10	7	14	5.9	57
MONTANA																																
BILLINGS	3567	889.3	1016.5	38	21	29.2	0.8	60	18	-4	9	0	23	17	64	0.95	0.36	0.55	7	0	10.3	4	8.4	25	36	NW	5	6	12	13	6.6	60
GLASGOW	2284	931.9		27	11	18.9	1.2	47	18+	-17	9	0	31			0.23	-0.22	0.07	8		3.9	3						6	5	20	7.5	
GREAT FALLS	3662	885.2	1016.3	36	20	27.9	0.6	57	16	-14	9	0	23	18	66	0.99	0.39	0.30	7	0	9.8	8	10.4	23	47	SW	5	4	6	21	7.7	40
HAVRE	2582	921.1	1016.8	28	9	18.3	-2.6	51	18	-27	1	0	29	15		0.14	-0.33	0.08	4		2.8	4	5.2	24	38	NW	5	4	8	19	7.7	36
HELENA	3828	879.4	1018.7	37	18	27.4	3.2	56	18+	-1	9+	0	29	19	69	0.62	0.09	0.22	9	0	5.7	5	4.0	26	47	S	5	3	7	21	7.6	36
KALISPELL	2965	910.6	1017.8	34	21	27.3	2.3	44	20	-2	10	0	27	25	87	1.58	0.25	0.33	16	0	15.7	11	1.9	20	23	13	5	0	3	28	9.5	
MILES CITY	2629	921.4	1017.9	29	13	21.2	-2.0	51	20+	-15	10+	0	29	15	77	0.54	0.17		8	0	3.7		2.6	24								
MISSOULA	3190	904.2	1019.0	35	24	29.5	6.0	47	18	8	9	0	29	24	81	0.79	-0.29	0.32	9	0	11.2	4	1.1	29	24	SE	4	1	3	27	8.9	20
NEBRASKA																																
GRAND ISLAND	1841	951.2	1020.0	38	15	26.3	-0.9	64	14	-8	30	0	30	19	79	0.66	0.10	0.45	5	0	8.5	8	2.5	30	28	33	28	9	2	20	6.7	
LINCOLN U	1150			38	19	28.2	-2.4	59	19+	0	30	0	28			0.71	-0.19	0.49	8		9.9	6			26	N	27	9	6	16	6.3	45
NORFOLK	1544			35	13	23.7	-1.5	55	19	-3	30+	0	31			0.56	-0.17	0.44	5		6.7	6						7	5	19	7.0	
NORTH PLATTE	2775	918.1	1019.7	38	11	24.5	-2.9	64	14	-10	23	0	31	12	66	0.51	0.11	0.29	3	0	8.5	7	1.9	31	26	NW	31+	5	10	16	6.8	50
OMAHA	977	983.4	1020.2	39	17	28.3	0.1	60	19	1	29	0	30	18	67	0.62	-0.18	0.54	5	0	6.8	6	2.0	2	29	NW	28	8	6	17	6.4	47
SCOTTSBLUFF	3957	878.4	1019.0	40	14	27.3	-1.3	58	20+	0	29+	0	31	16	69	0.17	-0.23	0.09	4	0	3.4	3	2.7	32	29	28	5	8	4	19	6.6	
VALENTINE	2587			37	13	24.9	-0.2	61	14	-15	23	0	31			0.44	0.10	0.16	7		5.6	4			32	S	3	6	7	18	7.0	54
NEVADA																																
ELKO	5050	846.3	1023.7	30	8	18.7	-7.7	48	3	-10	27	0	30	15	85	1.83	0.82	0.66	10	0	17.4	7	0.3	20	28	20	5	7	5	19	6.8	
ELY	6253	808.3	1020.1	40	15	27.0	0.2	57	19	-10	28	0	30	18	75	2.11	1.43	1.12	7	0	7.1	3	2.8	19	36	SE	5	7	7	17	6.6	56
LAS VEGAS	2162	940.7	1018.6	57	35	46.1	1.0	71	2	23	31+	0	11	29	55	0.48	0.08	0.43	3	1	T	T	2.9	22	48	SW	6	15	4	12	4.9	74
RENO	4404	867.3	1019.9	44	24	34.0	2.1	60	13	14	28	0	29	26	77	1.45	0.37	0.84	6	0	5.8	3	0.6	22	46	SE	1	5	6	20	7.4	50
WINNEMUCCA	4299	869.3	1020.8	41	20	30.6	0.8	50	1	-3	27	0	30	24	77	1.00	0.06	0.30	10	0	10.8	3	1.5	16	36	SW	5	5	8	18	7.4	32
NEW HAMPSHIRE																																
CONCORD	342	1004.4	1017.6	36	17	26.2	1.2	61	11	-6	28	0	26	20	76	2.42	-0.83	1.25	9	0	14.3	8	3.8	30	29	W	30	8	7	16	6.5	49
MT WASHINGTON OBS	6262			21	6	13.4	4.6	44	10+	-14	3	0	28			6.66	0.35	1.73	20	0	37.0	7			100Y	E	25	4	9	18	7.4	37
NEW JERSEY																																
ATLANTIC CITY	64	1017.3	1019.6	45	27	36.2	-0.4	72	9	8	4	0	23	28	74	4.81	1.59	1.56	10	0	8.5	6	4.8	29	31	34	24	11	10	10	5.8	47
ATLANTIC CITY U	11			44	31	37.7	-0.6	62	8	15	4	0	20			4.58	1.10	1.64	13						47	NNW	24					
NEWARK	7	1018.0	1019.1	43	30	36.5	1.2	68	9	16	4+	0	21	28	73	3.01	-0.21	1.23	13	1	12.6	8	5.3	30	29	33	24	7	10	14	6.4	
TRENTON U	56			43	30	36.5	1.3	72	10	12	4	0	22			4.28	1.41	1.24	12		15.5	12			33	N	24	7	10	14	6.1	46
NEW MEXICO																																
ALBUQUERQUE	5311	838.5	1019.2	47	22	34.3	-2.7	68	6	8	31+	0	27	14	46	0.01	-0.45	0.01	1	0	T	0	2.3	34	36	NW	8	17	7	7	4.0	77
CLAYTON	4969			47	18	32.1	-3.9	67	20	-3	29	0	29			0.17	-0.18	0.16	3		2.2	2						14	9	8	4.4	
RATON	6379			48	12	29.7	-1.5	65	20	-13	29	0	30			0.18	-0.08	0.13	3		3.1	2						13	8	10	4.8	
ROSWELL	3617	892.0		59	20	39.5	0.5	78	6	3	29+	0	28	13	39	T	-0.54	T	0	0	T	T	1.5	31	38	SW	7	16	12	3	3.1	80
SILVER CITY	5373			54	25	39.1	-2.4	68	1	9	29	0	25			0.13	-0.52	0.08	2		T	T						15	13	3	3.8	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature								No. of days				Precipitation			No. of days		Snow, Sleet		Wind		Fastest mile			No. of days (sunrise to sunset)				
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90°F. or above	Min. 32°F. or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
NEW YORK																																
ALBANY	275	1007.8	1018.8	36	19	27.3	0.8	64	10	0	4	0	27	22	77	3.04	0.45	1.20	17	1	29.4	19	3.8	28	32	NW	25	4	4	23	7.6	44
BINGHAMTON	1590	957.3	1018.1	32	21	26.5	- 0.3	64	10	1	4	0	27	22	81	2.75	0.19	0.72	20	0	25.4	8	4.5	26	30	W	30+	1	5	25	8.5	30
BUFFALO	705	991.5	1018.0	34	23	28.6	0.9	66	8	- 2	4	0	27	22	77	2.25	- 0.75	0.63	17	1	12.1	3	7.5	25	36	SW	29	1	4	26	9.0	23
NEW YORK U	132	1014.9	1018.1	41	30	35.7	- 0.2	66	9	14	4	0	22	26	71	3.18	- 0.08	1.30	13	1	9.1	7	3.9	31	34	NW	25+	9	12	10	5.6	45
J.F. KENNEDY	13	1018.0	1018.8	42	30	35.6	0.7	61	8	15	4+	0	22	26	70	2.78	- 0.45	1.20	13	0	8.8	7	5.6	32	40	17	29+	9	8	14	6.0	
NEW YORK LA GUARDIA	11	1016.9	1018.8	42	32	36.8	0.4	66	9	15	4	0	20	25	64	2.54	- 0.85	1.20	13	1	7.6	6	5.8	32	45	NW	24	6	12	13	6.3	
ROCHESTER	547	998.0	1018.8	37	24	30.8	2.1	68	8	3	4+	0	25	22	69	1.75	- 0.63	0.40	15	0	14.4	3	6.7	25	37	SW	29	1	4	26	8.9	26
SYRACUSE	410	1002.7	1018.0	36	22	29.2	1.4	70	10	- 7	3	0	26	23	78	3.93	0.78	1.12	21	0	33.0	13	4.6	27	33	W	30	5	0	26	8.2	25
NORTH CAROLINA																																
ASHEVILLE	2140	942.1	1020.0	47	28	37.6	- 0.3	63	9	14	25	0	26	30	79	2.36	- 1.26	1.07	6	0	0.8	T	3.9	35	29	34	24+	11	4	16	6.0	55
CAPE HATTERAS R	7	1019.6	1019.9	55	39	46.9	- 1.3	73	10+	27	27+	0	7	40	78	6.58	2.00	2.69	12	0	T	0	6.1	33	33	NE	13	13	3	15	5.7	47
CHARLOTTE	736	992.2	1020.4	52	31	41.5	- 1.2	74	9	15	25	0	15	31	70	2.58	- 1.04	0.90	9	0	T	T	1.1	33	21	S	10	10	7	14	5.8	64
GREENSBORO	897	988.2	1020.7	50	31	40.5	0.6	73	9	12	25	0	18	31	72	2.26	- 0.87	0.77	7	0	2.6	2	1.2	30	23	NW	20	10	6	15	5.9	55
RALEIGH	434	1004.4	1020.6	51	33	41.9	0.0	72	8	16	25	0	17	31	69	2.61	- 0.41	0.95	10	0	1.0	1	1.2	32	26	6	13	9	11	11	5.7	53
WILMINGTON	28	1019.3	1020.8	59	36	47.8	- 0.4	79	8	25	4	0	15	37	69	3.44	0.02	1.47	11	0	T	T	2.0	34	29	SW	29	12	5	14	5.5	56
NORTH DAKOTA																																
BISMARCK	1647	956.7	1019.4	28	4	15.9	- 1.9	46	20+	-25	10	0	31	8	71	0.18	- 0.18	0.08	5	0	2.5	2	0.7	33	34	NW	6	8	7	16	6.5	57
FARGO	896	985.4	1020.3	22	2	11.9	- 2.5	41	17	-20	26	0	31	6	75	0.50	- 0.08	0.19	7	0	3.4	3	1.2	26	40	W	6	5	13	13	6.9	52
WILLISTON	1899			27	9	17.9	1.7	48	18	-19	10	0	31			0.33	- 0.17	0.27	5		3.7	3			33	NW	5	9	5	17	6.2	39
OHIO																																
AKRON	1208	973.6	1019.5	37	25	31.0	0.5	67	8	2	3	0	25	25	78	2.11	- 0.16	0.68	13	0	6.8	6	5.3	24	24	21	8+	2	5	24	8.5	
CINCINNATI OBS	761			40	28	34.2	- 1.1	70	8	9	3	0	21			3.31	0.54	1.36	9		1.0	1			21	SW	29					28
CLEVELAND	777	989.5	1019.5	36	25	30.5	0.6	67	8	4	2	0	25	26	83	2.84	0.50	0.86	19	1	10.9	6	6.6	23	29	W	29+	2	1	28	9.1	21
COLUMBUS	812	989.8	1020.7	39	26	32.6	1.1	69	8	0	3	0	24	26	78	3.33	0.99	1.41	11	0	6.4	5	3.1	23	29	W	29+	4	4	23	7.9	32
DAYTON	1002	983.1	1020.2	40	26	33.0	1.7	66	8	3	3	0	21	24	71	2.81	0.44	1.03	10	0	7.5	4	3.4	23	29	SW	29	5	3	23	7.9	[illegible]
MANSFIELD	1295			35	23	29.0	- 0.2	66	8	0	3	0	27	22	75	2.57	- 0.08	1.22	12	0	6.3	4	6.0	24				3	4	24	8.4	
TOLEDO	676	993.6	1019.8	34	22	27.7	- 0.6	65	8	- 1	4	0	27	22	79	5.12	3.17	2.07	17	0	13.6	5	5.2	25	33	W	29	3	6	22	8.1	24
YOUNGSTOWN	1178	975.3	1019.4	34	22	28.3	- 1.1	65	8	1	3	0	26	23	81	2.49	- 0.19	0.69	18	0	12.5	5	5.3	24	30	27	29	2	4	25	8.6	
OKLAHOMA																																
OKLAHOMA CITY	1280	971.6	1019.1	49	27	37.8	- 2.5	80	7	10	24	0	23	26	67	0.45	- 0.96	0.22	3	0	0.6	1	1.0	35	34	N	23	14	3	14	5.5	65
TULSA	650	994.6	1019.5	49	26	37.2	- 2.4	80	7	4	24	0	24	26	71	2.53	0.91	1.66	6	0	3.1	2	0.8	23	32	SW	6	14	6	11	5.0	60
OREGON																																
ASTORIA	8	1013.5	1014.3	50	41	45.5	2.4	56	15+	29	27	0	3	41	85	14.07	0.42	2.33	29	5	0.0	0	5.9	17	31	18	12	0	4	27	9.4	
BURNS U	4151	873.4	1019.6	37	21	28.7	- 0.4	49	1	0	27	0	31	24	82	1.98	0.55	0.42	14		9.8	4	1.4	28				5	4	22	7.7	
EUGENE	359	1003.4	1016.9	51	40	45.1	3.3	60	12	33	31+	0	0	41	87	8.31	1.70	2.50	19	0	0.0	0	6.8	18	27	19	4	0	1	30	9.4	
MEACHAM	4050	875.0	1018.3	33	26	29.4	- 0.4	42	1	17	9	0	29	24	83	5.88	1.35	2.04	18		28.1	10	2.3	15				1	2	28	9.5	
MEDFORD	1298	970.5	1019.2	46	35	40.6	3.7	58	12+	25	22	0	8	36	86	2.80	- 0.58	1.42	12	0	T	T	0.7	18	23	15	13+	0	6	25	9.0	
PENDLETON	1482	962.4	1017.1	47	35	41.1	4.6	59	16+	25	27	0	12	33	76	2.65	1.16	1.06	14	0	2.9	3	3.3	22	32	18	4	2	3	26	8.7	
PORTLAND	21	1014.9	1016.3	49	40	44.2	2.9	58	1	32	25	0	1	41	87	6.89	0.51	1.58	23	0	0.0	0	7.3	14	34	SE	22	0	0	31	9.8	9
SALEM	196	1008.8	1016.3	50	38	44.2	2.7	59	13	26	22	0	3	40	84	7.32	- 0.05	1.95	21	0	T	0	7.9	18	29	19	12+	0	1	30	9.4	
SEXTON SUMMIT R	3836	882.5	1017.0	42	32	37.0	0.2	62	16	23	27	0	21			5.53	0.77	1.76	19		19.7	15			39	27	4	3	4	24	8.5	
PACIFIC AREA																																
CANTON ISLAND	8			89	79	83.7	0.6	92	11	76	24+	7	0			0.30	- 2.24	0.15	5		0.0	0						3	18	10	5.2	
ENIWETOK	13	1008.1	1008.9	87	78	82.0	0.0	89	3	74	19+	0	0	74	78	3.84	1.21	1.41	21		0.0	0	18.5	7								
TAGUAC GUAM R	361			84	73	78.7	0.0	89	15	61	13	0	0			4.76	- 1.35	0.99	23		0.0	0			26	E	30					52
JOHNSTON	7	1012.9	1013.4	82	74	78.0	- 0.1	85	3	70	18+	0	0	69	74	1.21	- 1.79	0.29	18	0	0.0	0	14.3	8	48	E	20	12	12	7	4.9	61
KOROR R	94	1004.1	1007.9	88	76	81.6	0.7	91	16	73	22+	5	0	75	85	14.93	3.21	4.04	26	4	0.0	0	5.0	8	26	SE	7	0	1	30	9.9	52
KWAJALEIN	8	1007.8	1008.5	85	75	80.3	- 0.5	87	28+	72	2	0	0	75	82	21.08	12.12	3.91	29	0	0.0	0	17.6	7	37	9	11	1	4	26	8.8	
MAJURO	10	1007.8	1008.2	85	77	80.9	0.6	88	2	72	7	0	0	75	81	19.44	8.32	4.15	27	6	0.0	0	11.1	8	35	E	17	1	6	24	8.4	36
MARCUS ISLAND	20	1013.2	1015.1	79	70	74.5	- 1.2	83	21+	66	12	0	0	66	75	1.73	- 1.41	0.76	11	0	0.0	0	2.0	5	37	W	14	11	10	10	5.5	60
PAGO PAGO	12	1008.8	1009.1	86	76	80.5		89	31	72	17+	0	0	74	83	16.21		4.78	21	3	0.0	0	10.9	11	27	E	10+	1	8	22	8.0	22
PONAPE R	123	1002.0	1007.6	86	75	80.4	0.2	90	14	70	16	1	0	75	84	18.12	- 0.22	3.56	29	4	0.0	0	7.0	9	20	NE	30	1	2	28	9.3	45
TRUK MOEN ISLAND	5	1007.5	1007.8	86	76	80.8	0.0	89	17	71	6	0	0	75	83	18.21	4.97	6.27	27	3	0.0	0	8.3	8	28	SE	6	0	3	28	9.5	73
WAKE	11	1013.9	1014.1	82	74	78.1	- 0.8	84	18+	72	16+	0	0	66	69	0.62	- 1.20	0.37	7	0	0.0	0	12.2	7	25	3	1	12	17	2	4.5	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No of days							No. of days		Snow, Sleet				Fastest mile							
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max. 90 F. or above	Min. 32 F. or below	Average dew point		Total	Departure from normal	Greatest in 24 hours	.01 inch or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
PACIFIC AREA	Ft.	Mb.	Mb.	F.	F.	F.	F.	F		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
YAP R	62	1006.1	1007.9	85	75	80.4	- 0.6	88	26	72	24+	0	0	75	84	9.97	- 0.19	1.66	22	2	0.0	0	7.9	6	26	NE	31	1	2	28	9.3	39
PENNSYLVANIA																																
ALLENTOWN	387	1005.1	1019.7	38	23	30.3	- 1.0	64	10	4	28	0	27	21	70	3.99	0.72	1.31	13	0	28.4	17	5.2	28	35	31	24	6	7	18	7.0	
ERIE	731	991.2	1018.7	38	27	32.3	1.6	68	8	6	4	0	24	24	71	4.32	1.71	0.90	20	0	31.4	16	6.6	23	28	26	29	0	4	27	9.5	
HARRISBURG	338	1006.8	1020.1	39	25	31.7	- 1.3	67	10	11	28	0	25	23	72	3.08	0.17	0.86	10	0	19.9	8	4.3	30	28	W	25	4	6	21	7.5	47
PHILADELPHIA	5	1018.6	1019.6	43	28	35.5	1.6	71	10	10	28	0	23	24	65	4.33	1.39	1.12	10	1	18.8	12	4.7	31	32	N	24	6	13	12	6.3	52
PITTSBURGH	1137	974.3	1019.9	38	25	31.4	0.7	68	8	1	3	0	26	23	71	1.70	- 0.70	0.57	15	0	7.8	6	5.4	25	30	25	29	2	6	23	8.5	20
READING U	266			42	29	35.3	0.6	71	9	13	4	0	22			3.78	0.64	1.09	10		27.1	16			40	W	25	4	12	15	6.4	47
SCRANTON	930	984.1	1019.5	36	25	30.5	1.1	65	10	6	4	0	26	23	75	2.00	- 0.47	0.48	12	0	17.7	8	2.7	26	26	S	10	3	6	22	7.9	34
WILLIAMSPORT	524	1000.0	1019.9	37	23	30.1	- 0.3	65	10	6	4	0	26	25	82	1.92	- 1.12	0.57	12	0	11.6	4	3.7	29	23	29	11	3	6	22	8.1	
RHODE ISLAND																																
BLOCK ISLAND	110			42	31	36.3	0.4	56	9	17	4	0	21			2.49	- 1.10	0.81	11		3.2	2						7	10	14	6.4	
PROVIDENCE	51	1015.2	1017.7	41	24	32.8	0.8	65	9	12	28+	0	25	23	68	3.04	- 0.58	1.23	9	1	7.2	5	5.4	30	37	26	25	8	12	11	5.8	58
SOUTH CAROLINA																																
CHARLESTON	40	1018.6	1020.4	61	37	48.9	- 1.1	79	8	24	25	0	11	37	69	3.76	0.91	1.19	11	0	0.0	0	1.8	30	42Y	S	29	8	7	16	6.4	32
CHARLESTON U	9			58	43	50.6	- 1.1	75	8	27	4	0	2			3.17	0.43	0.89	10		0.0	0			29	W	24					
COLUMBIA	217	1012.2	1020.5	58	34	45.7	- 0.7	79	9	20	25	0	17	35	73	3.31	- 0.21	1.14	9	0	T	0	1.2	29	21	25	29+	9	10	12	5.8	55
GNVLE-SPARTANBURG	957	985.4	1021.0	53	33	43.0	- 0.6	70	9	16	25	0	14	31	66	3.15	- 0.88	1.67	10	0	T	T	1.5	32	23	W	2	10	6	15	6.0	52
SOUTH DAKOTA																																
ABERDEEN	1296	970.9	1019.9	31	8	19.3	1.2	52	17	-10	10	0	31	11	72	0.03	- 0.58	0.03	1	0	0.7	T	1.3	32	29	16	3	11	5	15	6.3	
HURON	1282	971.2	1019.9	32	10	20.8	2.0	56	16	-13	10	0	31	14	75	0.06	- 0.50	0.03	4	0	1.7	1	0.9	26	33	SE	5	6	8	17	7.1	58
RAPID CITY	3162	903.5	1018.0	37	17	26.7	- 0.5	60	16	- 1	22	0	30	18	73	0.79	0.49	0.28	10	0	8.5	4	1.9	32	49	NW	8	9	4	18	6.3	53
SIOUX FALLS	1418	966.1	1019.9	30	8	19.4	- 1.7	49	19+	-18	11	0	31	13	74	0.65	- 0.09	0.36	5	0	9.3	6	1.7	34	31	16	5	9	4	18	6.7	
TENNESSEE																																
BRISTOL	1507	965.1	1020.9	47	29	37.7	- 0.6	73	9+	10	26+	0	23	29	74	3.07	- 0.14	1.35	7	0	5.8	3	0.8	30	18	25	29+	7	7	17	6.9	
CHATTANOOGA	665	995.6	1020.9	50	31	40.4	- 2.1	68	9	15	25	0	16	33	80	3.58	- 1.61	1.62	11	0	T	T	0.6	31	24	S	9	5	7	19	7.4	42
KNOXVILLE	980	984.4	1020.6	48	32	40.0	- 1.6	72	9	14	25	0	18	33	78	2.66	- 1.57	1.14	10	0	3.1	3	1.2	33	23	W	10	5	8	18	7.4	24
MEMPHIS	258	1010.5	1020.9	50	33	41.4	- 1.1	74	7	13	24	0	17	32	71	5.21	0.28	2.03	11	2	0.7	T	0.7	11	33	SE	27	6	4	21	7.6	37
NASHVILLE	590	998.3	1020.7	49	32	40.2	- 1.2	68	8	6	25	0	17	31	70	5.69	1.50	2.52	10	0	4.3	4	2.2	10	26	S	8	4	6	21	7.6	43
OAK RIDGE	905			47	30	38.3	- 1.8	73	9	13	25	0	20			3.72	- 2.18	1.56	10		4.4	4			33Y		9	6	6	19	7.3	
TEXAS																																
ABILENE	1762	955.3	1018.1	59	31	44.6	- 1.5	83	7	9	29	0	19	25	52	0.05	- 1.21	0.02	4	0	T	0	2.2	24	32	N	23+	12	12	7	4.4	71
AMARILLO	3604	890.6	1016.8	50	21	35.5	- 3.8	73	7	6	28	0	27	17	54	0.19	- 0.58	0.16	3	0	1.8	2	3.2	28	40	W	7	16	7	8	4.2	72
AUSTIN	597	997.0	1019.1	63	39	51.0	- 1.7	84	6	21	24	0	9	37	64	0.87	- 1.66	0.46	6	1	0.0	0	1.9	34	38	NW	22	9	9	13	5.9	53
BROWNSVILLE	19	1017.6	1018.0	71	51	61.1	- 1.8	84	8	30	12	0	2	51	71	0.68	- 1.04	0.53	6	1	T	0	1.7	16	38	S	27	12	6	13	5.6	52
CORPUS CHRISTI	41	1016.9	1018.5	69	47	58.2	- 1.0	84	22+	29	13+	0	4	46	68	0.18	- 1.90	0.17	3	1	0.0	0	2.6	8	34	NW	23+	11	6	14	5.7	50
DALLAS	481	1001.4	1019.2	56	36	45.9	- 2.2	82	6	16	24	0	13	35	72	1.08	- 1.59	0.50	5	2	T	T	0.2	15	34	NW	22	8	5	18	6.4	45
DEL RIO	1026	981.7	1018.6	65	37	50.9	- 1.4	82	21	23	13+	0	13	24	42	0.04	- 0.78	0.04	1	0	0.0	0	1.5	1	28	31	9	15	7	9	4.1	
EL PASO	3918	883.2	1017.5	58	27	42.4	- 1.7	73	6	14	29	0	24	16	37	0.04	- 0.45	0.04	1	0	T	T	1.9	28	47	SW	7	14	14	3	3.6	86
FORT WORTH	537	998.3	1019.3	56	35	45.3	- 2.4	84	6	15	24	0	14	35	71	1.17	- 1.18	0.50	6	1	T	T	0.4	32	32	34	23	9	6	16	6.4	
GALVESTON U	7			62	50	56.0	- 1.2	74	8+	30	24	0	1			1.99	- 1.90	0.75	9		0.0	0			30	N	23					48
HOUSTON U	41			63	46	54.8	- 1.7	80	6	27	24	0	5			1.83	- 2.27	0.54	9		0.0	0										
HOUSTON	50	1017.3	1019.3	65	44	54.2	- 1.5	81	8+	25	24	0	8	45	75	1.53	- 2.83	0.54	9	1	0.0	0	1.3	3	31	33	23	5	9	17	7.0	43
LUBBOCK	3254	903.8	1017.6	55	21	38.0	- 3.0	77	6	4	28	0	27	18	52	0.03	- 0.62	0.02	2	0	T	T	3.5	29	33	25	7	17	9	5	3.5	
MIDLAND	2851	917.0	1017.2	59	27	43.4	- 2.5	79	7	12	12	0	25	18	43	0.02	- 0.64	0.02	1	0	0.0	0	2.2	27	32	31	9	21	5	5	3.0	
PORT ARTHUR	16	1019.0	1019.6	63	44	53.5	- 1.3	80	8	26	13	0	8	47	82	3.39	- 1.70	1.36	8	3	0.0	0	2.1	8	34	NW	8	6	8	17	7.1	39
SAN ANGELO	1903	950.6	1018.5	61	29	45.2	- 2.5	83	7	10	29	0	20	24	48	T	- 0.85	T	0	0	0.0	0	3.1	25	29	35	9	20	5	6	3.3	
SAN ANTONIO	788	990.5	1019.0	64	37	50.7	- 3.0	81	7	19	29+	0	12	37	65	0.44	- 1.31	0.35	5	1	0.0	0	2.3	36	33	N	10	10	10	11	5.3	61
VICTORIA	104	1014.9	1019.0	67	44	55.3	- 1.9	82	6	26	14+	0	7	45	72	1.24	- 1.37	0.88	7	2	0.0	0	1.8	4	44Y	N	23	8	6	17	6.4	
WACO	501	1001.0	1019.5	59	36	47.6	- 2.7	82	6	15	24	0	10	38	75	0.45	- 2.29	0.22	5	3	0.0	0	1.0	24	31	32	23	9	7	15	6.0	
WICHITA FALLS	994	981.4	1018.9	54	29	41.4	- 3.2	87	7	15	24	0	21	28	66	0.27	- 1.18	0.10	4	0	T	0	0.7	34	37	36	9	11	4	16	5.7	
UTAH																																
MILFORD	5028	848.0		36	16	26.0	- 2.2	57	1	-20	28	0	29			2.45	1.74	0.97	10		16.0	9						1	11	19	8.0	

See footnotes at end of table

CLIMATOLOGICAL DATA

ENGLISH UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	Temperature: No. of days: Max. 90° F. or above	Temperature: No. of days: Min. 32° F. or below	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	Precipitation: No. of days: .01 inch or more	Precipitation: No. of days: With thunderstorms	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	No. of days (sunrise to sunset): Partly cloudy, 4-7	No. of days (sunrise to sunset): Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	Ft.	Mb.	Mb.	F.	F.	F.	F.	F.		F.				F.	%	In.	In.	In.			In.	In.	M.p.h.		M.p.h.							%
UTAH																																
SALT LAKE CITY	4220	874.4	1022.3	36	23	29.2	-0.9	59	2	9	29+	0	29	23	80	0.86	-0.38	0.31	6	0	8.7	4	1.2	16	37	SE	3	1	5	25	8.8	23
WENDOVER	4237			32	19	25.8	-4.0	52	3	9	30+	0	29			0.79	0.50	0.51	9		6.8	3										
VERMONT																																
BURLINGTON	332	1004.4	1017.5	31	15	23.4	1.9	61	11+	-10	31	0	27	18	76	2.82	0.69	0.72	13	0	36.2	15	1.5	20	34	S	16	2	7	22	8.3	49
VIRGINIA																																
LYNCHBURG	916	985.8		46	29	37.5	-1.0	71	9	13	27+	0	23	27	68	3.18	0.04	1.07	9	0	17.9	10	2.2	27	23	W	29+	9	8	14	6.1	47
NORFOLK	22	1019.3	1020.3	49	34	41.4	-1.1	72	10	22	4	0	16	31	67	3.13	0.39	1.28	9	1	1.0	1	3.1	32	42	E	13	9	3	19	6.6	56
RICHMOND	162	1014.6	1020.8	48	28	38.0	-1.7	75	10	4	27	0	22	30	75	3.07	0.10	1.16	9	0	12.2	5	1.8	33	24	N	24	10	4	17	6.3	53
ROANOKE	1149	977.3	1020.2	45	30	37.8	-0.6	70	9+	12	4	0	21	24	59	3.25	0.27	0.98	7	0	22.6	9	3.4	29	30	30	25	7	10	14	6.1	
WALLOPS ISLAND	9	1020.7	1020.8	44	30	37.0		59	11	17	4	0	19	30	76	2.84		1.07	10	0	1.5	1	4.3	31	48	ENE	13	7	12	12	6.2	
WASHINGTON																																
OLYMPIA	195	1007.5	1014.7	47	37	42.1	1.4	54	1	25	26	0	8	41	94	11.53	2.48	2.51	27	0	1.7	1	8.1	20	31	18	4	1	1	29	9.5	
QUILLAYUTE	179	1004.4	1012.0	48	40	43.6	2.4	54	12	29	26+	0	5	43	96	23.47	6.66	2.44	27	3	0.1	T	5.5	16	27	5	12+	1	2	28	9.2	9
SEATTLE TACOMA	400	997.6	1014.3	47	40	43.5	2.7	54	1	29	27	0	3	39	86	8.31	2.02	2.13	25	0	2.0	2	5.6	18	31	21	29	0	0	31	9.7	7
SPOKANE	2356	930.6	1016.1	38	28	33.4	3.3	51	18	7	8	0	23	29	85	2.96	0.53	0.73	19	0	9.0	5	4.4	18	31	SW	5	1	1	29	9.2	14
STAMPEDE PASS R	3958			33	27	29.9	2.9	42	18+	18	9	0	26			15.96	-0.23	2.54	29		75.2	41						0	0	31	9.9	
WALLA WALLA U	949			48	37	42.4	4.6	62	16	26	23	0	11			2.60	0.75	1.01	13		0.4	T			30	S	4	1	1	29	9.3	7
YAKIMA	1052	977.3	1016.7	44	29	36.4	4.9	53	20+	14	27	0	24	30	80	0.95	-0.17	0.32	11	0	5.4	3	2.9	27	28	19	4	4	3	24	8.2	
WEST INDIES																																
SAN JUAN P.R.	13	1012.2	1014.4	81	73	77.1	0.9	85	1	69	14	0	0	69	76	6.21	0.76	1.55	21	0	0.0	0	8.1	7	34	NE	5	0	19	12	6.6	56
SWAN ISLAND	28			82	74	77.8	-0.9	84	29	70	21+	0	0			1.45	-4.19	0.83	11		0.0	0						12	10	9	5.0	
WEST VIRGINIA																																
BECKLEY	2504	929.2	1021.1	41	25	32.7		70	9	7	3	0	25	25	76	4.08		1.43	11	1	18.1	9	3.6	24	29	26	29	4	6	21	7.5	
CHARLESTON	939	985.4	1020.6	44	27	35.5	-1.6	76	9	5	27	0	23	27	73	2.53	-0.72	0.91	10	0	6.0	5	2.2	24	23	23	29	4	7	20	7.7	
ELKINS	1970	947.2	1020.6	41	22	31.7	-1.3	75	8	-5	4	0	25	25	78	2.45	-0.63	0.58	12	0	14.2	7	3.3	27	26	27	29	2	10	19	8.0	
HUNTINGTON	827	989.8	1020.8	43	29	36.2	-1.2	73	8	9	27	0	22	28	76	2.81	0.00	1.11	10	0	5.0	4	1.9	22	23	24	29	5	5	21	7.6	
PARKERSBURG U	615			42	28	35.2	-0.6	72	8	9	3	0	23			2.31	-0.53	0.72	11		2.7	1			28	SW	8					31
WISCONSIN																																
GREEN BAY	682	992.2	1018.9	28	12	20.3	-1.7	44	6	-9	30	0	29	12	68	1.65	0.47	0.54	7	1	11.9	7	4.3	29	30	NE	28	8	9	14	6.1	44
LA CROSSE	651	994.2	1019.8	31	14	22.0	0.2	48	6	-6	24	0	30	15	75	1.20	0.05	0.66	9	0	11.7	10	1.4	28	21	20	31+	12	4	15	5.8	
MADISON	858	986.5	1019.2	31	15	23.2	1.1	51	17+	-6	30	0	29	17	75	2.62	1.31	1.46	11	2	10.1	9	2.4	29	31	E	28	9	8	14	6.2	50
MILWAUKEE	672	992.6	1018.9	31	18	24.5	-0.1	56	8	2	30	0	29	18	75	2.31	0.68	0.60	10	2	9.9	8	4.1	28	38	E	28	11	4	16	6.2	46
WYOMING																																
CASPER	5338	835.1	1017.7	36	15	25.3	-2.0	52	3	-10	27	0	31	13	61	0.57	0.09	0.22	8	0	11.8	6	13.5	23	44	23	5	8	7	16	6.5	
CHEYENNE	6126	809.0	1016.9	42	20	31.0	1.5	57	20	5	29	0	27	11	48	0.08	-0.37	0.07	2	0	0.8	1	9.9	29	40	NW	16+	7	8	16	6.4	65
LANDER	5563	826.6	1018.7	35	13	24.2	1.1	52	20+	-7	29+	0	31	12	65	0.41	-0.01	0.25	5	0	7.3	7	1.1	23	38	SW	5	5	10	16	6.8	67
SHERIDAN	3964	876.7	1018.1	37	12	24.6	-1.7	61	16	-9	23	0	31	11	59	0.82	0.20	0.41	8	0	14.6	8	2.2	29	42	NW	5	6	7	18	6.8	58

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or with a measurable amount the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 70 F. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - **Station Pressure**" table of the annual issue of this publication.
Z Sun continuously below horizon.

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C.	C.	C	C		C.				C.	%	Mm.	Mm	Mm			Mm	Mm	M p s.		M p.s							%
ALABAMA																																
BIRMINGHAM	189	998.0	1021.1	12.2	1.1	6.8	-1.7	21.1	7	-9.4	25	0	13	2.2	74	59	-68	32	9	0	T	T	0.1	9	13.0	SE	28	5	9	17	7.4	37
HUNTSVILLE	183	997.3	1021.0	10.6	0.0	5.1	-1.3	19.4	21+	-12.2	25	0	19	1.1	77	81	-44	35	10	0	18	25	0.6	11	11.6	13	27+	3	10	18	7.6	
MOBILE	64	1012.5	1020.4	16.7	6.7	11.8	-0.5	24.4	8+	-2.8	25	0	3	6.7	75	117	-22	35	10	0	0	0	1.2	6	11.2	35	23	7	5	19	7.3	
MONTGOMERY	59	1013.5	1021.1	14.4	3.9	9.1	0.1	23.9	9+	-6.7	25	0	7	3.9	73	130	8	53	9	1	0	0	0.3	1	10.7	5	28	8	4	19	6.8	37
ALASKA																																
ANCHORAGE PRK STRIP	26			-7.8	-15.0	-11.3	-1.4	0.6	27+	-28.9	10+	0	31			21	-3	6	6		254	305										
ANCHORAGE	35	998.6	1003.7	-7.8	-15.6	-11.8		0.6	28+	-29.4	10	0	31	-15.6	74	27		10	6	0	340	457	1.4	2	16.5	1	2	12	1	18	5.9	48
ANNETTE	34	999.7	1003.8	6.1	1.7	3.9	1.6	11.1	23	-8.3	7	0	8	-0.6	74	240	-68	50	26	0	147	25	3.2	13	14.8	16	16	1	1	29	9.5	
BARROW	9	1016.3	1016.8	-21.7	-27.8	-24.6	-0.6	-3.9	3	-37.2	24	0	31	-28.3	73	6	2	3	7	0	71	254	0.3	33	14.8	27	1	2	2	2		
BARTER ISLAND	12	1013.9	1015.7	-20.6	-27.2	-23.7	-0.2	-4.4	3	-38.9	22	0	31	-29.4	59	15	7	11	5	0	185	279	3.9	27	25.0	26	1	2	2	2		
BETHEL	38	1001.4	1007.3	-12.2	-20.0	-16.0	-0.9	1.1	29	-28.3	22+	0	31	-18.9	75	14	-12	4	11	0	175	203	3.3	4	14.3	18	28	8	4	19	7.0	
COLD BAY	29	997.0	1000.9	0.0	-4.4	-2.4	-0.6	5.0	28+	-12.8	8	0	28	-4.4	86	53	-13	13	19	0	325	229	1.0	4	27.7	12	24	2	4	25	8.5	
FAIRBANKS	133	993.9	1012.7	-24.4	-33.3	-28.9	-6.9	-7.2	28	-47.2	9	0	31	-32.8	69	4	-10	2	3	0	74	711	0.4	2	6.3	20	28	9	6	16	6.4	
JUNEAU	4	1004.4	1005.0	-0.6	-5.6	-3.1	-1.1	5.0	14	-17.2	8	0	30	-6.1	83	114	7	16	22	0	498	356	3.3	9	16.1	12	30	3	2	26	8.9	17
KING SALMON	13	1001.4	1003.2	-8.9	-16.7	-12.8	-2.4	2.8	25	-29.4	15	0	30	-16.7	71	14	-12	6	9	0	155	102	2.5	2	15.6	7	16	9	11	11	5.5	
KOTZEBUE	3	1012.5	1013.0	-18.3	-25.6	-22.2	-2.4	-5.6	29	-38.9	23+	0	31	-25.0	77	4	-4	1	6	0	112	483	1.9	10	13.9	10	26+	10	1	20	6.8	
MC GRATH	106	997.3	1011.1	-20.6	-30.6	-25.7	-4.0	0.6	30	-45.6	10	0	31	-29.4	67	3	-23	2	3	0	206	381	0.4	31	7.6	29	17	10	4	17	5.9	
NOME	4	1009.1	1009.9	-11.7	-21.7	-16.7	-2.4	-1.7	3	-36.7	21	0	31	-19.4	78	4	-22	3	3	0	41	305	2.2	3	12.5	36	27+	9	4	18	6.2	38
ST. PAUL ISLAND	7	1001.4	1002.3	0.0	-5.0	-2.4	0.7	3.3	7	-11.1	31	0	28	-5.0	81	27	-20	6	14	0	150	51	5.4	7	26.4	8	25+	1	5	25	8.5	
SHEMYA	37	992.6	996.3	2.8	-1.7	0.7	1.0	5.6	4+	-6.1	31	0	25	-1.7	83	38	-17	11	20	0	244	76	2.9	9	23.2	13	20	0	7	24	8.6	
YAKUTAT	9	999.7	1000.7	-0.6	-7.2	-3.8	-1.7	4.4	1	-21.1	7	0	31	-6.7	83	270	-42	51	20	0	869	203	2.5	10	14.3	14	26	3	4	24	8.3	
ARIZONA																																
FLAGSTAFF	2131	786.3	1019.3	5.6	-8.3	-1.3	-0.4	15.0	17	-24.4	28	0	28	-7.8	67	157	115	77	8	1	340	203	0.4	16	13.0	23	7	15	6	10	4.5	
PHOENIX	340	977.3	1016.7	19.4	2.8	11.1	0.2	26.1	6	-3.9	31	0	9	0.0	53	13	-8	12	4	1	0	0	1.1	10	11.6Y	NW	26+	17	3	11	4.2	81
TUCSON	788	927.2	1015.9	18.9	3.9	11.3	0.3	26.7	2	-5.0	29+	0	8	-3.9	40	5	-19	5	2	0	T	0	2.0	14	19.2	SE	24	13	9	9	4.6	79
WINSLOW	1492	853.0	1021.8	8.3	-6.7	0.6	0.3	20.6	1	-17.8	31	0	26	-6.7	66	7	-7	3	4	1	36	25	1.6	21	23.2	22	6	17	4	10	4.2	
YUMA	59	1009.5	1016.9	20.6	7.2	14.0	1.2	28.3	6+	-0.6	31	0	1	-1.7	38	1	-8	1	1	0	0	0	1.6	1	13.4	SW	6	18	6	7	3.6	77
ARKANSAS																																
FORT SMITH	136	1002.7	1019.8	11.1	-1.7	4.7	-1.1	27.2	7	-11.1	24	0	21	-1.1	71	50	-22	21	7	1	25	25	0.5	5	11.6	S	8+	8	7	16	6.1	49
LITTLE ROCK	78	1010.8	1020.5	11.1	1.1	6.2	0.7	25.6	7	-7.2	24	0	13	1.1	73	107	3	78	10	0	5	T	0.6	1	11.6	N	23	6	6	19	7.3	41
TEXARKANA	113	1006.4	1020.0	12.2	2.2	7.1	-1.2	26.7	7	-8.3	24	0	14	3.3	79	147	31	73	14	5	T	0	0.5	17				7	1	23	7.4	
CALIFORNIA																																
BAKERSFIELD	151	1002.4	1020.4	11.1	4.4	7.9	-1.4	20.6	6	-1.7	28	0	4	4.4	80	40	15	21	5	0	0	0	0.1	3	13.0	35	6	4	8	19	7.7	
BISHOP	1252	875.0		12.2	-3.3	4.4	0.3	18.3	18	-10.6	28	0	28			147	117	85	5		0	0										
BLUE CANYON	1609			7.8	1.1	4.2	-0.4	16.7	19+	-6.1	27	0	16			314	54	75	11		940	457			17.9	21	2	8	6	17	6.7	
EUREKA U	13			12.8	6.7	9.7	0.3	19.4	12	0.0	27	0	1			166	-5	59	14		0	0			18.8	5	4	2	11	18	7.3	52
FRESNO	100	1008.1	1020.1	10.0	4.4	7.3	-1.0	16.7	10+	-3.3	28	0	5	6.1	92	77	27	36	6	0	0	0	0.7	13	13.4	NW	6	5	4	22	8.1	29
LONG BEACH	10	1016.3	1017.5	19.4	7.2	13.5	0.2	25.0	18+	1.1	27	0	0	5.6	64	99	49	42	5	0	0	0	0.7	28	10.3	33	26+	13	9	9	4.8	
LOS ANGELES	30	1013.2	1017.0	18.9	9.4	14.2	0.3	24.4	15	4.4	29+	0	0	5.6	62	93	33	43	5	0	0	0	0.4	31	17.4Y	SW	6	14	6	11	4.8	
LOS ANGELES U	82			21.1	11.1	15.9	1.4	28.3	19	5.6	29+	0	0			134	61	46	5		0	0			12.1	N	26	18	7	6	3.7	66
MT SHASTA R	1080			6.7	-1.1	2.8	0.6	17.2	18	-6.7	27+	0	25			176	18	68	11		234	51										
OAKLAND	2	1019.0	1019.3	12.8	7.2	10.2	0.4	18.3	30	1.1	28	0	0	6.1	79	89	-2	27	8	0	0	0	1.2	10	15.6	15	2	9	7	15	6.2	
RED BLUFF	104	1006.4	1019.4	12.8	5.6	9.2	0.8	20.0	31	-1.1	28	0	2	3.3		78	-29	39	8	0	0	0	0.6	16	20.1	SE	4	3	6	22	7.9	40
SACRAMENTO	5	1019.0	1019.6	10.6	5.0	7.8	-0.2	15.6	30+	-2.2	27	0	5	5.0	85	90	7	32	8	0	0	0	0.5	13	14.8	SE	4	3	7	21	8.1	35
SANDBERG R	1377	863.2		8.9	2.2	5.6	-0.4	16.1	20	-5.6	27	0	10			43	-21	18	6		18	T			23.7	22	6	11	7	13	5.4	
SAN DIEGO	4	1015.9	1017.1	18.9	9.4	14.0	0.1	23.9	13	3.3	29+	0	0	7.8	70	82	30	44	5	1	0	0	0.6	26	13.0	N	30	17	5	9	4.5	75
SAN FRANCISCO	2	1018.6	1019.2	12.8	6.1	9.4	-0.6	16.1	30+	0.0	28	0	1	5.0	77	101	-3	32	8	0	0	0	0.6	10	21.5	S	2	7	8	16	6.6	
SAN FRANCISCO U	16			13.3	8.3	10.7	-0.7	17.2	30	5.0	20+	0	0			98	-10	28	10		0	0			16.1	SW	2					48
SANTA CATALINA	478			16.7	11.1	13.9	0.6	22.2	19	6.7	27	0	0			127	62	80	6	0	0	0						16	7	8	4.2	
SANTA MARIA	72			16.7	3.3	9.9	-1.4	22.8	19	-5.0	28	0	5			73	7	36	5		0	0						16	5	10	4.5	
STOCKTON	7	1019.3	1020.3	11.1	5.6	8.3	0.6	17.2	10	-2.2	28	0	4	6.1	87	98	30	39	9	0	0	0	1.4	14	15.6	14	2	4	2	25	8.4	
COLORADO																																
ALAMOSA	2297	769.4		3.3	-15.6	-6.2	0.9	14.4	2	-33.3	29	0	30			9	3	5	5		124	51						15	8	8	4.1	
COLORADO SPRINGS	1873	808.7	1019.1	6.1	-8.9	-1.4	-1.3	16.7	20+	-20.0	27	0	31	-13.3	48	4	-2	4	2	0	74	76	1.8	3	13.9	25	5	9	8	14	5.6	
DENVER	1610	834.1	1016.5	7.8	-7.8	-0.1	0.2	19.4	5	-16.1	28	0	31	-10.0	57	4	-8	3	3	0	48	25	0.9	19	11.2	SW	5	7	10	14	6.3	61
GRAND JUNCTION	1480	853.7	1021.6	3.9	-6.1	-1.4	0.2	12.8	2	-19.4	29	0	26	-6.1	75	45	31	25	10	0	160	127	0.7	13	12.1	SW	2	10	9	12	5.4	62
PUEBLO	1428	854.4	1018.6	7.8	-10.6	-1.3	-2.0	18.9	20	-21.1	28	0	31	-11.7	50	4	-4	3	3	0	66	51	0.5	1	16.1	N	22+	10	11	10	5.2	78

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station ⊙	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C.	C	C	C	C		C.				C	%	Mm.	Mm.	Mm			Mm	Mm	M.p.s.		M.p.s							%
CONNECTICUT																																
BRIDGEPORT	2	1017.6	1018.2	4.4	- 2.2	1.0	0.3	16.7	9	-11.1	28	0	22	- 3.9	72	71	- 18	26	12	0	356	203	3.2	31	20.1	1	24	7	9	15	6.4	
HARTFORD	52	1011.2	1018.0	4.4	- 4.4	- 0.1	1.6	17.8	11	-12.2	5+	0	24	- 5.0	71	91	3	33	13	0	508	254	1.9	33	15.2	W	25	5	8	18	7.0	52
NEW HAVEN	2	1018.0		5.0	- 3.3	0.7	0.5	15.6	11+	-12.8	28	0	25			73	- 29	24	14		318	178			17.0	N	25	7	7	17	6.4	60
DELAWARE																																
WILMINGTON	24	1016.6	1019.5	6.1	- 2.8	1.6	-0.2	22.2	10+	-11.1	28+	0	23	- 3.3	72	97	20	29	10	1	546	305	1.9	30	10.7	29	29+	12	7	12	5.6	
DIST.OF COLUMBIA																																
WASH NATL AP	4	1018.3	1020.7	7.2	- 0.6	3.1	-0.3	22.2	8	- 6.9	4	0	20	- 2.8	67	83	13	26	9	0	409	178	1.5	29	12.5	NW	2	9	7	15	6.3	46
FLORIDA																																
APALACHICOLA U	4			16.1	8.3	12.2	-1.1	21.7	9+	- 1.7	25	0	1			101	26	60	8	0	0	0			12.1	N	24	7	8	16	6.4	44
DAYTONA BEACH	9	1019.3	1020.6	20.6	8.9	14.7	-1.1	26.7	31+	- 1.1	25	0	1	9.4	75	41	- 9	25	7	0	0	0	1.2	32	10.3	27	24	9	8	14	6.0	
FORT MYERS	5	1019.6	1019.9	23.3	11.1	17.1	-1.2	27.8	31+	1.7	25	0	0	11.1	74	7	- 25	2	7	0	0	0	1.4	5	10.3	21	24	14	12	5	4.5	
JACKSONVILLE	6	1019.6	1020.8	18.3	6.1	12.2	-1.2	26.7	8	- 2.2	25	0	2	6.7	73	29	- 27	20	7	0	0	0	1.1	33	13.9	W	24	5	11	15	6.7	52
KEY WEST	1	1018.0	1018.7	25.5	16.3	20.9	-0.6	26.7	31+	12.2	25	0	0	15.6	74	34	- 9	12	7	0	0	0	3.4	6	12.1	SE	9+	12	12	7	4.6	76
LAKELAND U	65			21.1	10.6	15.7	-1.2	26.7	9+	0.0	25	0	1			22	- 26	12	9		0	0						10	11	10	5.1	63
MIAMI	2	1018.6	1018.8	24.4	13.9	19.2	-0.8	28.9	29	5.0	25	0	0	13.9	74	19	- 24	14	4	0	0	0	1.5	6	10.7	7	5	12	12	7	4.9	
ORLANDO	33	1016.3	1020.4	21.7	9.4	15.6	-0.4	27.2	31	0.6	25	0	0			25	- 23	19	6	0	0	0	1.0	34	10.3	29	24+	9	8	14	5.7	
PENSACOLA	34	1016.6	1020.8	16.1	6.7	11.2	-1.2	23.3	9+	- 3.3	25	0	3	6.7	78	153	45	59	12		0	0	1.3	5	16.5	SE	30	6	5	20	7.1	43
TALLAHASSEE	17	1018.6	1020.9	17.8	4.4	10.9	-1.3	25.6	8	- 3.3	15	0	8	6.1	78	101	14	29	8	0	0	0	0.7	1	9.4	18	8	7	8	16	6.5	
TAMPA	6	1019.6	1020.0	21.1	8.9	15.1	-1.7	27.2	9+	- 0.6	25	0	1	9.4	74	24	- 24	13	6	0	0	0	1.1	6	9.8	32	24+	9	10	12	5.5	49
WEST PALM BEACH	5	1018.6	1019.5	23.9	12.8	18.2	-1.9	27.8	29	3.9	25	0	0	12.8	73	26	- 39	12	7	0	0	0	1.	7	12.5	9	4	10	12	9	5.4	
GEORGIA																																
ATHENS	244	990.9	1020.4	12.8	1.7	6.9	-0.1	23.9	9	- 7.2	25	0	14	1.1	72	120	5	67	9	0	T	0	0.7	31	8.9	29	24+	12	2	17	6.0	
ATLANTA	308	983.1	1020.7	11.7	1.1	6.3	-0.8	21.1	9	- 8.9	25	0	11	0.6	72	117	6	45	10	0	0	0	0.8	32	14.8	NW	24	10	5	16	6.2	46
AUGUSTA	44	1015.2	1020.6	15.0	0.6	7.6	-0.8	26.7	9	- 7.8	25	0	19	1.7	72	84	T	30	10	0	T	0	0.7	29	8.9	29	24	10	7	14	6.1	
COLUMBUS	117			15.0	3.3	9.2	0.5	25.0	9	- 6.7	25	0	9	4.4	77	171	55	66	11		0	0	0.5	1	9.4	30	24	8	6	17	6.4	
MACON	108	1008.1	1021.3	15.0	2.2	8.8	-0.6	26.1	8	- 6.7	25	0	12	1.7	67	101	- 2	33	11	0	T	0	0.6	33	11.6	5	9	11	9	11	5.6	61
ROME	194			11.1	- 0.6	5.5	-0.3	20.6	9	-11.1	25	0	17			92	- 39	28	9		T	T										
SAVANNAH	14	1019.3	1021.0	16.7	2.8	9.7	-1.1	26.1	9	- 5.6	25	0	13	3.9	72	49	- 22	15	7	0	0	0	0.4	31	11.2	NW	24+	7	10	14	6.3	55
HAWAII																																
HILO	8	1015.6	1016.6	27.2	20.0	23.5	1.0	31.1	6+	17.2	28	0	0	18.9	79	383	- 2	99	24	3	0	0	0.3	19	10.7	E	30	4	14	13	6.0	37
HONOLULU	2	1015.6	1016.2	27.2	20.0	23.7	0.6	29.4	2	16.7	10+	0	0	18.3	73	76	T	24	13	1	0	0	3.6	7	15.6	NE	27	8	17	6	5.4	49
KAHULUI	15	1013.9	1016.2	26.7	20.0	23.4	0.8	30.0	1	13.9	11	0	0	16.7	68	29	- 39	10	12	2	0	0	3.8	6	14.3	NE	27	9	17	5	5.3	63
LIHUE	31	1012.2	1017.4	25.0	20.0	22.4	0.1	28.3	3	15.6	9+	0	0	18.9	81	94	- 38	38	17	0	0	0	3.4	6	14.3	NE	28	4	14	13	6.6	45
IDAHO																																
BOISE	865	918.1	1021.0	3.3	- 3.9	- 0.4	-0.5	10.6	4+	-16.7	27	0	25	- 3.3	84	36	2	8	15	0	229	102	1.7	13	14.3	NW	5	3	9	19	7.8	56
IDAHO FALLS 42NW R	1460			- 2.2	-16.7	- 9.4	-2.1	5.6	1	-28.9	30	0	31			33	18	17	7				0.7	29	17.4	SSW	5					
IDAHO FALLS 46W R	1503			- 1.7	-15.0	- 8.2	-1.9	6.1	1	-23.9	30	0	30			22	7	11	10		130	102	1.2	24	18.8	SW	5					
LEWISTON	431			7.8	1.1	4.3	2.7	11.1	19+	- 3.3	9	0	11			43	8	14	11		T	T						2	3	26	8.9	
POCATELLO	1358	864.2	1022.3	0.6	- 9.4	- 4.4	-1.9	10.0	1	-18.3	26	0	31	- 7.2	82	18	- 7	4	13	0	140	51	1.6	22	19.2	S	5	2	7	22	8.0	37
ILLINOIS																																
CAIRO U	96			7.2	0.0	3.6	-0.6	21.7	7	- 7.8	25+	0	18			126	33	49	10		43	51			13.4	S	8	6	7	18	7.2	39
CHICAGO O HARE	201	993.9	1019.4	1.1	- 6.7	- 2.7	-0.2	16.1	8	-16.7	3+	0	26	- 6.1	77	48	1	18	13	2	213	102	1.4	26	13.0	21	6	5	7	19	7.2	
CHICAGO MIDWAY	185	995.9		1.1	- 5.0	- 1.8	-0.2	17.2	8	-15.0	2	0	25	- 6.1	74	57	19	27	12	0	170	102	1.9	26	11.6	E	28+	7	4	20	7.5	32
MOLINE	177	997.3	1019.6	1.7	- 6.1	- 2.2	0.7	15.6	8	-16.1	3	0	27	- 6.1	76	64	22	21	10	3	183	127	1.2	27	12.5	SW	28	6	9	16	6.9	41
PEORIA	199	994.9	1020.0	2.2	- 5.0	- 1.6	0.1	16.7	8	-15.6	3	0	26	- 5.6	78	76	27	35	9	3	97	51	0.8	26	15.6	SW	28	6	6	19	7.2	38
ROCKFORD	221	991.2	1019.2	0.0	- 7.8	- 4.0	-0.4	12.2	8	-19.4	1	0	27	- 6.7	80	55	12	20	8	2	198	127	1.0	27	9.8	22	28+	8	6	17	6.7	
SPRINGFIELD	179	997.0	1020.0	2.8	- 4.4	- 0.8	-0.8	17.2	8+	-15.6	3	0	23	- 3.9	82	67	19	33	9	1	51	25	1.0	24	15.2	SW	8	8	4	19	7.1	39
INDIANA																																
EVANSVILLE	116	1006.4	1020.8	6.1	- 2.8	1.7	-0.6	20.6	6	-11.1	3	0	26	- 2.8	76	140	62	41	10	0	15	25	0.5	21	11.6	SW	28	7	4	20	7.3	39
FORT WAYNE	241	988.5	1019.7	1.7	- 5.0	- 1.8	0.2	17.2	8	-15.6	2	0	26	- 5.0	80	125	72	54	14	1	185	76	2.2	24	15.2	W	29	2	6	23	8.3	32
INDIANAPOLIS	241	989.8	1020.0	[illegible]	- 3.3	0.4	0.9	18.9	8	-15.6	3	0	24	- 5.0	68	133	[illegible]	44	11	1	84	51	1.0	24	14.3	S	8	7	3	21	7.5	23
SOUTH BEND	236	989.8	1018.9	1.7	- 3.9	- 1.2	0.7	18.3	8	-13.9	2	0	25	- 4.4	79	120	65	55	17	2	462	178	2.1	24	11.2	24	8	2	6	23	8.5	
IOWA																																
BURLINGTON	211			2.2	- 5.6	- 1.7	0.3	17.2	8	-15.0	3	0	27	- 5.6	78	55	15		9	2	112		1.2	31	10.3	32	1	7	7	17	6.6	

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Temperature: Date	Temperature: Lowest	Temperature: Date	No of days: Max 32.2 °C or above	No of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No of days: 25 mm or more	No of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C	C.	C	C.	C.		C				C.	%	Mm.	Mm	Mm.			Mm.	Mm	M.p.s.		M.p.s.							%
IOWA																																
DES MOINES	286	984.1	1020.2	0.6	- 8.9	- 4.0	-0.3	13.3	6	-17.2	11	0	30	- 7.2	80	12	- 17	10	6	0	180	178	1.0	34	12.1	NW	19	11	5	15	6.2	49
DUBUQUE	322	978.3		- 0.6	- 7.8	- 4.1	0.6	11.1	5	-17.2	3	0	29			67	19	33	11		282	254						8	8	15	6.0	
SIOUX CITY	334	978.7	1020.3	0.6	-10.6	- 4.9	-1.1	12.8	16	-21.1	29	0	31	- 7.8	82	21	2	15	5	0	218	203	0.6	35	14.3	NW	28	10	3	18	6.0	52
WATERLOO	265	986.5	1019.6	- 0.6	-10.0	- 5.2	-0.3	11.1	5	-13.3	3	0	30	- 8.3	80	20	- 8	7	3	0	153	152	1.0	31	12.5	33	1	11	5	15	6.0	
KANSAS																																
CONCORDIA	448	964.8	1019.6	4.4	- 7.8	- 1.8	-1.8	17.2	19	-18.9	30	0	29	- 7.2	71	23	5	19	4	0	384	330	0.8	32	12.5	NW	28	14	3	14	5.4	60
DODGE CITY	787	925.5	1019.3	4.4	- 7.8	- 1.7	-3.2	20.0	20	-17.2	10	0	29	- 8.3	68	16	4	10	5	0	208	178	1.6	31	14.3	N	22	8	9	14	6.2	60
GOODLAND	1113	888.3	1019.2	5.0	-10.0	- 2.6	-1.7	18.3	14	-18.9	23	0	31	- 9.4	68	5	- 5	3	4	0	178	76	1.6	27	12.5	33	31+	6	11	14	6.5	
TOPEKA	267	987.1	1020.0	6.1	- 7.2	- 0.7	-1.5	20.6	7	-18.9	30	0	28	- 5.7	68	20	- 15	17	4	0	211	178	0.6	1	14.3	NE	9	9	7	15	6.0	59
WICHITA	403	970.2	1019.6	6.7	- 6.1	0.4	-1.7	23.9	7	-16.7	29	0	27	- 7.2	63	11	- 13	8	6	0	127	102	0.5	36	13.0	N	22+	11	8	12	5.3	61
KENTUCKY																																
COVINGTON	265	988.2	1020.6	5.0	- 2.8	0.9	0.2	18.3	8	-12.8	3	0	23	- 2.8	76	84	14	35	10	0	41	25	1.2	24	13.0	20	8	6	2	23	7.9	
LEXINGTON	294	984.4	1020.9	5.6	- 1.7	1.9	-0.2	18.9	8	-11.1	3	0	20	- 2.8	72	117	29	49	8	0	8	T	1.3	19	12.1	19	8	4	5	22	7.4	
LOUISVILLE	145	1002.4	1020.6	5.6	- 1.7	2.0	-0.4	19.4	8	-10.6	3	0	23	- 3.3	71	110	28	39	8	0	13	T	0.6	22	12.1	SW	8+	6	5	20	7.5	35
LOUISIANA																																
ALEXANDRIA	28	1015.6	1020.0	15.0	3.9	9.3	-1.4	26.1	7	- 7.8	25	0	8	6.1	85	139	- 7	64	11	3	0	0	0.7	3	15.6	32	28	4	5	22	7.7	
BATON ROUGE	20	1017.3	1020.1	17.2	6.1	11.7	-0.4	27.8	7	- 4.4	25	0	5	6.1	72	64	- 65	17	12	2	0	0	0.8	8	13.4	18	28	5	4	22	7.5	
LAKE CHARLES	3	1019.0	1019.9	17.8	7.2	12.5	-0.1	27.8	8	- 1.7	14	0	6	8.9	82	96	- 50	54	8	3	0	0	1.1	8	11.2	35	23	5	9	17	7.3	
NEW ORLEANS	1	1019.0	1020.0	16.7	7.2	11.8	-1.2	26.7	8+	- 3.3	25+	0	5	8.9	84	138	34	40	12	3	0	0	1.0	5	11.2	31	23	7	7	17	7.0	
SHREVEPORT	77	1010.2	1019.5	13.3	3.3	8.3	-1.5	27.2	7	- 6.7	25+	0	13	4.4	82	92	- 33	24	14	2	T	T	0.4	15	10.7	29	23	5	7	19	7.5	43
MAINE																																
CARIBOU	190	991.9		- 2.2	- 9.4	- 6.1	3.1	12.2	11	-19.4	20+	0	29			55	- 7	21	18		615	432						8	2	21	7.5	
PORTLAND	14	1014.2	1016.7	2.2	- 8.3	- 2.9	0.5	15.6	11	-17.8	16	0	29	- 7.2	70	88	- 10	45	11	0	373	127	1.6	30	12.5	SW	25	7	7	17	6.6	41
MARYLAND																																
BALTIMORE	45	1014.6	1020.2	6.1	- 2.2	2.0	-0.1	22.8	9+	-11.1	28	0	22	- 4.4	64	90	14	26	10	0	518	229	2.2	29	16.5	W	29	10	5	16	6.2	48
MASSACHUSETTS																																
BLUE HILL OBS R	192			3.3	- 4.4	- 0.6	0.5	20.0	9	-12.8	4	0	26			90	- 10	34	9		351	178			30.4	S	29					55
BOSTON	5	1016.3	1017.3	5.0	- 2.2	1.2	0.5	21.1	9	-10.0	4	0	21	- 5.6	62	77	- 15	36	10	0	251	127	3.5	30	21.0	NE	24	9	8	14	6.1	59
NANTUCKET	13	1016.6	1016.8	6.1	- 1.1	2.3	0.0	14.4	9	-10.6	28	0	23	- 2.2	73	77	- 23	24	11	0	163	25	2.3	31	24.6	S	25	5	6	20	7.6	30
PITTSFIELD	357			1.1	- 7.8	- 3.4	0.3	16.1	11+	-17.2	4	0	28			85	2	29	17		704	432										
WORCESTER	301	979.3	1017.4	1.7	- 6.1	- 2.2	0.4	18.9	9	-13.9	4	0	27	- 6.7	72	77	- 14	46	10	0	345	178	2.7	29	16.1	30	25	9	7	15	6.2	
MICHIGAN																																
ALPENA	210	991.2	1017.4	- 0.6	- 9.4	- 5.2	-0.8	10.6	8	-21.1	28	0	28	- 8.9	74	60	14	26	16	1	386	432	1.0	25	13.4	SE	28	1	7	23	8.6	21
DETROIT	36	994.9	1018.5	1.7	- 4.4	- 1.4	-0.2	17.8	8	-12.2	3+	0	27	- 6.1	72					0			2.2	27	10.7	26	14					
DETROIT M WAYNE CO	193	993.6	1018.7	1.7	- 5.6	- 1.8	-0.7	18.9	8	-14.4	31+	0	26	- 4.4	81	115	66	43	12	0	378	152	2.1	25	13.4	SW	29+	5	3	23	7.9	24
DETROIT WILLOW RUN	217	989.8	1019.1	1.1	- 6.7	- 2.9	-1.5	18.3	8	-15.0	31	0	27	- 6.7	75	107	57	36	12	0	391	152	2.7	25	14.3	20	8	4	5	22	8.1	
FLINT	235	989.5	1018.3	0.6	- 7.8	- 3.6	-0.2	16.7	8	-16.7	4+	0	28	- 6.7	76	45	- 1	13	14	1	264	102	2.4	25	12.5	27	29+	2	4	25	8.6	
GRAND RAPIDS	239	988.2	1018.2	2.2	- 5.6	- 1.6	1.2	17.8	8	-14.4	3	0	27	- 5.0	80	102	50	41	15	1	447	203	1.4	24	13.9	SW	29	2	7	22	8.2	26
HOUGHTON LAKE	350	974.3	1017.8	- 1.1	- 8.9	- 5.0		11.7	8	-17.8	28+	0	29	- 6.7	84	88		42	16	1	391	178	1.5	26	13.9	9	28	3	4	24	8.5	
LANSING	256	985.1	1018.1	0.6	- 7.8	- 3.4	-0.9	18.3	8	-20.0	4+	0	28	- 7.2	73	62	12	22	15	1	254	178	2.0	24	15.2	W	29	3	6	22	8.2	35
MARQUETTE U	206			- 1.7	- 7.2	- 4.5	-0.1	6.1	6	-19.4	1	0	31			71	22	17	19		828	660			13.4	SW	15	4	0	27	8.6	25
MUSKEGON	191	994.6	1018.3	1.1	- 4.4	- 1.6	-0.4	13.3	8	-13.9	4	0	25	- 4.4	82	76	26	18	21	1	803	279	0.7	27	13.9	29	29	0	2	29	9.4	
SAULT STE MARIE	220	989.8	1017.5	- 3.9	-10.6	- 7.3	-1.1	5.0	8	-22.8	30	0	29	-10.6	78	67	9	21	18	0	518	279	0.6	6	12.5	SE	6	4	7	20	7.7	32
MINNESOTA																																
DULUTH	435	965.1	1019.5	- 5.6	-15.0	-10.3	-0.3	2.8	6	-26.1	11	0	31	-13.3	76	40	10	13	13	0	391	330	1.7	29	14.3	NW	15+	9	4	18	6.7	39
INTERNATIONAL FALLS	359	974.6	1020.4	- 8.3	-19.4	-13.9	-1.4	2.2	16	-30.0	27+	0	31	-16.1	79	23	2	5	9	0	305	254	0.7	27	12.5	27	6	10	4	17	6.6	
MINNEAPOLIS	254	988.2	1020.2	- 3.9	-11.7	- 7.7	0.0	5.6	16	-22.8	11	0	31	-11.1	77	26	4	8	11	0	323	203	1.0	32	11.6	SE	6+	9	5	17	6.4	46
ROCHESTER	395	969.9	1019.8	- 3.3	-10.6	- 7.0	0.4	6.7	16	-18.3	26+	0	30	-10.0	79	24	T	13	9	0	262	203	1.4	28	13.0	31	1	9	9	13	6.0	
ST CLOUD	315	980.0	1019.9	- 4.4	-14.4	- 9.4	-0.9	3.9	6	-25.0	11	0	31		74	20	2	8	8		211	152						7	7	17	6.7	
MISSISSIPPI																																
JACKSON	94	1008.1	1020.4	13.9	2.2	8.1	-1.6	27.2	8	-10.0	25	0	10	5.0	85	123	- 12	28	13	2	T	0	0.7	11	17.4	S	28	5	4	22	7.8	26
MERIDIAN	88	1009.5	1021.0	15.0	3.3	9.2	0.1	25.6	8	- 8.9	25	0	9	5.0	80	149	14	67	10	1	T	0	0.1	8	10.3	34	23	6	4	21	7.5	
VICKSBURG U	71			13.3	4.4	8.8	-1.3	26.1	7	- 5.6	24	0	7			161	35	69	14		T	0			11.6	NW	28+	5	4	22	7.6	39

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb.	C	C	C	C	C		C.				C.	%	Mm.	Mm	Mm			Mm.	Mm	M.p.s.		M.p.s							%
MISSOURI																																
COLUMBIA	237	990.2	1019.4	6.1	- 3.3	1.3	0.3	22.2	7	-11.1	29	0	24	- 4.4	72	58	8	23	8	1	41	25	0.3	26	16.5	W	8	7	5	19	6.9	49
KANSAS CITY	226	991.9	1019.7	6.7	- 3.3	1.6	-0.6	18.3	6	-13.3	29	0	21	- 5.0	66	23	- 16	17	5	1	183	152	0.3	33	11.2	NE	22	10	4	17	6.3	52
SAINT JOSEPH	247			5.0	- 7.8	- 1.2	-0.9	17.2	6	-20.6	30	0	27			18	- 17	12	4	0	185	178	0.8	35	9.4	34	9	9	9	13	5.6	
ST LOUIS	163	999.3	1020.4	6.1	- 2.8	1.6	0.0	22.8	7	-10.6	3	0	23	- 2.8	77	63	13	25	7	2	T	T	0.6	28	14.3	SW	8	8	6	17	6.9	51
SPRINGFIELD	386	972.9	1019.7	7.2	- 5.0	1.1	-1.6	23.3	7	-22.2	24	0	20	- 4.4	73	55	- 1	19	10	2	206	203	1.0	17	13.0	NE	23+	10	7	14	5.9	57
MONTANA																																
BILLINGS	1087	889.3	1016.5	3.3	- 6.1	- 1.6	0.4	15.6	18	-20.0	9	0	23	- 8.3	64	24	9	14	7	0	262	102	3.8	25	16.1	NW	5	6	12	13	6.6	60
GLASGOW	646	931.9		- 2.9	-11.7	- 7.3	0.7	8.3	18+	-27.2	9	0	31			6	- 6	2	8		99	76						6	5	20	7.5	
GREAT FALLS	1116	885.2	1016.3	2.1	- 6.7	- 2.3	0.3	13.9	16	-25.6	9	0	23	- 7.8	66	25	10	8	7	0	249	203	4.6	23	21.0	SW	5	4	6	21	7.7	40
HAVRE	787	921.1	1016.8	- 2.2	-12.8	- 7.6	-1.4	10.6	18	-32.8	1	0	29	- 9.4		4	- 8	2	4		71	102	2.3	24	17.0	NW	5	4	8	19	7.7	36
HELENA	1167	879.4	1016.7	2.6	- 7.8	- 2.6	1.8	13.3	18+	-18.3	9+	0	29	- 7.2	69	16	2	6	9	0	145	127	1.8	26	21.0	S	5	3	7	21	7.6	36
KALISPELL	904	910.6	1017.8	1.1	- 6.1	- 2.6	1.3	6.7	20	-18.9	10	0	27	- 3.9	87	40	6	8	16	0	399	279	0.8	20	10.3	13	5	0	3	28	9.5	
MILES CITY	801	921.4	1017.9	- 1.7	-10.6	- 6.0	-1.1	10.6	20+	-26.1	10+	0	29	- 9.4	77	14	4		8	0	94		1.2	24								
MISSOULA	972	904.2	1019.0	1.7	- 4.4	- 1.4	3.3	8.3	18	-13.3	9	0	29	- 4.4	81	20	- 7	8	9	0	284	102	0.5	29	10.7	SE	4	1	3	27	8.9	20
NEBRASKA																																
GRAND ISLAND	561	951.2	1020.0	3.3	- 9.4	- 3.2	-0.5	17.8	14	-22.2	30	0	30	- 7.2	79	17	3	11	5	0	216	203	1.1	30	12.5	33	28	9	2	20	6.7	
LINCOLN U	351			3.3	- 7.2	- 2.1	-1.3	15.0	19+	-17.8	30	0	28			18	- 5	12	8		251	152			11.6	N	27	9	6	16	6.3	45
NORFOLK	471			1.7	-10.6	- 4.6	-0.8	12.8	19	-19.4	30+	0	31			14	- 4	11	5		170	152						7	5	19	7.0	
NORTH PLATTE	846	918.1	1019.7	3.3	-11.7	- 4.2	-1.6	17.8	14	-23.3	23	0	31	-11.1	66	13	3	7	3	0	216	178	0.8	31	11.6	NW	31+	5	10	16	6.8	50
OMAHA	298	983.4	1020.2	3.7	- 8.3	- 2.1	0.1	15.6	19	-17.2	29	0	30	- 7.8	67	16	- 5	14	5	0	173	152	0.9	2	13.0	NW	28	8	6	17	6.4	47
SCOTTSBLUFF	1206	878.4	1019.0	4.4	-10.1	- 2.6	-0.7	14.4	20+	-17.8	29+	0	31	- 8.9	69	4	- 6	2	4	0	86	76	1.2	32	13.0	28	5	8	4	19	6.6	
VALENTINE	789			2.8	-10.6	- 3.9	-0.1	16.1	14	-26.1	23	0	31			11	3	4	7		142	102			14.3	5	3	6	7	18	7.0	54
NEVADA																																
ELKO	1539	846.3	1023.7	- 1.1	-13.3	- 7.4	-4.3	8.9	3	-23.3	27	0	30	- 9.4	85	46	21	17	10	0	442	178	0.1	20	12.5	20	5	7	5	19	6.8	
ELY	1906	808.3	1020.1	4.4	- 9.4	- 2.8	0.1	13.9	19	-23.3	28	0	30	- 7.8	75	54	36	28	7	0	180	76	1.3	19	16.1	SE	5	7	7	17	6.6	56
LAS VEGAS	659	940.7	1018.6	13.9	1.7	7.8	0.6	21.7	2	- 5.0	31+	0	11	- 1.7	55	12	2	11	3	1	T	T	1.3	22	21.5	SW	6	15	4	12	4.9	74
RENO	1342	867.1	1019.9	6.7	- 4.4	1.1	1.2	15.6	13	-10.0	28	0	29	- 3.3	77	37	9	21	6	0	147	76	0.3	22	20.6	SE	1	5	6	20	7.4	50
WINNEMUCCA	1310	869.3	1020.8	5.0	- 6.7	- 0.8	0.4	10.0	1	-19.4	27	0	30	- 4.4	77	25	2	8	10	0	274	76	0.7	16	16.1	SW	5	5	8	18	7.4	32
NEW HAMPSHIRE																																
CONCORD	104	1004.4	1017.6	2.2	- 8.3	- 3.2	0.7	16.1	11	-21.1	28	0	26	- 6.7	76	61	- 21	32	9	0	363	203	1.7	30	13.0	W	30	8	7	16	6.5	49
MT WASHINGTON OBS	1909			- 6.1	-14.4	-10.3	2.6	6.7	10+	-25.6	3	0	28			169	9	44	20	0	940	178			44.7Y	E	25	4	9	18	7.4	37
NEW JERSEY																																
ATLANTIC CITY	20	1017.3	1019.6	7.2	- 2.8	2.3	-0.2	22.2	9	-13.3	4	0	23	- 2.2	74	122	40	40	10	0	216	152	2.1	29	13.9	34	24	11	10	10	5.8	47
ATLANTIC CITY U	3			6.7	- 0.6	3.2	-0.3	16.7	8	- 9.4	4	0	20			116	28	42	13						21.0	NNW	24					
NEWARK	2	1018.5	1019.1	6.1	- 1.1	2.5	0.7	20.0	9	- 8.9	4+	0	21	- 2.2	73	76	- 5	31	13	1	320	203	2.4	30	13.0	33	24	7	10	14	6.4	
TRENTON U	17			6.1	- 1.1	2.5	0.7	22.2	10	-11.1	4	0	22			109	36	31	12		394	305			14.8	N	24	7	10	14	6.1	46
NEW MEXICO																																
ALBUQUERQUE	1619	835.5	1019.2	8.3	- 5.6	1.3	-1.5	20.0	6	-13.3	31+	0	27	-10.0	46	T	- 11	T	1	0	T	0	1.0	34	16.1	NW	8	17	7	7	4.0	77
CLAYTON	1515			8.3	- 7.8	0.1	-2.2	19.4	20	-19.4	29	0	29			4	- 5	4	3		56	51						14	9	8	4.4	
RATON	1944			8.9	-11.1	- 1.3	-0.5	18.3	20	-25.0	29	0	30			5	- 2	3	3		79	51						13	8	10	4.8	
ROSWELL	1102	892.0		15.0	- 6.7	4.2	0.3	25.6	6	-16.1	29+	0	28	-10.6	39	T	- 14	T	0	0	T	T	0.7	31	17.0	SW	7	16	12	3	3.1	80
SILVER CITY	1638			12.2	- 3.9	3.9	-1.3	20.0	1	-12.8	29	0	25			3	- 13	2	2		T	T						15	13	3	3.8	
NEW YORK																																
ALBANY	84	1007.8	1018.8	2.2	- 7.2	- 2.6	0.4	17.8	10	-17.8	4	0	27	- 5.6	77	77	11	30	17	1	747	483	1.7	28	14.3	NW	25	4	4	23	7.6	44
BINGHAMTON	485	957.3	1018.1	0.0	- 6.1	- 3.1	-0.2	17.8	10	-17.2	4	0	27	- 5.6	81	70	5	18	20	0	645	203	2.0	26	13.4	W	30+	1	5	25	8.5	30
BUFFALO	215	991.5	1018.0	1.1	- 5.0	- 1.9	0.5	18.9	8	-18.9	4	0	27	- 5.6	77	57	- 19	16	17	1	307	76	3.4	25	16.1	SW	29	1	4	26	9.0	23
NEW YORK U	40	1014.9	1018.1	5.0	- 1.1	2.1	-0.1	18.9	9	-10.0	4	0	22	- 3.3	71	81	- 2	33	13	1	231	178	1.7	31	15.2	NW	25+	9	12	10	5.6	45
J.F. KENNEDY	4	1018.0	1018.8	5.6	- 1.1	2.0	0.4	16.1	8	- 9.4	4+	0	22	- 3.3	70	71	- 11	30	13	0	224	178	2.5	32	17.9	17	29+	9	8	14	6.0	
NEW YORK LA GUARDIA	3	1016.9	1018.8	5.6	0.0	2.7	0.2	18.9	9	- 9.4	4	0	20	- 3.9	64	65	- 22	30	13	1	193	152	2.6	32	20.1	NW	24	6	12	13	6.3	
ROCHESTER	167	998.0	1018.8	2.8	- 3.9	- 0.7	1.2	20.0	8	-16.1	4+	0	25	- 5.6	69	44	- 16	10	15	0	366	76	3.0	25	16.5	SW	29	1	4	26	8.9	26
SYRACUSE	125	1002.7	1018.0	2.2	- 5.6	- 1.6	0.8	21.1	10	-21.7	3	0	26	- 5.0	78	100	20	28	21	0	838	330	2.1	27	14.8	W	30	5	0	26	8.2	25
NORTH CAROLINA																																
ASHEVILLE	652	942.1	1020.0	8.3	- 2.2	3.1	-0.2	17.2	9	-10.0	25	0	26	- 1.1	79	60	- 32	27	6	0	20	T	1.7	35	13.0	34	24+	11	4	16	6.0	55
CAPE HATTERAS R	2	1019.6	1019.9	12.8	3.9	8.3	-0.7	22.8	10+	- 2.8	27+	0	7	4.4	78	167	51	68	12	0	T	0	2.7	33	14.8	NE	13	13	3	15	5.7	47
CHARLOTTE	224	992.2	1020.4	11.1	- 0.6	5.3	-0.7	23.3	9	- 9.4	25	0	15	- 0.6	70	66	- 26	23	9	0	T	T	0.5	33	9.4	S	10	10	7	14	5.8	64

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No. of days		Snow, Sleet				Fastest mile (1.6 kilometers)							
		Station Ω	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32.2 °C or above	Min. 0 C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb.	Mb	C.	C.	C	C	C		C				C.	%	Mm	Mm	Mm			Mm	Mm	M.p.s.		M p s							%
NORTH CAROLINA																																
GREENSBORO	273	988.2	1020.7	10.0	- 0.6	4.7	0.3	22.8	9	-11.1	25	0	18	- 0.6	72	57	- 22	20	7	0	66	51	0.5	30	10.3	NW	20	10	6	15	5.9	55
RALEIGH	132	1004.4	1020.6	10.6	0.6	5.5	0.0	22.2	8	- 8.9	25	0	17	- 0.6	69	66	- 10	24	10		25	25	0.5	32	11.6	S	13	9	11	11	5.7	53
WILMINGTON	9	1019.3	1020.8	15.0	2.2	8.8	-0.2	26.1	8	- 3.9	4	0	15	2.8	69	87	1	37	11	0	T	T	0.9	34	13.0	SW	29	12	5	14	5.5	56
NORTH DAKOTA																																
BISMARCK	502	955.7	1019.4	- 2.2	-15.6	- 8.9	-1.1	7.8	20+	-31.7	10	0	31	-13.3	71	5	- 5	2	5	0	64	51	0.3	33	15.2	NW	6	8	7	16	6.5	57
FARGO	273	985.4	1020.3	- 5.6	-16.7	-11.2	-1.4	5.0	17	-28.9	26	0	31	-14.4	75	13	- 2	5	7	0	86	76	0.5	26	17.9	W	6	5	13	13	6.9	52
WILLISTON	579			- 2.8	-12.8	- 7.8	0.9	8.9	18	-28.3	10	0	31			8	- 4	7	5		44	76			14.8	NW	5	9	5	17	6.2	39
OHIO																																
AKRON	368	973.6	1019.5	2.8	- 3.9	- 0.6	0.3	19.4	8	-16.7	3	0	25	- 3.9	78	54	- 4	17	13	0	173	152	2.4	24	10.7	21	8+	2	5	24	8.5	
CINCINNATI OBS	232			4.4	- 2.2	1.2	-0.6	21.1	8	-12.8	3	0	21			84	14	35	9		25	25			9.4	SW	29					28
CLEVELAND	237	989.5	1019.5	2.2	- 3.9	- 0.8	0.3	19.4	8	-15.6	2	0	25	- 3.3	83	72	13	22	19	1	277	152	3.0	23	13.0	W	29+	2	1	28	9.1	21
COLUMBUS	247	989.8	1020.7	3.9	- 3.3	0.3	0.6	20.6	8	-17.8	3	0	24	- 3.3	78	85	25	36	11	0	163	127	1.4	23	13.0	W	29+	4	4	23	7.9	32
DAYTON	305	983.1	1020.2	4.4	- 3.3	0.6	0.9	18.9	8	-16.1	3	0	21	- 4.4	71	71	11	26	10	0	191	152	1.5	23	13.0	SW	29	5	3	23	7.9	40
MANSFIELD	395			1.7	- 5.0	- 1.7	-0.1	18.9	8	-17.8	3	0	27	- 5.6	75	65	- 2	31	12	0	160	102	2.7	24				3	4	24	8.4	
TOLEDO	206	993.6	1019.8	1.1	- 5.6	- 2.4	-0.3	18.3	8	-18.3	4	0	27	- 5.6	79	130	81	53	17	0	345	127	2.3	25	14.8	W	29	3	6	22	8.1	24
YOUNGSTOWN	359	975.3	1019.4	1.1	- 5.6	- 2.1	-0.6	18.3	8	-17.2	3	0	26	- 5.0	81	63	- 5	18	18	0	318	127	2.4	24	13.4	27	29	2	4	25	8.6	
OKLAHOMA																																
OKLAHOMA CITY	390	971.6	1019.1	9.4	- 2.8	3.2	-1.4	26.7	7	-12.2	24	0	23	- 3.3	67	11	- 24	6	3	0	15	25	0.4	35	15.2	N	23	14	3	14	5.5	65
TULSA	198	994.6	1019.6	9.4	- 3.3	2.9	-1.3	26.7	7	-15.6	24	0	24	- 3.3	71	64	23	42	6	0	79	51	0.4	23	14.3	SW	6	14	6	11	5.0	60
OREGON																																
ASTORIA	2	1013.5	1014.3	10.0	5.0	7.5	1.3	13.3	15+	- 1.7	27	0	3	5.0	85	357	11	59	29	5	0	0	2.6	17	13.9	18	12	0	4	27	9.4	
BURNS U	1265	873.4	1019.6	2.8	- 6.1	- 1.8	-0.2	9.4	1	-17.8	27	0	31	- 4.4	82	50	14	11	14		249	102	0.6	28				5	4	22	7.7	
EUGENE	109	1003.4	1016.9	10.6	4.4	7.3	1.8	15.6	12	0.6	31+	0	0	5.0	87	211	43	64	19	0	0	0	3.0	18	12.1	19	4	0	1	30	9.4	
MEACHAM	1234	875.0	1018.3	0.6	- 3.3	- 1.4	-0.2	5.6	1	- 8.3	9	0	29	- 4.4	83	149	34	52	18		714	254	1.0	15				1	2	28	9.5	
MEDFORD	396	970.5	1019.2	7.8	1.7	4.8	2.1	14.4	12+	- 3.9	22	0	8	2.2	86	71	- 15	36	12	0	T	T	0.3	18	10.3	15	13+	0	6	25	9.0	
PENDLETON	452	962.4	1017.1	8.3	1.7	5.1	2.6	15.0	16+	- 3.9	27	0	12	0.6	76	67	29	27	14	0	74	76	1.5	22	14.3	18	4	2	3	26	8.7	
PORTLAND	6	1014.9	1016.3	9.4	4.4	6.8	1.6	14.4	1	0.0	25	0	1	5.0	87	175	13	40	23	0	0	0	3.3	14	15.2	SE	22	0	0	31	9.8	09
SALEM	60	1008.8	1016.3	10.0	3.3	6.8	1.5	15.0	13	- 3.3	22	0	3	4.4	84	186	- 1	50	21	0	T	0	3.5	18	13.0	18	12+	0	1	30	9.4	
SEXTON SUMMIT R	1169	882.5	1017.0	5.6	0.0	2.8	0.1	16.7	16	- 5.0	27	0	21			140	20	45	19		500	381			17.4	27	4	3	4	24	8.5	
PACIFIC AREA																																
CANTON ISLAND	2			31.7	26.1	28.7	0.3	33.3	11	24.4	24+	7	0			8	- 57	4	5		0	0						3	18	10	6.2	
ENIWETOK	4	1008.1	1008.9	30.6	25.6	27.8	0.0	31.7	3	23.3	19+	0	0	23.3	78	98	31	36	21		0	0	8.3	7								
TAGUAC GUAM R	110			28.9	22.8	25.9	0.0	31.7	15	16.1	13	0	0			121	- 34	25	23		0	0			11.6	E	30					52
JOHNSTON	2	1012.9	1013.4	27.8	23.3	25.6	-0.1	29.4	3	21.1	18+	0	0	20.6	74	31	- 45	7	18	0	0	0	6.4	8	21.5	E	20	12	12	7	4.9	61
KOROR R	29	1004.1	1007.8	31.1	24.4	27.6	0.4	32.8	16	22.8	22+	5	0	23.9	85	379	82	103	26	4	0	0	2.2	8	11.6	SE	7	0	1	30	9.9	52
KWAJALEIN	2	1007.8	1008.5	29.4	23.9	26.8	-0.3	30.6	28+	22.2	2	0	0	23.9	82	535	308	99	29	0	0	0	7.9	7	16.5	9	11	1	4	26	8.8	
MAJURO	3	1007.8	1008.2	29.4	25.0	27.2	0.3	31.1	2	22.2	7	0	0	23.9	81	494	211	105	27	6	0	0	5.0	8	15.6	E	17	1	6	24	8.4	36
MARCUS ISLAND	6	1013.2	1015.1	26.1	21.1	23.6	-0.7	28.3	21+	18.9	12	0	0	18.9	75	44	- 36	19	11	0	0	0	0.9	5	16.5	W	14	11	10	10	5.5	60
PAGO PAGO	4	1008.8	1009.1	30.0	24.4	26.9		31.7	31	22.2	17+	0	0	23.3	83	412		121	21	3	0	0	4.9	11	12.1	E	10+	1	8	22	8.0	22
PONAPE R	37	1002.0	1007.6	30.0	23.9	26.9	0.1	32.2	14	21.1	16	1	0	23.9	84	460	- 6	90	29	4	0	0	3.1	9	8.9	NE	30	1	2	28	9.3	45
TRUK MOEN ISLAND	2	1007.5	1007.8	30.0	24.4	27.1	0.0	31.7	17	21.7	6	0	0	23.9	83	463	126	159	27	3	0	0	3.7	8	12.5	SE	6	0	3	28	9.5	73
YAP R	19	1006.1	1007.9	29.4	23.9	26.9	-0.3	31.1	26	22.2	24+	0	0	23.9	84	16	- 30	9	7	0	0	0	5.5	7	11.2	3	1	12	17	2	4.5	
WAKE	3	1013.9	1014.1	27.8	23.3	25.6	-0.4	28.9	18+	22.2	16+	0	0	18.9	69	253	- 5	42	22	2	0	0	3.5	6	11.6	NE	31	1	2	28	9.3	39
PENNSYLVANIA																																
ALLENTOWN	118	1005.1	1019.7	3.3	- 5.0	- 0.9	-0.6	17.8	10	-15.6	28	0	27	- 6.1	70	101	18	33	13	0	721	432	2.3	28	15.6	31	24	6	7	18	7.0	
ERIE	223	991.2	1018.7	3.3	- 2.8	0.2	0.9	20.0	8	-14.4	4	0	24	- 4.4	71	110	43	23	20	0	798	406	3.0	23	12.5	26	29	0	4	27	9.5	
HARRISBURG	103	1006.8	1020.1	3.9	- 3.9	- 0.2	-0.7	19.4	10	-11.7	28	0	25	- 5.0	72	78	4	22	10	0	505	203	1.9	30	12.5	W	25	4	6	21	7.5	47
PHILADELPHIA	2	1018.6	1019.6	6.1	- 2.2	1.9	0.9	21.7	10	-12.2	28	0	23	- 4.4	65	110	35	28	10	1	478	305	2.1	31	14.3	N	24	6	13	12	6.3	52
PITTSBURGH	347	974.3	1019.9	3.3	- 3.9	- 0.3	0.4	20.0	8	-17.2	3	0	26	- 5.0	71	43	- 18	14	15	0	198	152	2.4	25	13.4	25	29	2	6	23	8.5	20
READING U	81			5.6	- 1.7	1.8	0.3	21.7	9	-10.6	4	0	22			96	16	28	10		688	406			17.9	W	25	4	12	15	6.4	47
SCRANTON	283	984.1	1019.5	2.2	- 3.9	- 0.8	0.6	18.3	10	-14.4	4	0	26	- 5.0	75	51	- 12	12	12	0	450	203	1.2	26	11.6	S	10	3	6	22	7.9	34
WILLIAMSPORT	160	1000.0	1019.9	2.8	- 5.0	- 1.1	-0.2	18.3	10	-14.4	4	0	26	- 3.9	82	49	- 28	14	12	0	295	102	1.7	29	10.3	29	11	3	6	22	8.1	
RHODE ISLAND																																
BLOCK ISLAND	34			5.6	- 0.6	2.4	0.2	13.3	9	- 8.3	4	0	21			63	- 28	21	11		81	51						7	10	14	6.4	
PROVIDENCE	16	1015.2	1017.7	5.0	- 4.4	0.4	0.4	18.3	9	-11.1	28+	0	25	- 5.0	68	77	- 15	31	9	1	183	127	2.4	30	16.5	26	25	8	12	11	5.8	58

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure		Temperature											Average relative humidity	Precipitation							Wind					No. of days (sunrise to sunset)			Sky cover, tenths (sunrise to sunset)	Possible sunshine
												No. of days							No of days		Snow, Sleet				Fastest mile (1 6 kilometers)							
		Station O	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	Max 32 2 °C or above	Min. 0 °C or lower	Average dew point		Total	Departure from normal	Greatest in 24 hours	25 mm or more	With thunderstorms	Total	Maximum depth on ground	Resultant speed	Resultant direction	Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10		
	M.	Mb	Mb.	C.	C.	C	C	C		C.				C.	%	Mm.	Mm.	Mm.			Mm	Mm.	M p.s.		M.p.s							%
SOUTH CAROLINA																																
CHARLESTON	12	1018.6	1020.4	16.1	2.8	9.4	-0.6	26.1	8	- 4.4	25	0	11	2.8	69	96	23	30	11	0	0	0	0.8	30	18.8Y	S	29	8	7	16	6.4	32
CHARLESTON U	3			14.4	6.1	10.3	-0.6	23.9	8	- 2.8	4	0	2			81	11	23	10		0	0			13.0	W	24					
COLUMBIA	66	1012.2	1020.5	14.4	1.1	7.6	-0.4	26.1	9	- 6.7	25	0	17	1.7	73	84	- 5	29	9	0	T	0	0.5	29	9.4	25	29+	9	10	12	5.8	55
GNVLE SPARTANBURG	292	985.4	1021.0	11.7	0.6	6.1	-0.3	21.1	9	- 8.9	25	0	14	- 0.6	66	80	- 22	42	10	0	T	T	0.7	32	10.3	W	2	10	6	15	6.0	52
SOUTH DAKOTA																																
ABERDEEN	395	970.9	1019.9	- 0.6	-13.3	- 7.1	0.7	11.1	17	-23.3	10	0	31	-11.7	72	1	- 15	1	1	0	18	T	0.6	32	13.0	16	3	11	5	15	6.3	
HURON	391	971.2	1019.9	0.0	-12.2	- 6.2	1.1	13.3	16	-25.0	10	0	31	-10.0	75	2	- 13	1	4	0	43	25	0.4	26	14.8	SE	5	6	8	17	7.1	58
RAPID CITY	964	903.5	1018.0	2.8	- 8.3	- 2.9	-0.3	15.6	16	-18.3	22	0	30	- 7.8	73	20	12	7	10	0	216	102	0.8	32	21.9	NW	8	9	4	18	6.3	53
SIOUX FALLS	432	966.1	1019.9	- 1.1	-13.3	- 7.0	-0.9	9.4	19+	-27.8	11	0	31	-10.6	74	17	- 2	9	5	0	236	152	0.8	34	13.9	16	5	9	4	18	6.7	
TENNESSEE																																
BRISTOL	459	965.1	1020.9	8.3	- 1.7	3.2	-0.3	22.8	9+	-12.2	26+	0	23	- 1.7	74	78	- 4	34	7	0	147	76	0.4	30	8.0	25	29+	7	7	17	6.9	
CHATTANOOGA	204	995.6	1020.9	10.0	- 0.6	4.7	-1.2	20.0	9	- 9.4	25	0	16	0.6	80	91	- 41	41	11	0	T	T	0.3	31	10.7	S	9	5	7	19	7.4	42
KNOXVILLE	299	984.4	1020.6	8.9	0.0	4.4	-0.9	22.2	9	-10.0	25	0	18	0.6	78	68	- 40	29	10	0	79	76	0.5	33	10.3	W	10	5	8	18	7.4	24
MEMPHIS	79	1010.5	1020.9	10.0	0.6	5.2	-0.6	23.3	7	-10.6	24	0	17	0.0	71	132	7	52	11	2	18	T	0.3	11	14.8	SE	27	6	4	21	7.6	37
NASHVILLE	180	998.3	1020.7	9.4	0.0	4.6	-0.7	20.0	8	-14.4	25	0	17	- 0.6	70	145	38	64	10	0	109	102	1.0	10	11.6	S	8	4	6	21	7.6	43
OAK RIDGE	276			8.3	- 1.1	3.5	-1.0	22.8	9	-10.6	25	0	20			94	- 55	40	10		112	102			14.8Y		9	6	6	19	7.3	
TEXAS																																
ABILENE	537	955.3	1018.1	15.0	- 0.6	7.0	-0.8	28.3	7	-12.8	29	0	19	- 3.9	52	1	- 31	1	4	0	T	0	1.0	24	14.3	N	23+	12	12	7	4.4	71
AMARILLO	1098	890.6	1016.8	10.0	- 6.1	1.9	-2.1	22.8	7	-14.4	28	0	27	- 8.3	54	5	- 15	4	3	0	46	51	1.4	28	17.9	W	7	16	7	8	4.2	72
AUSTIN	182	997.0	1017.1	17.2	3.9	10.6	-0.9	28.9	6	- 6.1	24	0	9	2.8	64	22	- 42	12	6	1	0	0	0.8	34	17.0	NW	22	9	9	13	5.9	53
BROWNSVILLE	6	1017.6	1018.0	21.7	10.6	16.2	-1.0	28.9	8	- 1.1	12	0	2	10.6	71	17	- 26	13	6	1	T	0	0.8	16	17.0	S	27	12	6	13	5.6	52
CORPUS CHRISTI	12	1016.9	1018.5	20.6	8.3	14.6	-0.6	28.9	22+	- 1.7	13+	0	4	7.8	68	5	- 48	4	3	1	0	0	1.2	8	15.2	NW	23+	11	6	14	5.7	50
DALLAS	147	1001.4	1019.2	13.3	2.2	7.7	-1.2	27.8	6	- 8.9	24	0	13	1.7	72	27	- 40	13	5	2	T	T	0.1	15	15.2	NW	22	8	5	18	6.4	45
DEL RIO	313	981.7	1018.6	18.3	2.8	10.5	-0.8	27.8	21	- 5.0	13+	0	13	- 4.4	42	1	- 20	1	1	0	0	0	0.7	1	12.5	31	9	15	7	9	4.1	
EL PASO	1194	883.2	1017.5	14.4	- 2.8	5.8	-0.9	22.8	6	-10.0	29	0	24	- 8.9	37	1	- 11	1	1	0	T	T	0.8	28	21.0	SW	7	14	14	3	3.6	86
FORT WORTH	164	998.3	1019.3	13.3	1.7	7.4	-1.3	28.9	6	- 9.4	24	0	14	1.7	71	30	- 30	13	6	1	T	T	0.2	32	14.3	34	23	9	6	16	6.4	
GALVESTON U	2			16.7	10.0	13.3	-0.7	23.3	8+	- 1.1	24	0	1			51	- 48	19	9		0	0			13.4	N	23					48
HOUSTON U	12			17.2	7.8	12.7	-0.9	26.7	6	- 2.8	24	0	5			46	- 58	14	9		0	0										
HOUSTON	15	1017.3	1019.3	18.3	5.7	12.3	-0.8	27.2	8+	- 3.9	24	0	8	7.2	75	39	- 72	14	9	1	0	0	0.6	3	13.9	33	23	5	9	17	7.0	43
LUBBOCK	992	903.8	1017.6	12.8	- 6.1	3.3	-1.7	25.0	6	-15.6	28	0	27	- 7.8	52	1	- 16	1	2	0	T	T	1.6	29	14.8	25	7	17	9	5	3.5	
MIDLAND	869	917.0	1017.2	15.0	- 2.8	6.3	-1.4	26.1	7	-11.1	12	0	25	- 7.8	43	1	- 16	1	1	0	0	0	1.0	27	14.3	31	9	21	5	5	3.0	
PORT ARTHUR	5	1019.0	1019.6	17.2	6.7	11.9	-0.7	26.7	8	- 3.3	13	0	8	8.3	82	86	- 43	35	8	3	0	0	0.9	8	15.2	NW	8	6	8	17	7.1	39
SAN ANGELO	580	950.6	1018.5	16.1	- 1.7	7.3	-1.4	28.3	7	-12.2	29	0	20	- 4.4	48	T	- 22	T	0	0	0	0	1.4	25	13.0	35	9	20	5	6	3.3	
SAN ANTONIO	240	990.5	1019.0	17.8	2.8	10.4	-1.7	27.2	7	- 7.2	29+	0	12	2.8	65	11	- 33	9	5	1	0	0	1.0	36	14.8	N	10	10	10	11	5.3	61
VICTORIA	32	1014.9	1019.0	19.4	6.7	12.9	-1.1	27.8	6	- 3.3	14+	0	7	7.2	72	31	- 35	22	7	2	0	0	0.8	4	19.7Y	N	23	8	6	17	6.4	
WACO	153	1001.0	1019.5	15.0	2.2	8.7	-1.5	27.8	6	- 9.4	24	0	10	3.3	75	11	- 58	6	5	3	0	0	0.4	24	13.9	32	23	9	7	15	6.0	
WICHITA FALLS	303	981.4	1018.9	12.2	- 1.7	5.2	-1.8	30.6	7	- 9.4	24	0	21	- 2.2	66	7	- 30	3	4	0	T	0	0.3	34	16.5	36	9	11	4	16	5.7	
UTAH																																
MILFORD	1533	848.0		2.2	- 8.9	- 3.3	-1.2	13.9	1	-28.9	28	0	29			62	44	25	10		406	229						1	11	19	8.0	
SALT LAKE CITY	1286	874.4	102[illegible].3	2.2	- 5.0	- 1.6	-0.5	15.0	2	-12.8	29+	0	29	- 5.0	80	22	- 10	8	6	0	221	102	0.5	16	16.5	SE	3	1	5	25	8.8	23
WENDOVER	1291			0.0	- 7.2	- 3.4	-2.2	11.1	3	-12.8	30+	0	29			20	13	13	9		173	76										
VERMONT																																
BURLINGTON	101	1004.4	1017.5	- 0.5	- 9.4	- 4.8	1.1	16.1	11+	-23.3	31	0	27	- 7.8	76	72	18	18	13	0	919	381	0.7	20	15.2	S	16	2	7	22	8.3	49
VIRGINIA																																
LYNCHBURG	27[illegible]	985.8		7.8	- 1.7	3.1	-0.6	21.7	9	-10.6	27+	0	23	- 2.8	68	81	1	27	9	0	455	254	1.0	27	10.3	W	29+	9	8	14	6.1	47
NORFOLK	7	1019.3	1020.3	9.4	1.1	5.2	-0.6	22.2	10	- 5.6	4	0	16	- 0.6	67	80	10	33	9	1	25	25	1.4	32	18.8	E	13	9	3	19	6.6	56
RICHMOND	[illegible]	1014.6	1020.8	8.9	- 2.2	3.3	-0.7	23.9	10	-15.6	27	0	22	- 1.1	75	78	3	29	9	0	310	127	0.8	33	10.7	N	24	10	4	17	6.3	53
ROANOKE	350	977.3	1020.2	7.2	- 1.1	3.2	-0.3	21.1	9+	-11.1	4	0	21	- 4.4	59	83	7	25	7	0	574	229	1.5	29	13.4	30	25	7	10	14	6.1	
WALLOPS ISLAND	3	1020.7	1020.8	5.7	- 1.1	2.8		15.0	11	- 8.3	4	0	19	- 1.1	76	72		27	10	0	38	25	1.9	31	21.5	ENE	13	7	12	12	6.2	
WASHINGTON																																
OLYMPIA	59	1007.5	1014.7	8.3	2.8	5.6	0.8	12.2	1	- 3.9	26	0	8	5.0	94	293	63	64	27	0	43	25	3.6	20	13.9	18	4	1	1	29	9.5	
QUILLAYUTE	55	1004.4	1012.0	8.9	4.4	6.4	1.3	12.2	12	- 1.7	26+	0	5	6.1	96	596	169	62	27	3	T	T	2.5	16	12.1	S	12+	1	2	28	9.2	09
SEATTLE TACOMA	122	997.6	1014.3	8.3	4.4	6.4	1.5	12.2	1	- 1.7	27	0	3	3.9	86	211	51	54	25	0	61	51	2.5	18	13.9	21	29	0	0	31	9.7	07
SPOKANE	718	930.6	1016.1	3.3	- 2.2	0.8	1.8	10.6	18	-13.9	8	0	23	- 1.7	85	75	13	19	19	0	229	127	2.0	18	13.9	SW	5	1	1	29	9.2	14
STAMPEDE PASS	1205			0.6	- 2.8	- 1.2	1.6	5.6	18+	- 7.8	9	0	26			405	- 6	65	29		1910	1041						0	0	31	9.9	
WALLA WALLA	28[illegible]			8.9	2.8	5.8	2.6	16.7	16	- 3.3	23	0	11			66	19	26	13		10	T			13.4	S	4	1	1	29	9.3	07

See footnotes at end of table

CLIMATOLOGICAL DATA

METRIC UNITS

State and Station	Elevation (ground)	Pressure: Station Ø	Pressure: Sea level	Temperature: Average maximum	Temperature: Average minimum	Temperature: Average	Temperature: Departure from normal	Temperature: Highest	Date	Temperature: Lowest	Date	No. of days: Max 32.2 °C or above	No. of days: Min 0 C or lower	Average dew point	Average relative humidity	Precipitation: Total	Precipitation: Departure from normal	Precipitation: Greatest in 24 hours	No. of days: 25 mm. or more	No. of days: With thunderstorms	Snow, Sleet: Total	Snow, Sleet: Maximum depth on ground	Wind: Resultant speed	Wind: Resultant direction	Fastest mile (1.6 kilometers): Speed	Fastest mile: Direction	Fastest mile: Date	No. of days (sunrise to sunset): Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine
	M.	Mb.	Mb.	C.	C.	C.	C	C.		C.				C.	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.		M.p.s.							%
WASHINGTON																																
YAKIMA	321	977.3	1016.7	6.7	- 1.7	2.4	2.7	11.7	20+	-10.0	27	0	24	- 1.1	80	24	- 4	8	11	0	137	76	1.3	27	12.5	19	4	4	3	24	8.2	
WEST INDIES																																
SAN JUAN P.R.	4	1012.2	1014.4	27.2	22.8	25.1	0.5	29.4	1	20.6	14	0	0	20.6	76	158	19	39	21	0	0	0	3.6	7	15.2	NE	5	0	19	12	6.0	56
SWAN ISLAND	9			27.8	23.3	25.4	-0.5	28.9	29	21.1	21+	0	0			37	-106	21	11		0	0						12	10	9	5.0	
WEST VIRGINIA																																
BECKLEY	763	929.2	1021.1	5.0	- 3.9	0.4		21.1	9	-13.9	3	0	25	- 3.9	76	104		36	11	1	460	229	1.6	24	13.0	26	29	4	6	21	7.5	
CHARLESTON	286	985.4	1020.6	6.7	- 2.8	1.9	-0.9	24.4	9	-15.0	27	0	23	- 2.8	73	64	- 18	23	10	0	152	127	1.0	24	10.3	23	29	4	7	20	7.7	
ELKINS	600	947.2	1020.6	5.0	- 5.6	- 0.2	-0.7	23.9	8	-20.6	4	0	25	- 3.9	78	62	- 16	15	12	0	361	178	1.5	27	11.6	27	29	2	10	19	8.0	
HUNTINGTON	252	989.8	1020.8	6.1	- 1.7	2.3	-0.7	22.8	8	-12.8	27	0	22	- 2.2	76	71	0	28	10	0	127	102	0.8	22	10.3	24	29	5	5	21	7.6	
PARKERSBURG U	187			5.6	- 2.2	1.8	-0.3	22.2	8	-12.8	3	0	23			59	- 13	18	11		69	25			12.5	SW	8					31
WISCONSIN																																
GREEN BAY	208	992.2	1018.9	- 2.2	-11.1	- 6.5	-0.9	6.7	6	-22.8	30	0	29	-11.1	68	42	12	14	7	1	302	178	1.9	29	13.4	NE	28	8	9	14	6.1	44
LA CROSSE	198	994.2	1019.8	- 0.6	-10.0	- 5.6	0.1	8.9	6	-21.1	24	0	30	- 9.4	75	30	1	17	9	0	297	254	0.6	28	9.4	20	31+	12	4	15	5.8	
MADISON	262	986.5	1019.2	- 0.6	- 9.4	- 4.9	0.6	10.6	17+	-21.1	30	0	29	- 8.3	75	67	33	37	11	2	257	229	1.1	29	13.9	E	28	9	8	14	6.2	50
MILWAUKEE	205	992.6	1018.9	- 0.6	- 7.8	- 4.2	-0.1	13.3	8	-16.7	30	0	29	- 7.8	75	59	17	15	10	2	251	203	1.8	28	17.0	E	28	11	4	16	6.2	46
WYOMING																																
CASPER	1627	835.1	1017.7	2.2	- 9.4	- 3.7	-1.1	11.1	3	-23.3	27	0	31	-10.6	61	14	2	6	8	0	300	152	6.0	23	19.7	23	5	8	7	16	6.5	
CHEYENNE	1867	809.0	1016.9	5.6	- 6.7	- 0.6	0.8	13.9	20	-15.0	29	0	27	-11.7	48	2	- 9	2	2	0	20	25	4.4	29	17.9	NW	16+	7	8	16	6.4	65
LANDER	1696	826.6	1018.7	1.7	-10.6	- 4.3	0.6	11.1	20+	-21.7	29+	0	31	-11.1	65	10	T	6	5	0	185	178	0.5	23	17.0	SW	5	5	10	16	6.8	67
SHERIDAN	1208	876.7	1018.1	2.8	-11.1	- 4.1	-0.9	16.1	16	-22.8	23	0	31	-11.7	59	21	5	10	8	0	371	203	1.0	29	18.8	NW	5	6	7	18	6.8	58

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day and may include precipitation from the last day of the previous month or with a measurable amount the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

A Maximum hourly average.
B Number of days maximum 21.1°C. or above for Alaskan Stations.
Y Peak Gust.
+ And also on an earlier date or dates.
Ø Station pressures apply to elevations shown in the "Elevations - Station Pressure" table of the annual issue of this publication.

Data in this table are obtained by conversion from data in the English Units table.

Z Sun continuously below horizon.

HEATING DEGREE DAYS

(Base 65°F.)

DECEMBER 1966

State and station	Current season		Normals
	This month	Period July through this month	July through this month
ALABAMA			
BIRMINGHAM	635	1172	1017
HUNTSVILLE	728	1283	1228
MOBILE	374	579	592
MONTGOMERY	515	858	925
ALASKA			
ANCHORAGE	1674	5192	
ANNETTE	802	2872	2981
BARROW	2401	8381	8511
BARTER ISLAN	2352	8043	8260
BETHEL	1914	5769	5667
COLD BAY	1153	4679	4236
FAIRBANKS	2643	6607	6435
JUNEAU	1188	4304	3903
KING SALMON	1736	5597	4952
KOTZEBUE	2259	6523	6654
MC GRATH	2457	6688	6386
NOME	1957	6218	6039
ST. PAUL ISLAND	1151	4755	4778
SHEMYA	979	4200	4255
YAKUTAT	1231	4741	3955
ARIZONA			
FLAGSTAFF	1089	2633	2813
PHOENIX	397	544	671
TUCSON	386	532	662
WINSLOW	983	1820	1970
YUMA	249	331	467
ARKANSAS			
FORT SMITH	770	1310	1293
LITTLE ROCK	679	1189	1317
TEXARKANA	636	972	984
CALIFORNIA			
BAKERSFIELD	572	827	821
BISHOP	771	1559	1663
BLUE CANYON	778	1888	1896
EUREKA U	472	1936	2027
FRESNO	606	910	975
LONG BEACH	265	400	496
LOS ANGELES	224	327	559
LOS ANGELES U	145	233	398
MT SHASTA R	860	2182	2186
OAKLAND	447	909	1065
RED BLUFF	506	803	926
SACRAMENTO	580	948	1033
SANDBERG R	703	1441	1403
SAN DIEGO	236	353	432
SAN FRANCISCO	489	1219	1130
SAN FRANCISCO U	417	1231	1205
SANTA CATALINA	240	548	519
SANTA MARIA	463	1083	1095
STOCKTON	555	880	1029
COLORADO			
ALAMOSA	1362	3303	3567
COLORADO SPRINGS	1099	2460	2479
DENVER	1018	2178	2414
GRAND JUNCTION	1092	1994	2242
PUEBLO	1091	2207	2116
CONNECTICUT			
BRIDGEPORT	961	1873	1974
HARTFORD	1019	2059	2307
NEW HAVEN	976	2026	2105
DELAWARE			
WILMINGTON	931	1926	1836
DIST.OF COLUMBIA			
WASH NATL AP	843	1542	1603
FLORIDA			
APALACHICOLA U	338	501	488
DAYTONA BEACH	217	308	286
FORT MYERS	105	149	133
JACKSONVILLE	346	539	466
KEY WEST	6	7	28
LAKELAND U	166	249	221
MIAMI	41	68	65
ORLANDO	169	241	270
PENSACOLA	398	621	567
TALLAHASSEE	405	628	586
TAMPA	198	290	231
WEST PALM BEACH	77	121	71
GEORGIA			
ATHENS	627	1157	1164
ATLANTA	663	1224	1185
AUGUSTA	590	1053	963
COLUMBUS	505	845	963
MACON	526	928	870
ROME	709	1374	1360
SAVANNAH	480	789	730
IDAHO			
BOISE	1039	2262	2356
IDAHO FALLS 42NW R	1541	3559	3525
IDAHO FALLS 46W R	1470	3395	3369
LEWISTON	769	1859	2215
POCATELLO	1263	2859	2731
ILLINOIS			
CAIRO U	817	1530	1504
CHICAGO O HARE	1170	2329	2483
CHICAGO MIDWAY	1116	2219	2273
MOLINE	1137	2340	2398
PEORIA	1103	2304	2291
ROCKFORD	1238	2557	2587
SPRINGFIELD	1065	2176	2082
INDIANA			
EVANSVILLE	923	1875	1788
FORT WAYNE	1116	2585	2410
INDIANAPOLIS	995	2105	2180
SOUTH BEND	1079	2312	2391
IOWA			
BURLINGTON	1110	2279	2318
DES MOINES	1239	2552	2539
DUBUQUE	1246	2712	2842
SIOUX CITY	1293	2719	2593
WATERLOO	1306	2798	2802
KANSAS			
CONCORDIA	1119	2197	2061
DODGE CITY	1110	2093	1889
GOODLAND	1160	2404	2351
TOPEKA	1053	2055	1979
WICHITA	996	1775	1785
KENTUCKY			
COVINGTON	969	2069	2018
LEXINGTON	908	1883	1804
LOUISVILLE	907	1797	1801
LOUISIANA			
ALEXANDRIA	514	846	760
BATON ROUGE	390	588	616
LAKE CHARLES	348	502	570
NEW ORLEANS	376	559	533
SHREVEPORT	570	850	821
MAINE			
CARIBOU	1354	3499	3790
PORTLAND	1181	2752	2790
MARYLAND			
BALTIMORE	905	1881	1802
MASSACHUSETTS			
BLUE HILL OBS R	1046	2218	2286
BOSTON	950	1896	1971
NANTUCKET	888	2069	1928
PITTSFIELD	1210	2831	2889
WORCESTER	1141	2520	2583
MICHIGAN			
ALPENA	1302	3176	3206
DETROIT	1090	2295	2273
DETROIT M WAYNE CO	1119	2383	2275
DETROIT WILLOW RUN	1182	2661	2301
FLINT	1215	2828	2550
GRAND RAPIDS	1102	2366	2614
HOUGHTON LAKE	1295	3162	
LANSING	1209	2692	2573
MARQUETTE U	1267	3121	3111
MUSKEGON	1106	2472	2410
SAULT STE MARIE	1421	3507	3378
MINNESOTA			
DULUTH	1589	3931	3854
INTERNATIONAL FALLS	1801	4351	4207
MINNEAPOLIS	1446	3249	3215
ROCHESTER	1407	3193	3162
ST CLOUD	1543	3567	3414
MISSISSIPPI			
JACKSON	581	1006	851
MERIDIAN	513	919	938
VICKSBURG U	539	870	794
MISSOURI			
COLUMBIA	946	1817	1923
KANSAS CITY	931	1643	1776
ST JOSEPH	1085	1984	2098
ST LOUIS	931	1879	1874
SPRINGFIELD	959	1824	1745
MONTANA			
BILLINGS	1104	2597	2726
GLASGOW	1422	3454	3526
GREAT FALLS	1143	2948	2972
HAVRE	1444	3527	3414
HELENA	1157	2833	3252
KALISPELL	1161	3275	3384
MILES CITY	1353	3194	2956
MISSOULA	1097	2826	3384
NEBRASKA			
GRAND ISLAND	1192	2472	2501
LINCOLN U	729	1157	1108
NORFOLK	1275	2755	2624
NORTH PLATTE	1250	2725	2620
OMAHA	1132	2347	2346
SCOTTSBLUFF	1165	2603	2601
VALENTINE	1237	2971	2858
NEVADA			
ELKO	1427	2941	2950
ELY	1169	2783	3020
LAS VEGAS	578	911	1082
RENO	951	2413	2651
WINNEMUCCA	1059	2499	2747
NEW HAMPSHIRE			
CONCORD	1196	2668	2800
MT WASHINGTON OBS	1595	5742	5899
NEW JERSEY			
ATLANTIC CITY	888	1859	1719
ATLANTIC CITY U	835	1608	1597
NEWARK	876	1705	1842
TRENTON U	876	1754	1821
NEW MEXICO			
ALBUQUERQUE	942	1745	1751
CLAYTON	1012	[illegible]	1980
RATON	1086	2342	2467
ROSWELL	788	1480	1599
SILVER CITY	796	1463	1443
NEW YORK			
ALBANY	1163	2562	2568
BINGHAMTON	1186	2723	2753
BUFFALO	1124	2544	2570
NEW YORK U	901	1709	1705
J.F. KENNEDY	904	1772	1781
NEW YORK LA GUARDIA	866	1630	1665
ROCHESTER	1053	2356	2453
SYRACUSE	1104	2428	2478
NORTH CAROLINA			
ASHEVILLE	838	1925	1821
CAPE HATTERAS R	562	935	872
CHARLOTTE	724	1394	1259
GREENSBORO	751	1440	1516
RALEIGH	709	1361	1351
WILMINGTON	530	863	886
NORTH DAKOTA			
BISMARCK	1517	3726	3407
FARGO	1642	3853	3534
WILLISTON	1455	3629	3571
OHIO			
AKRON	1044	2340	2282
CINCINNATI OBS	947	1981	1835
CLEVELAND	1063	2353	2349
COLUMBUS	999	2222	2190
DAYTON	984	2169	2135
MANSFIELD	1108	2527	2420
TOLEDO	1150	2493	2469
YOUNGSTOWN	1130	2587	2432
OKLAHOMA			
OKLAHOMA CITY	837	1347	1443
TULSA	859	1450	1485
OREGON			
ASTORIA	595	1985	2101
BURNS U	1116	2714	2754
EUGENE	611	1589	1867
MEACHAM	1096	3151	3085
MEDFORD	749	1762	1999
PENDLETON	736	1736	2056
PORTLAND	635	1610	1834
SALEM	637	1684	1840
SEXTON SUMMIT R	861	2438	2316
PENNSYLVANIA			
ALLENTOWN	1070	2309	2181
ERIE	1006	2236	2295
HARRISBURG	1024	1997	2001
PHILADELPHIA	908	1891	1936
PITTSBURGH	1035	2293	2278
PITTSBURGH U	975	2081	2056
READING U	911	1860	1847
SCRANTON	1063	2327	2451
WILLIAMSPORT	1075	2514	2285
RHODE ISLAND			
BLOCK ISLAND	883	1878	1897
PROVIDENCE	994	2125	2167
SOUTH CAROLINA			
CHARLESTON	498	829	812
CHARLESTON U	440	687	669
COLUMBIA	596	1074	1006
GNVLE-SPARTANBURG	675	1277	1213
SOUTH DAKOTA			
ABERDEEN	1409	3422	3261
HURON	1362	3250	3140
RAPID CITY	1180	2830	2749
SIOUX FALLS	1406	3159	3007
TENNESSEE			
BRISTOL	843	1702	1688
CHATTANOOGA	756	1474	1327
KNOXVILLE	767	1480	1415
MEMPHIS	732	1312	1293
NASHVILLE	763	1454	1415
OAK RIDGE	820	1634	1534
TEXAS			
ABILENE	633	950	1051
AMARILLO	908	1598	1590
AUSTIN	453	593	644
BROWNSVILLE	185	237	215
CORPUS CHRISTI	267	340	340
DALLAS	606	869	907
DEL RIO	434	553	643
EL PASO	695	1130	1146
FORT WORTH	627	888	925
GALVESTON U	298	377	408
HOUSTON U	344	453	453
HOUSTON	359	485	496
LUBBOCK	827	1291	1449
MIDLAND	663	1071	1060
PORT ARTHUR	383	544	558
SAN ANGELO	614	933	922
SAN ANTONIO	456	644	598
VICTORIA	327	427	426
WACO	557	735	765
WICHITA FALLS	723	1041	1112
UTAH			
MILFORD	1205	2465	2550
SALT LAKE CITY	1101	2271	2431
WENDOVER	1206	2412	2333
VERMONT			
BURLINGTON	1285	2884	3079
VIRGINIA			
LYNCHBURG	844	1680	1636
NORFOLK	725	1375	1242
RICHMOND	833	1639	1529
ROANOKE	837	1732	1654
WALLOPS ISLAND	859	1640	
WASHINGTON			
OLYMPIA	700	2198	2148
QUILLAYUTE	656	2340	2340
SEATTLE TACOMA	658	1912	2054
SPOKANE	975	2496	2656
STAMPEDE PASS R	1081	3707	3844
WALLA WALLA U	692	1616	1921
YAKIMA	880	1972	2473
WEST VIRGINIA			
BECKLEY	993	2291	
CHARLESTON	910	1777	1774
ELKINS	1027	2488	2290
HUNTINGTON	889	1856	1761
PARKERSBURG U	920	1970	1835
WISCONSIN			
GREEN BAY	1377	3162	2993
LA CROSSE	1325	2825	2884
MADISON	1290	2988	2973
MILWAUKEE	1249	2792	2863
WYOMING			
CASPER	1225	2865	2849
CHEYENNE	1049	2573	2828
LANDER	1261	3038	3104
SHERIDAN	1244	3075	2962

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

STORM SUMMARY

DECEMBER 1966

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ø ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE		DEATHS	INJURIES	†DAMAGE	
								PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS			PROP-ERTY	CROPS
Alabama *																													
Alaska										0	10	5	0																
Arizona *																													
Arkansas *																													
California																										6	25	7	4
Colorado *																													
Connecticut										0	0	3	0													0	0	4	0
Delaware *																													
Florida *																													
Georgia	1	1	0	0	3																								
Hawaii																										0	1	2	
Idaho											2	4																	
Illinois *																													
Indiana	2	1	0	1	4																								
Iowa *																													
Kansas																		0	0	?	0								
Kentucky																		?	?	?				?	?				
Louisiana *																													
Maine										0	0	4	0																
Maryland *																													
Massachusetts										0	0	5	0					0	0	3	0								
Michigan																						0	0	?	0				
Minnesota																		0	0	4	0								
Mississippi *																													
Missouri	7	1	0	2	5																								
Montana *																													
Nebraska *																													
Nevada										0	0	3	0													1	2	6	4
New Hampshire										0	0	4	0																
New Jersey																				5									
New Mexico	1	1	0	0	5																								
New York																		2										4	
North Carolina *																													
North Dakota *																													
Ohio *																													
Oklahoma																		1	0	?	0								
Oregon *																													
Pacific Area *																													
Pennsylvania														0	0	4	0												
Puerto Rico *																													
Rhode Island										0	0	3	0																
South Carolina *																													
South Dakota *																													
Tennessee																						0	0	3	0	0	0	L?	0
Texas *																													
Utah																										0	0	6	6
Vermont *																													
U.S. Virgin Is. *																													
Virginia *																													
Washington *																													
West Virginia *																													
Wisconsin *																													
Wyoming *																													

L Local flooding

* No occurrence of storms or unusual weather phenomena.
‡ Includes heavy sleet storm.
# Freezing drizzle and freezing rain, commonly known as glaze.
ø For breakdown of "All Others", and for detailed listing of other storms, see the U. S. Weather Bureau monthly publication STORM DATA.

† Storm damages are placed in categories varying from 1 to 9 as follows:

1	Less than $50
2	$50 to $500
3	$500 to $5,000
4	$5,000 to $50,000
5	$50,000 to $500,000
6	$500,000 to $5,000,000
7	$5,000,000 to $50,000,000
8	$50,000,000 to $500,000,000
9	$500,000,000 to $5,000,000,000

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS

DECEMBER 1966

Elmer R. Nelson, Office of Hydrology

Severe flooding occurred in southern California during December. Flooding along the Kaweah, Tule, and Kern Rivers was the highest of record. The peak flow of the Tule River at Success Dam was more than twice the previous record and on the Kern River at Isabella Reservoir about 2.5 times its previous record. Preliminary estimates of damage on the Kaweah, Tule, and Kern Rivers were placed at $16.7 million. The total flood damage in the Salinas Basin was estimated at $2 million.

Major flooding occurred in northern Arizona, southern Nevada, and southwestern Utah. Flooding on the Virgin River was one of the largest floods on record.

ST. LAWRENCE DRAINAGE

Lake Erie.--Heavy rains, with heavy thunderstorm activity, from the 7th to the 10th caused 3 to 7 feet of overflow in the Maumee River Basin in Indiana and Ohio. The rainfall on the 7th and 8th totalled around 5 inches and caused a rapid rise of the Maumee River to above flood stage. Many homes in the River Haven area between Ft. Wayne and New Haven, Ind., were surrounded by water, but only minor damage resulted. Several families were evacuated and household contents were protected. At Grand Rapids, Ohio, 75% of the homes (with basements) experienced flooding due to the downpour. By noon of the 9th, several stores moved or protected merchandise and more than a dozen families were evacuated from their homes. Many thousands of dollars damage resulted to roads and dikes. At Lima, Ohio, two persons lost their lives in the Ottawa River while trying to drive their car through the swollen stream. In addition to river overflow, the heavy showers caused surface and basement flooding in many cities throughout the area.

ATLANTIC SLOPE DRAINAGE

Heavy rainfall over New Jersey on the 29th plus partial melting of snow cover, varying from 6 inches to nearly 2 feet, caused some flash flooding of small streams. Larger streams crested at 3/4 bankfull or slightly above. Flows in these streams remained high for several days.

The Lumber River at Lumberton, N. C., rose slowly to above flood stage on the 30th. Light overflow continued into January. No damage or inconvenience resulted from the flooding.

MISSISSIPPI SYSTEM

Upper Mississippi System.--A period of general and rather heavy rain (2 to over 6 inches) over Illinois, beginning on the 4th and continuing to the 8th caused flooding on the Sangamon and Kaskaskia Rivers. The Sangamon River equalled flood stage at Monticello, Ill., on the 10th and 11th and exceeded flood stage at Riverton, Ill., from the 8th to the 18th cresting on the 12th 5.6 feet above flood stage. The Kaskaskia River exceeded flood stage from 4 to 9 feet in the reach from Shelbyville to Carlyle Dam, Ill., between the 8th and 14th. Because of the season of the year, flood damage was limited mostly to winter grains and pastures in bottom-land areas.

Navigation along the Mississippi River ended at St. Paul, Minn., on the 4th, at La Crosse, Wis., on the 7th and at Guttenberg, Iowa, on the 8th.

Missouri Basin.--High water was reported along the Yellowstone River in Montana during December due to icejams. At Miles City, the river reached a level of 11.9 feet, 1.1 feet below flood stage. The river remained within its banks at all points.

Minor flooding was reported along the main stem of the Missouri River in North Dakota on several days during the month due to ice action. Only a few acres of private land was inundated. The amount of damage was insignificant. The main stem did not freeze over in the reach below the North Dakota-South Dakota state line. Ice increased and developed downstream, becoming heavy by the end of the month, with 50% coverage as far as St. Charles, Mo., near the mouth. Blocking action developed the night of the 28th and 29th, with fluctuations of 3 to 5 feet in the Kansas City, Mo., area.

Ohio Basin.--Considerable flooding occurred around Chautauqua Lake, N. Y., in the upper Allegheny Basin during the second week of December. This flooding was due to the rapid melting of the snow which was extremely heavy, measuring up to 54 inches near Mayville, N. Y. Some rain accompanied this snowmelt. Main flood damage occurred in low areas.

Moderate rain showers from the 6th to the 8th, accompanied by snowmelt over the upper Allegheny Basin caused flooding along French Creek at Meadville, Pa., from the 8th to the 10th. The flooding was confined to summer cottage areas. Many secondary roads along with Route 19 were closed and traffic rerouted. Flood damages were minor.

Flooding in the Scioto Basin in Ohio from the 9th to the 14th was due to recurring rains from the 5th to the 10th. Heavy rain and some scattered thunderstorms occurred late on the 9th or early on the 10th. This flood ranked among some of the higher floods of past Decembers, but did not reach serious proportions. Some secondary roads were closed by the high water. Small fields of unharvested corn were partly inundated.

Streams in the Wabash Basin in Indiana rose to the highest stages in two or three years from the heavy rains from the 4th to the 9th. Daily rainfall amounts reported at most stations totalled more than 3 inches. More than 4.5 inches was reported along much of the Wabash. Several stations reported more than 6 inches of rain during this period. Flood crests ranged from 10 to 12 feet above flood stage and were highest along the Wabash and lower White Rivers. Thousands of acres of cornland were inundated, resulting in considerable damage to an estimated 20 to 25 percent of the cornland which remained unpicked. Many state and county roads were closed by the high water. A washout near Lafayette, Ind., derailed a train. Near Montezuma, the water overtopped low levees, flooding wide areas of farmland.

The Stones River at J. Percy Priest Dam, Tenn., exceeded flood stage by 6.8 feet on the 10th. It remained above flood stage for about 36 hours. This flooding was due to heavy rain on the 8th to the 10th, which totalled around 4.5 inches in the middle and upper portions and 2.5 to 3 inches in the lower portion. Damages were light with little, if any, crop damage because of the season of the year. Heavy rain (1 to 1.5 inches) in the Cumberland Basin above Barbourville, Tenn., on the 27th to the 29th, plus snowmelt caused the main stem to exceed flood stage by 1.3 feet at Barbourville on the 29th. The rainfall ranged from 1 to 1.5 inches on the 27th and 28th, plus another 0.5 to 1 inch by the morning of the 29th. Snow fell over the Cumberland Basin on the 24th with amounts ranging from 4 to 10 inches in the upper basin. The snow melted very slowly with 2 to 5 inches remaining on the ground by the morning of the 27th.

Heavy rains beginning during the late afternoon of the 8th and continuing through early morning of the 10th caused 3.5 to 6 feet of overflow along the Duck River in Tennessee. The rainfall averaged 4 to 5 inches with local amounts up to 8 inches. The high water caused the closing of some streets in Columbia, Tenn. The total damages were estimated at less than $5,000.

Some flooding occurred along the main stem of the Ohio River from Dam No. 47 (Newburgh, Ind.,) to Dam No. 50 (Fords Ferry, Ky.,) between the 13th and 22d. This 1 to 5 feet of overflow was due to heavy rains (3 to 5 inches) in Illinois and Indiana from the 4th to the 10th. Corn was still being harvested at the time of the flood. However, losses are not expected to be heavy.

White Basin.--Two- to three-inch rains on the 27th and 28th caused flooding on the Cache River at Patterson, Ark., beginning on the 29th. The flooding continued into January, cresting nearly 2 feet above flood stage on January 4.

Arkansas Basin.--No significant runoff was noted. Extremely low soil moisture conditions (negative A. P.I.'s) predominated, except in the eastern portion, at the end of the month.

At Pueblo, Colo., the year 1966 was the third driest since 1889. It was the driest year of record above the Kansas-Oklahoma state line.

Lower Mississippi Basin.--Minor flooding occurred on the St. Francis River at Fisk, Mo, on the 11th to the 13th. Very little if any damage resulted from this overflow.

GULF OF CALIFORNIA DRAINAGE

Colorado Basin.--Major flooding occurred in northern Arizona, southern Nevada, and southwestern Utah between the 4th and 8th. Streams affected include the Virgin, the Bill Williams, the Verde, and minor tributaries of the Colorado River. Flooding of the Virgin River was described by Nevada authorities as one of the largest floods of record. At Little Field, Ariz., this was the highest recorded flood in the past 30 years. The flow of the Verde River above Horseshoe Dam, Ariz., was measured at 70,000 c.f.s. compared to a maximum of 100,000 c.f.s. on March 3, 1938. This flooding was due to heavy rainfall (5.5 to over 11 inches) from the 3d to the 7th.

Preliminary estimates of flood damage were heavy and placed at $5 million. Flood damages in Arizona, Utah, and Nevada were estimated at $3.1 million and $1.6 million, and $300 thousand, respectively. One death from drowning was reported on the Virgin River in southern Nevada.

PACIFIC SLOPE DRAINAGE

Flooding along the Kaweah, Tule, and Kern Rivers in California from the 5th to the 8th was the severest of record. Some severe flooding also occurred on Poso, Deer, and Caliente Creeks. Minor flooding occurred along the Fresno, and Chowchilla Rivers and the creeks from the foothills of the Kings and San Joaquin Basins. The synoptic situation was such that the heaviest precipitation occurred in the upper reaches of the Kaweah, Tule, and Kern Rivers. Ten to 15 inches of precipitation were measured within a 24-hour period. Runoff was almost instantaneous as this same area had been saturated the previous week. The first flooding occurred on the evening of the 5th in the towns of Three Rivers on the Kaweah, Springville on the Tule, and Kernville on the Kern. This was followed by additional peak flows on the 6th and again on the 7th. The Tule River at Success Dam had an estimated peak flow of 56,000 c.f.s., a little more than twice the previous record. There was 9,650 acre-feet of water behind Success Dam before the storm. Within 40 hours it filled to its capacity of 85,440 acre-feet and began running through the spillways. Uncontrolled releases continued from the 6th through the 10th. The Kern River at Isabella Reservoir had a peak of 102,000 c.f.s. or about 2.5 times its previous record. On the Keweah, there was 8,800 acre-feet behind Terminus Dam at midnight on the 4th. By the night of the 7th, it had filled to within 15 inches of its capacity of 150,000 acre-feet.

The greatest devastation occurred above the dams. At least 20 to 25 homes were lost, and several trailer courts were destroyed. Topsoil was removed from farmlands along the rivers and river channels were altered. Roads were washed out and undercut in innumerable places; at least 10 bridges were destroyed. The main right-of-way of the Santa Fe and Southern Pacific Railroads was damaged, halting train service for several days, while repairs were made. Citrus groves were flooded and a few trees near the foothills were damaged or lost. Barley fields in the vicinity of Tulare Lake was inundated. Communities in the foothills were isolated and helicopter rescue and supply lines were established by the military over a two-day period. A fish hatchery on the Kern River was destroyed and a million small trout were washed into Isabella Reservoir. The town of Springville, Calif., lost its water and sewer system, and was one of the hardest hit. Elsewhere in the foothill communities, private wells were contaminated and had to be purified. Most of the town of Lamont, Calif., was under 18 inches of water as Caliente Creek overflowed. Three lives were lost during these floods. Preliminary estimates of damage were placed at around $18 million.

Moderate rises occurred on streams in the lower Sacramento and northern San Joaquin Basins from the rains on the 5th to the 7th. Overflow into the Sacramento bypass system occurred at Colusa, Tisdale, and Fremont Wiers, but stages on main streams were far below flood stage. Some minor surface flooding occurred due to poor drainage.

Very heavy rains between the 4th and 6th produced minor to moderate flooding on the Russian River in the Guerneville, Calif., area and along much of the Salinas and its tributaries. Some flooding occurred in Marin County, just north of San Francisco along Corte Madera Creek and along coastal streams. Streams in the Salinas Basin, where the heaviest rain occurred, began overflowing their banks early on the 6th and crested in the afternoon of that date. Santa Margarita Dam on the Salinas, with a capacity of 28,000 acre-feet, filled rapidly and crested 10 feet above the spillway by late afternoon of the 6th. More than 15 inches of rain occurred at Santa Margarita, 5 miles northwest of Santa Margarita Dam, from the 3d through the 7th. The crest reached the Bradley gaging station early on the morning of the 7th, cresting at a stage of 15.9 feet, the highest stage of record since the gage was installed in 1948. This stage was almost 3.5 feet higher than the previous record established in April 1958. The overflow at Wunpost inundated many oil wells operating in the lowlands along the river, filling them with sand and making them inoperable. The damage to the oil industry was estimated at about one-half million dollars. San Lorenzo Creek which enters the Salinas River at King City, flooded the city golf course and deposited a heavy layer of silt on the course. A number of homes in the Arroyo Seco area were flooded by the overflow from Arroyo Seco Creek, which reached a crest of 16.3 feet at the Middle Bridge USGS gaging station during the afternoon of the 6th. This crest moved into the Salinas River on the evening of the 6th, causing a primary and relatively flat crest at the Gonzales and Chular Bridges that night. It continued to move slowly and reached Spreckles Highway Bridge at 8 p.m. on the 7th with a crest stage of 18.9 feet. The main crest from the headwaters area reached the Spreckles Highway bridge at 8 a.m. on the 9th at a stage of 22.7 feet. The main crests at all three bridges - Gonzales, Chular, and Spreckles Highway, were about 3.5 feet higher than their primary crests. The agricultural losses in the Salinas Basin, estimated at $ 1 million was the greatest since the February 1938 flood. About 20,000 acres were flooded of which 6,800 acres were in cropland. About 4,500 acres of the flooded cropland were in the area from Soledad downstream through Spreckles and the remaining 2,300 acres south of Soledad. Based on reports and preliminary survey made by the Corps of Engineers, the total flood damage was estimated at around $2 million. Only minor damage resulted from the flooding in the Russian Basin. A few summer cabins were flooded.

Heavy rain early in December caused the South Fork of the Coquille River at Myrtle Point, Oreg., to exceed flood stage by 1.8 feet on the 5th. The stream went out of its banks on the 4th and receded within its banks on the 5th. Rainfall in excess of 3 inches was reported over much of the mountain areas of western Oregon and from 2.5 to 3 inches along the western slopes of the Cascades on the 4th and 5th. This heavy rain triggered the rise. The main stem of the Coquille River rose to within 1.6 feet of flood stage at Coquille, Oreg., on the 6th. The dry conditions preceding the heavy rain held damages from the flood waters to a minimum.

Heavy rainfall from the 12th to the 14th produced flooding along the South Yamhill and Tualatin Rivers in Oregon. These streams were near bankfull stages due to light to moderate rains during the first seven days of December. Rainfall was particularly heavy along the northern Coast Range in Oregon during the evening and night of the 12th. Timber, Oreg., located in the headwaters of the Coastal Nehalem drainage and adjacent to the Tualatin Basin reported 5.06 inches of rainfall on the morning of the 13th. Precipitation was considerably lighter in the upper Willamette and in Cascade Range tributary basins. Consequently rises on the upper Willamette and Cascade Range tributaries were minor. The Santiam River at Jefferson, Oreg., came within several tenths of bankfull stage on the 13th. The Willamette River at Harrisburg, Oreg., approached bankfull stage twice on the 14th and 15th. At Salem, Oreg., the mainstem approached within 4 feet of flood stage on the 14th. In the Portland Harbor, the high tide effect produced a crest of 11.4 feet at 8 p.m. on the 14th (flood stage 18 feet). The total damages as estimated by the Corps of Engineers was $480,000.

The most extensive flooding in northwestern Washington in December occurred in the Chehalis River Basin. The mainstem crested 5.2 feet above flood stage at Centralia, Wash., on the 14th and was above flood stage from the 13th to the 15th, or about 48 hours. Minor flooding occurred on the Satsop River at Satsop, Wash., on the 13th. Considerable farmland and some roads were under water. The total flood damages in this basin, as estimated by the Corps of Engineers was $592,000. Minor flooding occurred on streams draining into the Puget Sound between the 13th and the 17th. Some minor flooding was also reported on the Willapa River which drains into Willapa Bay. This flooding was due to rainfall from the 10th to the 16th, ranging up to 12 inches at higher elevations.

FLOOD STAGE DATA

(All dates in December unless otherwise specified)

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft.			Ft.	
ST. LAWRENCE DRAINAGE					
Lake Erie					
St. Marys: Decatur, Ind.	15	8	15	21.9	11
St. Joseph: Montpelier, Ohio	10	8	14	13.35	10
Maumee: Fort Wayne, Ind.	15	7	16	21.3	10
Defiance, Ohio	10	8	14	14.5	10
Napoleon, Ohio	10	8	13	13.25	10
Grand Rapids, Ohio	15	8	13	18.2	10
ATLANTIC SLOPE DRAINAGE					
Lumber: Lumberton, N. C.	8	30	Jan. 28	9.5 9.8 9.8	Jan. 6-7 Jan. 11 Jan. 17
MISSISSIPPI SYSTEM					
Upper Mississippi Basin					
Sangamon: Monticello, Ill.	13	10	11	13.0	10-11
Riverton, Ill.	13	8	18	18.6	12
Kaskaskia: Shelbyville, Ill.	13	8	14	17.0	10
Vandalia, Ill.	18	9	17	26.7	10
Carlyle Dam, Ill.	423.5	10	24	428.5	18
Ohio Basin					
French Creek: Meadville, Pa.	13	8	10	14.0	9
Paint Creek: Bourneville, Ohio	10	10	10	11.8	10
Scioto: La Rue, Ohio	11	9	12	13.55	11
Prospect, Ohio	10	11	13	11.4	12
Circleville, Ohio	14	11	13	17.4	12
Piketon, Ohio	16	10	14	20.9	11
Vermillion: Danville, Ill.	18	9	9	20.1	9
Sugar Creek: Crawfordsville, Ind.	8	9	9	9.3	9
Embarrass: Ste. Marie, Ill.	18	11	16	20.6	12
Lawrenceville, Ill.	15	11	19	18.05	16
Eagle Creek: Zionsville, Ind.	7	8	10	10.1	9
Eel: Bowling Green, Ind.	17	10	10	17.75	10
Muscatatuck: Austin, Ind.	16	8	13	27.1	10
East Fork: Columbus, Ind.	10	10	12	12.0	11
Seymour, Ind.	14	10	14	17.5	11
Bedford, Ind.	20	14	16	21.9	15
Little Wabash: Wilcox, Ill.	16	8	16	20.9	11
Skillet Fork: Wayne City, Ill.	15	9	12	16.3	11
White: Anderson, Ind.	10	5	12	12.0	10
Noblesville, Ind.	14	9	12	15.8	10
Ravenswood, Ind.	6	10	12	8.0	10
Centerton, Ind.	603T	9	13	606.0	10-11
Spencer, Ind.	14	9	15	21.6	11
Elliston, Ind.	18	9	17	26.4	13
Newberry, Ind.	18	10	16	20.8	13
Edwardsport, Ind.	15	9	18	22.8	14
Elliston, Ind.	18	9	17	26.4	13
Petersburg, Ind.	16	11	20	22.85	16
Hazleton, Ind.	16	14	21	23.6	17
Wabash: Bluffton, Ind.	10	9	13	14.0	11
Wabash, Ind.	12	8	15	18.0	9
Lafayette, Ind.	11	7	23	21.85	10
Covington, Ind.	16	9	23	25.25	11
Montezuma, Ind.	14	8	24	25.6	12
Clinton, Ind.	18	8	17	24.85	12
Terre Haute, Ind.	14	8	23	21.0	13
Hutsonville, Ill.	20	11	22	24.2	14
Riverton, Ind.	18	13	22	21.5	15
Vincennes, Ind.	16	11	24	22.4	16

River and station	Flood stage	Above flood stages -dates		Crest *	
		From–	To–	Stage	Date
	Ft.			Ft.	
MISSISSIPPI SYSTEM					
Wabash (Cont'd.): Mt. Carmel, Ill.	17	12	23	25.5	18
New Harmony, Ind.	15	14	25	18.4	20
Stones: J. Percy Priest Dam, Tenn.	40	10	11	46.8	10
Cumberland: Barbourville, Ky.	27	29	30	28.3	29
Duck: Shelbyville (nr), Tenn.	23	9	10	26.5	10
Shelbyville, Tenn.	719	10	11	723.0	10
Columbia, Tenn.	32	10	12	37.8	11
Ohio: Dam No. 47, Newburgh, Ind.	38	13	17	40.0	16
Dam No. 48, Cypress, Ind.	38	15	17	38.4	16
Mt. Vernon, Ind.	35	15	18	36.1	17
Dam No. 49, Uniontown, Ky.	37	16	19	38.1	17
Shawneetown, Ill.	33	14	21	37.4	18
Dam No. 50, Fords Ferry, Ky.	34	14	22	39.4	18
White Basin					
Cache: Patterson, Ark.	7	29	1/	8.9	Jan. 4
Lower Mississippi Basin					
St. Francis: Fisk, Mo.	20	11	13	20.2	12
PACIFIC SLOPE DRAINAGE					
South Fork Kern: Onyx (nr.), Calif.				12.0	6
Kern: Kernville, Calif				21.8	6
South Fork Tule: Success (nr.), Calif.				12.5	6
Tule: Springville (nr.), Calif.				17.3	6
Mill Creek: Piedra (nr.), Calif.				9.6	6
South Fork Kaweah: Three Rivers, Calif.				9.3	5
Dry Creek: Lemon Cove (nr.), Calif.				7.3	6
Kaweah: Three Rivers, Calif.	10	5	7	16.7	5
Fresno: Knowles, Calif.				6.6	6
Chowchilla: Raymond (nr.),Calif.				14.5	6
Sacramento: Colusa Weir, Calif.	62	3	12	65.1 65.3	4 6
Tisdale Weir, Calif.	45	3	17	48.2	4,8
Fremont Weir, Calif.	33	4	14	35.5	7
Russian: Guerneville, Calif.	29	5	5	31.5	5
South Fork Coquille: Myrtle Point, Oreg.	35	4	5	36.8	5
South Yamhill: Whiteson, Oreg.	38	13	15	41.8	14
Tualatin: Farmington, Oreg.	29	13	19	32.7	15
Satsop: Satsop, Wash.	34	13	13	34.5	13
Chehalis: Centralia, Wash.	63	13	15	68.2	14
Snoqualmie: Carnation, Wash.	54	14	14	54.3	14
Snohomish: Snohomish, Wash.	25	13	14	27.5	13
Skagit: Mt. Vernon, Wash.	21	(14 (16	14 17	21.4 21.5	14 17
Nooksack: Deming, Wash.	12	(13 (16	13 16	12.8 12.21	13 16

* Provisional
T Tentative
1/ Continued at end of month
__ Record stage

RAWINSONDE DATA

Average monthly values

ALBANY, N. Y.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	- 3.5		[illegible]	[illegible]
1000	[illegible]	155			[illegible]	[illegible]
950	[illegible]	[illegible]	- 4.1		[illegible]	[illegible]
900	[illegible]	[illegible]	- 5.2	84	[illegible]	[illegible]
850	[illegible]	1,436	[illegible]	79	[illegible]	15.2
800	[illegible]	1,912	- 5.4	66	[illegible]	17.3
750	30	[illegible]	- 6.9	[illegible]	[illegible]	[illegible]
700	30	[illegible]	- 9.1	[illegible]	[illegible]	[illegible]
650	[illegible]	[illegible]	-11.8	58	[illegible]	29.9
600	[illegible]	4,136	-14.7	[illegible]	[illegible]	[illegible]
550	[illegible]	4,787	-18.7	[illegible]	[illegible]	[illegible]
500	[illegible]	5,495	-23.2	47	265	42.7
450	[illegible]	6,254	-28.4	[illegible]	[illegible]	45.1
400	[illegible]	7,094	-34.5	[illegible]	265	47.2
350	[illegible]	8,016	-40.7	37	262	49.7
300	30	9,050	-47.5		261	53.2
250	30	10,238	-53.5		[illegible]	54.6
200	30	[illegible]	[illegible]		[illegible]	58.1
175	30	12,512	-55.5		268	55.0
150	30	13,495	-55.7		[illegible]	49.1
125	[illegible]	[illegible]	-57.3		265	37.7
100	[illegible]	16,056	-59.0		[illegible]	[illegible]
80	30	[illegible]	-59.7		[illegible]	[illegible]
70	[illegible]	[illegible]	-59.7		264	25.8
60	[illegible]	[illegible]	-59.9		[illegible]	[illegible]
50	30	[illegible]	-59.9		[illegible]	[illegible]
40	[illegible]	21,781	-60.1		[illegible]	15.0
30	[illegible]	23,577	-59.4		[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	14.2
20	[illegible]	26,120	-58.5		284	16.7
15	29	27,932	-57.6		[illegible]	[illegible]
10	25	[illegible]	[illegible]		[illegible]	35.5
7	11	32,819	-53.4			

ALBUQUERQUE, N. MEX.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	[illegible]	58	[illegible]	2.9
1000	31	197				
950	31	611				
900	31	1,049				
850	31	1,510				
800	[illegible]	1,995	.7	45	[illegible]	[illegible]
750	31	2,512	- 1.2	42	[illegible]	[illegible]
700	31	[illegible]	- 3.5	44	290	[illegible]
650	[illegible]	3,638	- 6.1	45	287	[illegible]
600	[illegible]	[illegible]	- 9.6	[illegible]	288	[illegible]
550	[illegible]	4,925	[illegible]	[illegible]	[illegible]	[illegible]
500	[illegible]	5,650	[illegible]	[illegible]	[illegible]	[illegible]
450	31	[illegible]	-24.1	39	287	[illegible]
400	[illegible]	7,277	[illegible]	[illegible]	[illegible]	31.1
350	31	8,214	-37.2	[illegible]	285	[illegible]
300	[illegible]	9,262	[illegible]		[illegible]	[illegible]
250	31	10,459	[illegible]		[illegible]	43.3
200	31	[illegible]	-58.0		[illegible]	44.9
175	30	12,719	-58.4		[illegible]	44.5
150	29	13,694	-60.1		281	43.3
125	29	14,922	-63.2		277	38.1
100	29	16,185	[illegible]		275	[illegible]
80	28	17,541	-64.7		278	23.5
70	[illegible]	18,357	-63.9		274	18.1
60	[illegible]	19,301	-63.5		274	[illegible]
50	[illegible]	20,423	-61.9		[illegible]	[illegible]
40	27	21,907	[illegible]		277	[illegible]
30	25	[illegible]	-58.5		277	[illegible]
25	22	[illegible]	-57.2		268	11.5
20	[illegible]	26,162	-56.1		277	[illegible]
15	18	[illegible]	-54.7		[illegible]	[illegible]
10	5	30,584	-53.8			
7						

AMARILLO, TEX.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	- 3.1	[illegible]		[illegible]
1000	31	168				
950	31	[illegible]				
900	31	1,022				
850	31	1,472	[illegible]	[illegible]	278	[illegible]
800	31	[illegible]	[illegible]	[illegible]	275	[illegible]
750	31	[illegible]	[illegible]	[illegible]	274	12.6
700	31	3,036	[illegible]	[illegible]	273	13.8
650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16.7
600	31	4,247	[illegible]	[illegible]	269	[illegible]
550	31	4,912	[illegible]	[illegible]	267	22.9
500	31	5,633	-18.9			25.8
450	31	6,404	[illegible]	[illegible]	271	29.3
400	[illegible]	7,256	[illegible]		[illegible]	30.1
350	31	[illegible]	[illegible]			36.9
300	31	9,239	-44.9		272	44.1
250	31	[illegible]	-52.6		[illegible]	[illegible]
200	31	[illegible]	[illegible]		[illegible]	[illegible]
175	31	[illegible]	-57.9		272	53.2
150	31	13,672	-59.5		271	51.7
125	29	14,802	-61.9		272	[illegible]
100	[illegible]	16,175	[illegible]		271	37.1
80	28	[illegible]	[illegible]		[illegible]	[illegible]
70	29	[illegible]	[illegible]		273	[illegible]
60	28	19,296	-62.5			[illegible]
50	29	20,423	-61.6		[illegible]	[illegible]
40	27	21,806	-60.3		[illegible]	10.5
30	24	23,607	-58.5		[illegible]	9.3
25	24	24,756	-57.3		[illegible]	9.3
20	22	26,171	-56.5		280	15.2
15	19	[illegible]	-55.2		279	[illegible]
10	7	[illegible]	-53.4			
7						

ANCHORAGE, ALASKA
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	45	[illegible]	[illegible]		4.3
1000	1	37				7.2
950	31	442	[illegible]			[illegible]
900	31	[illegible]	[illegible]		[illegible]	[illegible]
850	[illegible]	1,306	- 7.6		[illegible]	[illegible]
800	[illegible]	1,776	-10.1			[illegible]
750	[illegible]	2,273	-12.7			4.7
700	31	2,795	[illegible]			[illegible]
650	[illegible]	3,349	-18.8	[illegible]	[illegible]	3.5
600	31	[illegible]	-22.1	[illegible]	[illegible]	[illegible]
550	31	4,577	[illegible]	[illegible]	[illegible]	[illegible]
500	[illegible]	5,262	[illegible]		[illegible]	8.5
450	31	6,001	[illegible]		[illegible]	[illegible]
400	31	6,812	[illegible]			9.5
350	[illegible]	7,708	[illegible]		[illegible]	11.7
300	31	8,716	[illegible]		[illegible]	13.8
250	31	[illegible]	[illegible]		254	[illegible]
200	31	11,329	[illegible]		[illegible]	[illegible]
175	31	12,198	-50.5			[illegible]
150	[illegible]	[illegible]	-50.6			18.5
125	[illegible]	[illegible]	-50.8		[illegible]	17.1
100	[illegible]	15,845	[illegible]		[illegible]	[illegible]
80	31	17,294	[illegible]			[illegible]
70	31	18,161	-51.3			13.2
60	30	19,159	[illegible]		[illegible]	[illegible]
50	30	20,342	-51.8		[illegible]	[illegible]
40	30	[illegible]	-52.4		[illegible]	[illegible]
30	[illegible]	23,640	-53.7		[illegible]	15.2
25	30	24,809	-54.8		[illegible]	[illegible]
20	29	26,234	-55.9		[illegible]	[illegible]
15	25	28,064	-58.2		[illegible]	[illegible]
10	12	30,649	-61.9			
7						

[illegible]
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	37	[illegible]	[illegible]		[illegible]
1000	[illegible]	42				[illegible]
950	[illegible]	459	[illegible]		[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]		167	[illegible]
850	[illegible]	1,342	[illegible]		[illegible]	[illegible]
800	[illegible]	[illegible]	[illegible]		186	[illegible]
750	[illegible]	2,320	[illegible]	[illegible]		[illegible]
700	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
650	[illegible]	3,415	[illegible]		[illegible]	[illegible]
600	[illegible]	[illegible]	[illegible]			[illegible]
550	[illegible]	[illegible]	[illegible]	[illegible]	224	[illegible]
500	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
450	[illegible]	6,101	[illegible]		231	[illegible]
400	[illegible]	6,925	[illegible]			[illegible]
350	[illegible]	7,829	[illegible]			[illegible]
300	[illegible]	[illegible]	[illegible]			[illegible]
250	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
200	[illegible]	[illegible]	[illegible]			[illegible]
175	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
150		13,301	[illegible]			[illegible]
125	[illegible]	[illegible]	[illegible]			[illegible]
100		[illegible]	[illegible]		[illegible]	[illegible]
80		17,357	[illegible]			[illegible]
70		[illegible]	[illegible]			[illegible]
60		[illegible]	[illegible]		[illegible]	[illegible]
50		20,374	[illegible]		[illegible]	[illegible]
40		[illegible]	[illegible]			[illegible]
30		[illegible]	[illegible]			[illegible]
25	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
20	[illegible]	26,264	[illegible]		[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]			
10		30,716	[illegible]			
7						

ATHENS, GA.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	246	[illegible]	[illegible]	214	[illegible]
1000	31	171				
950	[illegible]	[illegible]	[illegible]	66	[illegible]	[illegible]
900	[illegible]	1,030	5.1	59	[illegible]	[illegible]
850	31	1,497	4.3	55	[illegible]	[illegible]
800	31	1,989	2.5	51	271	[illegible]
750	31	2,504	[illegible]	50	[illegible]	[illegible]
700	31	3,061	- 1.8	48	[illegible]	[illegible]
650	31	3,644	- 4.4	[illegible]	[illegible]	27.8
600	31	4,276	- 7.6	42	265	33.8
550	[illegible]	4,947	-11.7	41	267	[illegible]
500	31	5,672	-16.8	[illegible]	266	[illegible]
450	31	[illegible]	-22.3	[illegible]	[illegible]	44.1
400	31	7,311	-28.5	37	263	49.7
350	30	8,251	-35.6	39	265	56.3
300	30	9,305	-43.3		[illegible]	62.7
250	[illegible]	10,510	-50.9		264	70.1
200	30	11,942	-56.9		[illegible]	77.1
175	30	12,784	-58.4		264	76.3
150	30	13,748	-60.7		[illegible]	[illegible]
125	29	14,981	-63.8		262	65.1
100	29	[illegible]	[illegible]		[illegible]	[illegible]
80	[illegible]	17,591	[illegible]		262	36.1
70	27	18,398	-64.6		261	28.9
60	27	19,342	[illegible]		264	25.1
50	27	20,465	[illegible]		[illegible]	21.8
40	25	21,863	-60.0		276	18.1
30	25	23,666	-57.9		[illegible]	19.2
25	25	24,819	-56.4		281	22.9
20	25	26,242	-54.1		279	[illegible]
15	[illegible]	[illegible]	-50.5		272	32.4
10						

* BARROW, ALASKA
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	-24.3	71	302	1.4
1000	31	[illegible]			299	4.7
950	31	[illegible]	-21.4	79	351	[illegible]
900	31	[illegible]	-19.7	[illegible]	[illegible]	[illegible]
850	31	1,329	-19.4	74	352	[illegible]
800	31	1,779	-20.3	65	[illegible]	[illegible]
750	31	2,255	-21.9	63	317	5.6
700	31	2,761	-24.3	64	306	[illegible]
650	31	3,297	-26.6	60	299	[illegible]
600	31	3,874	-29.4	59	285	[illegible]
550	[illegible]	[illegible]	-33.1	61	[illegible]	12.8
500	[illegible]	5,157	-37.1	58	262	15.7
450	[illegible]	5,878	-41.3	64	276	[illegible]
400	[illegible]	6,673	-45.8		270	19.6
350	[illegible]	7,552	-50.5		275	22.5
300	30	8,549	[illegible]		276	24.1
250	[illegible]	9,716	-54.2		275	23.5
200	30	11,155	-51.6		277	20.0
175	[illegible]	12,025	-50.9		[illegible]	19.2
150	[illegible]	[illegible]	-50.6		[illegible]	18.1
125	27	14,204	[illegible]		255	22.5
100	27	15,655	-51.4		263	24.5
80	26	[illegible]	-52.6		256	27.6
70	26	[illegible]	-53.4		[illegible]	30.3
60	26	18,943	-54.1		[illegible]	31.3
50	26	20,114	-55.7		261	35.7
40	24	[illegible]	-56.7		[illegible]	38.3
30	20	[illegible]	-59.1		256	39.6
25	18	[illegible]	[illegible]		258	45.3
20	14	25,973	[illegible]		267	[illegible]
15	[illegible]	27,791	-62.5			
10						

[illegible] IS., ALASKA
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	[illegible]	[illegible]	[illegible]	[illegible]	5.8
1000	29	[illegible]			284	[illegible]
950	29	490	-21.8	[illegible]	[illegible]	5.2
900	29	887	-18.4	[illegible]	301	4.1
850	29	1,315	-17.6	[illegible]	[illegible]	4.7
800	[illegible]	1,769	-17.7	[illegible]	[illegible]	5.2
750	29	2,251	-19.3	[illegible]	[illegible]	[illegible]
700	29	2,752	-21.6	[illegible]	[illegible]	[illegible]
650	29	3,304	-24.5	[illegible]	[illegible]	[illegible]
600	29	3,886	-27.8	[illegible]	271	11.3
550	29	4,502	[illegible]	[illegible]	[illegible]	[illegible]
500	[illegible]	5,176	-35.9	[illegible]	[illegible]	14.8
450	29	[illegible]	-40.6	[illegible]	[illegible]	16.9
400	29	6,696	[illegible]		[illegible]	[illegible]
350	29	7,576	-50.5		267	18.6
300	29	8,573	[illegible]		268	18.5
250	29	9,741	[illegible]		266	[illegible]
200	29	11,184	-51.2		258	[illegible]
175	29	12,054	-50.5		258	[illegible]
150	29	13,060	-50.3		262	[illegible]
125	29	[illegible]	-50.5		264	22.1
100	29	15,705	-50.7		[illegible]	[illegible]
80	29	17,155	-52.0		268	26.6
70	29	18,017	-52.6		[illegible]	29.9
60	29	19,010	[illegible]		269	32.2
50	29	20,179	-54.9		272	34.6
40	28	21,593	-56.3		[illegible]	[illegible]
30	27	[illegible]	[illegible]		269	46.4
25	26	24,566	[illegible]		266	52.1
20	[illegible]	[illegible]	[illegible]		268	[illegible]
15	12	27,772	-64.2		266	[illegible]
10						

[illegible]
1003 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	-15.7	[illegible]		7.4
1000	[illegible]	60			[illegible]	[illegible]
950	31	458	- 9.0	[illegible]	[illegible]	[illegible]
900	31	872	- 8.4	[illegible]	[illegible]	10.3
850	31	1,315	- 9.1	[illegible]	[illegible]	[illegible]
800	31	1,783	-10.7	[illegible]	[illegible]	6.2
750	[illegible]	[illegible]	-12.6			[illegible]
700	31	[illegible]	[illegible]	[illegible]		[illegible]
650	31	3,355	-18.4	[illegible]		[illegible]
600	[illegible]	[illegible]	-22.2	[illegible]	[illegible]	[illegible]
550	31	4,530	-26.1	[illegible]		[illegible]
500	31	5,269	-30.8	[illegible]	[illegible]	[illegible]
450	[illegible]	6,004	[illegible]		[illegible]	[illegible]
400	31	6,819	[illegible]	[illegible]	234	[illegible]
350	31	7,716	-46.6		[illegible]	16.5
300	31	8,726	-52.1		[illegible]	[illegible]
250	31	[illegible]	-55.0		[illegible]	21.8
200	[illegible]	11,321	[illegible]		[illegible]	[illegible]
175	30	12,133	[illegible]		[illegible]	18.3
150	29	13,187	-51.3		[illegible]	[illegible]
125	[illegible]	[illegible]	-51.7		[illegible]	19.6
100	29	15,817	-51.7		[illegible]	[illegible]
80	29	17,264	-51.7		[illegible]	17.1
70	[illegible]	[illegible]	-51.8		[illegible]	18.5
60	[illegible]	19,128	-51.9		[illegible]	17.5
50	29	20,308	-52.4		[illegible]	17.5
40	29	21,749	[illegible]		[illegible]	16.5
30	28	23,607	[illegible]		[illegible]	17.9
25	27	24,780	-54.2		[illegible]	17.7
20	23	26,187	[illegible]		[illegible]	23.3
15	15	28,011	-57.7		[illegible]	24.3
10	6	[illegible]	-61.8			

[illegible]
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	505	-11.5	72	[illegible]	[illegible]
1000	[illegible]	166				
950	[illegible]	564			[illegible]	[illegible]
900	[illegible]	[illegible]	[illegible]			[illegible]
850	[illegible]	1,431	[illegible]	[illegible]	[illegible]	[illegible]
800	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
750		[illegible]	[illegible]	[illegible]	297	[illegible]
700	[illegible]	2,945	[illegible]	[illegible]	299	[illegible]
650	[illegible]	3,508	[illegible]	[illegible]	295	[illegible]
600	[illegible]	4,119	[illegible]	[illegible]	[illegible]	[illegible]
550	[illegible]	4,765	[illegible]	[illegible]	297	[illegible]
500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
450	[illegible]	6,223	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
350		[illegible]	[illegible]			[illegible]
300	[illegible]	[illegible]	[illegible]		295	[illegible]
250	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
200		11,581	[illegible]			[illegible]
175	[illegible]	12,432	[illegible]		294	[illegible]
150	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
125	[illegible]	14,584	[illegible]		292	[illegible]
100		16,001	[illegible]		293	[illegible]
80		[illegible]	[illegible]		[illegible]	[illegible]
70		[illegible]	[illegible]		[illegible]	[illegible]
60		[illegible]	[illegible]		[illegible]	[illegible]
50		[illegible]	[illegible]		[illegible]	[illegible]
40	[illegible]	21,807	[illegible]			[illegible]
30	[illegible]	23,626	[illegible]		[illegible]	[illegible]
25	[illegible]	24,779	[illegible]			[illegible]
20	[illegible]	26,199	[illegible]			[illegible]
15		[illegible]	[illegible]		[illegible]	[illegible]
10						

BOISE, IDAHO
919 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	868	- 1.3	[illegible]	[illegible]	[illegible]
1000	31	184				
950	31	596				
900	31	1,030	[illegible]	77	139	4.1
850	31	[illegible]	[illegible]	64	[illegible]	4.5
800	31	1,972	- 2.2	65	234	[illegible]
750	31	2,479	- 4.6	69	260	10.9
700	31	3,024	- 7.3	65	272	14.4
650	[illegible]	3,594	-10.6	61	278	17.1
600	31	[illegible]	[illegible]	56	277	21.2
550	[illegible]	4,862	-18.8	55	276	23.9
500	[illegible]	5,570	-23.1	50	278	[illegible]
450	31	6,329	-27.9	[illegible]	281	32.8
400	[illegible]	7,172	[illegible]	[illegible]	[illegible]	36.1
350	31	8,095	-40.6	44	286	[illegible]
300	[illegible]	9,129	-47.7		286	[illegible]
250	31	10,314	-54.6		284	[illegible]
200	[illegible]	11,728	-58.9		285	46.4
175	[illegible]	[illegible]	-58.1		285	42.3
150		13,531	-58.3		282	37.5
125	30	14,676	-59.1		[illegible]	[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	28	[illegible]	-59.5		286	[illegible]
70	[illegible]	18,296	[illegible]		[illegible]	12.2
60	[illegible]	[illegible]	-59.2		[illegible]	[illegible]
50	27	20,405	-58.5		329	5.1
40	27	[illegible]	[illegible]		25	5.2
30	25	[illegible]	-57.8		48	[illegible]
25	[illegible]	24,768	-57.6		55	12.6
20	23	26,192	-57.3		62	[illegible]
15	[illegible]	[illegible]	-56.4			[illegible]
10	[illegible]	[illegible]	[illegible]			
7						
5						

* BOOTHVILLE, LA.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1	[illegible]	[illegible]	15	1.4
1000	31	[illegible]	13.1	83	52	2.5
950	[illegible]	591	11.1	[illegible]	[illegible]	3.7
900	31	1,040	9.4	70	226	5.1
850	31	1,513	7.9	59	247	9.1
800	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.6
750	[illegible]	[illegible]	3.7	48	[illegible]	[illegible]
700	31	3,096	[illegible]	47	256	17.3
650	31	[illegible]	[illegible]	[illegible]	256	[illegible]
600	31	4,323	- 4.7	[illegible]	263	23.5
550	31	[illegible]	- 8.6	36	262	28.9
500	[illegible]	5,735	-13.5	[illegible]	261	[illegible]
450	[illegible]	6,520	-19.1	39	[illegible]	38.7
400	[illegible]	7,394	-25.7	39	263	42.9
350	[illegible]	[illegible]	-32.8	40	261	49.1
300	31	9,417	-40.5	34	263	56.1
250	31	10,636	[illegible]		263	[illegible]
200	[illegible]	12,070	[illegible]		[illegible]	65.3
175	29	[illegible]	-59.4		[illegible]	66.6
150	28	[illegible]	-62.9		261	[illegible]
125	[illegible]	14,982	-66.7		[illegible]	[illegible]
100	[illegible]	16,315	[illegible]		262	[illegible]
80	27	[illegible]	[illegible]		[illegible]	31.7
70	27	[illegible]	[illegible]		[illegible]	24.4
60	27	[illegible]	[illegible]			[illegible]
50	[illegible]	20,471	[illegible]		[illegible]	[illegible]
40	26	21,851	[illegible]		266	16.9
30	25	[illegible]	-57.9		264	23.3
25	24	[illegible]	-55.6		272	[illegible]
20	24	26,236	-52.6		276	32.2
15	[illegible]	[illegible]	[illegible]		272	[illegible]
10	21	[illegible]	[illegible]		[illegible]	[illegible]
7	13	[illegible]	[illegible]			
5						

* [illegible]ILLE, TEX.
1017 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.4
1000	31	[illegible]	15.3	[illegible]	[illegible]	[illegible]
950	[illegible]	[illegible]	[illegible]	[illegible]	172	[illegible]
900	31	[illegible]	11.6	[illegible]	[illegible]	[illegible]
850	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
800	31	[illegible]	[illegible]	[illegible]	225	7.2
750	[illegible]	2,549	[illegible]	[illegible]	[illegible]	[illegible]
700	31	3,115	[illegible]	[illegible]	262	14.4
650	31	[illegible]	1.1	[illegible]	264	[illegible]
600	31	4,355	[illegible]	[illegible]	262	[illegible]
550	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23.1
500	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
450	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	7,444	-24.2	[illegible]	[illegible]	[illegible]
350	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
300	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
250	[illegible]	10,704	[illegible]		261	[illegible]
200	31	12,143	[illegible]		[illegible]	66.2
175	31	[illegible]	[illegible]		261	[illegible]
150	[illegible]	[illegible]	-66.7		254	[illegible]
125	29	[illegible]	[illegible]		[illegible]	[illegible]
100	[illegible]	[illegible]	-72.7		257	[illegible]
80	27	17,661	[illegible]		[illegible]	[illegible]
70	[illegible]	[illegible]	[illegible]		257	24.1
60	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
50	26	[illegible]	[illegible]		[illegible]	[illegible]
40	25	[illegible]	-61.2		[illegible]	13.2
30	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
25	24	[illegible]	[illegible]		[illegible]	23.3
20	23	[illegible]	[illegible]		267	[illegible]
15	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
5	7	[illegible]	[illegible]			

[illegible], N. Y.
991 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	218	[illegible]	[illegible]	[illegible]	7.2
1000		[illegible]				
950	31	[illegible]	- 3.7		[illegible]	14.4
900	[illegible]	981	- 5.1	[illegible]	[illegible]	[illegible]
850	31	1,430	[illegible]	[illegible]	[illegible]	[illegible]
800	31	[illegible]	[illegible]	[illegible]	273	22.3
750	[illegible]	[illegible]	[illegible]	[illegible]	271	23.1
700	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
650	31	[illegible]	[illegible]	[illegible]	271	[illegible]
600	[illegible]	4,116	[illegible]	46		[illegible]
550	31	[illegible]	-19.4	[illegible]	[illegible]	34.6
500	[illegible]	[illegible]	-23.6	[illegible]	[illegible]	[illegible]
450	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41.4
400	[illegible]	[illegible]	[illegible]	[illegible]	267	[illegible]
350	[illegible]	[illegible]	-41.6	[illegible]		45.3
300	[illegible]	[illegible]	[illegible]			[illegible]
250	[illegible]	[illegible]	[illegible]			[illegible]
200	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
175	[illegible]	[illegible]	[illegible]			47.4
150	[illegible]	13,456	[illegible]		[illegible]	[illegible]
125	[illegible]	14,617	[illegible]		[illegible]	[illegible]
100	[illegible]	[illegible]	-57.8			[illegible]
80	29	17,432	-59.1			[illegible]
70	28	[illegible]	[illegible]			[illegible]
60	27	[illegible]	-59.4			[illegible]
50	27	[illegible]	[illegible]			17.1
40	27	[illegible]	[illegible]		[illegible]	[illegible]
30	27	[illegible]	[illegible]			[illegible]
25	26	[illegible]	[illegible]		[illegible]	[illegible]
20	25	[illegible]	[illegible]		[illegible]	[illegible]
15	[illegible]	27,914	-57.6		[illegible]	[illegible]
10	21	[illegible]	[illegible]		[illegible]	[illegible]
7	12	32,741	[illegible]			
5						

*CANTON IS., PACIFIC
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	[illegible]			[illegible]
1000		[illegible]	[illegible]			[illegible]
950		[illegible]	[illegible]	[illegible]		[illegible]
900	[illegible]	991	[illegible]	[illegible]		[illegible]
850	[illegible]	[illegible]	[illegible]			[illegible]
800		[illegible]	[illegible]			[illegible]
750		[illegible]	[illegible]			[illegible]
700		[illegible]	[illegible]			[illegible]
650		[illegible]	[illegible]			[illegible]
600	[illegible]	[illegible]	[illegible]			[illegible]
550		[illegible]	[illegible]			[illegible]
500		[illegible]	[illegible]			[illegible]
450	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
400		[illegible]	[illegible]		[illegible]	[illegible]
350		[illegible]	[illegible]			[illegible]
300	[illegible]	[illegible]	[illegible]			[illegible]
250	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
200		[illegible]	[illegible]			[illegible]
175		[illegible]	[illegible]		216	[illegible]
150		[illegible]	[illegible]		234	[illegible]
125		15,310	[illegible]			[illegible]
100		16,576	[illegible]			[illegible]
80		[illegible]	[illegible]			[illegible]
70		[illegible]	[illegible]			[illegible]
60		[illegible]	[illegible]			[illegible]
50		[illegible]	[illegible]		271	[illegible]
40		[illegible]	[illegible]		[illegible]	[illegible]
30		[illegible]	[illegible]			[illegible]
25		[illegible]	[illegible]			[illegible]
20		[illegible]	[illegible]			[illegible]
15		[illegible]	[illegible]		[illegible]	[illegible]
10		[illegible]	-41.1			[illegible]
7	[illegible]	33,572	[illegible]			[illegible]
5	[illegible]	[illegible]	[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

DECEMBER 1966

*** CAPE HATTERAS, N. C. 1019 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4	6.7	82	335	5.9
1000	31	158	7.7	74	337	6.2
950	31	[illegible]	6.1	[illegible]	[illegible]	6.4
900	31	1,023	4.5	70	251	10.5
850	31	1,477	3.2	61	261	15.7
800	31	1,978	1.9	57	260	20.0
750	31	2,494	.3	56	264	23.1
700	31	3,048	- 2.3	56	265	25.8
650	31	3,628	- 5.4	53	266	[illegible]
600	31	4,258	- 9.1	53	270	32.6
550	31	[illegible]	[illegible]	55	268	36.9
500	31	5,645	-17.7	46	[illegible]	42.5
450	31	6,420	-22.8	43	267	47.4
400	30	7,276	-29.4	[illegible]	[illegible]	51.1
350	30	8,215	-36.4	49	267	57.7
300	29	9,271	-43.9		[illegible]	62.2
250	28	10,476	-51.3		271	74.4
200	28	11,907	-56.4		271	77.3
175	27	12,759	-57.7		271	72.3
150	27	13,719	-60.1		[illegible]	60.0
125	25	14,847	-62.6		266	55.8
100	25	16,216	-64.6		266	46.2
80	24	17,577	-65.1		262	33.0
70	24	18,392	-64.2		265	28.6
60	24	19,337	-63.1		264	21.4
50	24	20,463	-61.6		262	18.1
40	23	[illegible]	-60.5		267	15.3
30	23	23,650	[illegible]		[illegible]	16.3
25	22	[illegible]	-57.0		[illegible]	15.3
20	22	26,221	-55.0		277	19.2
15	21	28,062	-52.3		275	26.6
10	19	30,716	-47.0		269	53.4
7	12	33,108	-42.6		265	76.
5	6	35,430	-40.3			

*** CARIBOU, ME. 992 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	191	- 7.2	86	270	3.3
1000	31	127				
950	31	529	- 7.3	[illegible]	284	6.0
900	31	[illegible]	- 7.7	79	[illegible]	[illegible]
850	31	1,393	- 7.9	71	[illegible]	9.7
800	31	1,864	- 8.2	70	273	11.5
750	31	2,365	- 9.3	63	259	[illegible]
700	31	[illegible]	-11.5	60	266	[illegible]
650	31	[illegible]	-14.5	[illegible]	263	21.0
600	31	[illegible]	-17.5	56	261	24.7
550	31	4,707	-20.3	55	255	26.6
500	31	5,411	[illegible]	51	[illegible]	[illegible]
450	31	6,164	-20.2	47	253	32.4
400	31	[illegible]	[illegible]	42	[illegible]	34.2
350	31	7,913	-42.1	[illegible]	[illegible]	39.4
300	31	8,941	-48.5		[illegible]	45.1
250	31	[illegible]	[illegible]		255	45.3
200	31	11,555	-54.6		256	45.8
175	30	12,418	-53.9		256	42.
150	30	[illegible]	-54.5		[illegible]	40.2
125	30	14,572	-55.4		255	36.3
100	[illegible]	[illegible]	-57.5		253	28.2
80	29	17,395	-58.3		[illegible]	26.
70	29	[illegible]	-58.4		264	21.6
60	28	19,202	-58.9		261	20.2
50	28	20,344	-59.8		254	[illegible]
40	28	21,737	-60.2		269	16.3
30	25	23,530	-60.5		[illegible]	16.9
25	25	24,665	-60.6		286	17.3
20	24	26,052	-60.3		285	21.0
15	21	27,849	[illegible]		[illegible]	29.4
10	20	30,379	-59.5		282	[illegible]
7	18	32,617	-56.9		274	67.
5	7	[illegible]	-52.0			

CHARLESTON, S. C. 1019 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	13	5.3	[illegible]	[illegible]	2.3
1000	31	165	[illegible]	78	339	2.9
950	31	594	[illegible]	66	283	5.4
900	31	1,037	7.1	62	254	[illegible]
850	31	[illegible]	5.5	62	251	15.2
800	31	2,000	3.5	59	[illegible]	[illegible]
750	31	2,523	1.5	47	257	[illegible]
700	31	[illegible]	[illegible]	43	[illegible]	23.7
650	31	3,663	- 3.9	46	261	27.8
600	31	4,294	- 6.7	44	[illegible]	31.7
550	31	[illegible]	-11.	43	256	[illegible]
500	31	[illegible]	-15.3	43		42.5
450	31	6,475	[illegible]	41	[illegible]	46.6
400	31	7,341	-27.7	[illegible]	[illegible]	[illegible]
350	31	8,286	-34.9	[illegible]	265	55.2
300	31	9,244	-42.8	46	266	[illegible]
250	31	10,551	[illegible]		267	[illegible]
200	31	11,977	-57.6		[illegible]	75.4
175	[illegible]	[illegible]	[illegible]		268	77.3
150	31	[illegible]	-62.0		267	71.7
125	[illegible]	14,894	[illegible]		[illegible]	61.2
100	30	[illegible]	-68.0		[illegible]	53.3
80	30	17,579	-67.5		263	35.7
70	30	[illegible]	-66.5		262	27.8
60	[illegible]	19,313	[illegible]		[illegible]	[illegible]
50	[illegible]	20,428	-63.1		270	17.3
40	[illegible]	21,808	-60.9		276	16.9
30	29	[illegible]	-58.7		[illegible]	19.6
25	29	24,754	-56.9		279	19.8
20	29	26,175	-54.4		276	25.8
15	28	28,038	-50.3		273	38.3
10	23	30,720	-44.7		270	70.1
7	5	33,042	-44.			

*** COLD BAY, ALASKA 997 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	- 2.1	97	[illegible]	1.4
1000	31				[illegible]	[illegible]
950	31	419	- 2.2	74	[illegible]	2.7
900	31	843	- 4.1	73	[illegible]	[illegible]
850	31	1,293	- 5.8	70	96	2.7
800	31	1,766	- 7.4	64	321	1.4
750	31	2,265	- 9.7	56	291	4.7
700	31	2,797	-12.7	60	[illegible]	5.6
650	[illegible]	[illegible]	-15.8	[illegible]	276	7.4
600	31	[illegible]	[illegible]	55	260	[illegible]
550	31	4,595	-23.3	54	247	11.1
500	31	5,292	-28.1	[illegible]	[illegible]	12.2
450	31	6,034	[illegible]	43	251	13.6
400	31	6,959	-38.8	43	[illegible]	[illegible]
350	31	7,763	[illegible]		[illegible]	17.9
300	31	8,779	-50.6		[illegible]	[illegible]
250	31	[illegible]	-52.1		[illegible]	19.8
200	[illegible]	[illegible]	-52.1		[illegible]	[illegible]
175	30	12,241	-52.0		235	17.7
150	29	[illegible]	-51.3		237	17.3
125	29	[illegible]	-51.5		[illegible]	14.1
100	29	15,879	-51.9		[illegible]	13.8
80	29	17,322	-52.5		[illegible]	9.3
70	29	18,184	[illegible]		[illegible]	7.0
60	28	19,178	-52.8		[illegible]	6.2
50	[illegible]	[illegible]	[illegible]		192	6.4
40	27	21,784	-52.5		162	6.8
30	26	23,647	-52.4		132	9.7
25	24	24,333	-52.0		107	10.3
20	23	26,265	-53.9		89	9.1
15	16	28,113	-54.6		[illegible]	7.2
10	9	[illegible]	[illegible]			

COLUMBIA, MO. 990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	73	[illegible]	.8
1000	31	15				
950	31	568	- .8	70	279	5.8
900	31	[illegible]	- .4	63	276	10.5
850	31	1,456	- .9	[illegible]	271	13.2
800	31	[illegible]	- 1.8	46	270	15.9
750	31	2,447	- 3.0	[illegible]	273	18.9
700	31	2,994	- 6.	46	277	22.9
650	31	3,565	- 8.7	45	276	26.2
600	31	4,189	[illegible]	46	276	28.7
550	31	4,841	-16.6	47	276	32.1
500	31	[illegible]	-21.1	43	276	36.9
450	31	6,221	-26.6	43	274	37.3
400	31	7,171	-32.8	43	273	40.2
350	31	8,097	[illegible]	40	273	44.3
300	31	9,134	-47.2		275	49.
250	31	10,323	-53.5		271	54.2
200	31	11,742	-57.7		270	57.5
175	31	12,584	-57.4		270	59.6
150	31	13,558	-57.5		269	55.4
125	31	14,735	-59.4		271	45.3
100	31	16,093	-61.9		271	35.2
80	30	17,474	-62.2		269	27.0
70	[illegible]	18,303	[illegible]		269	23.9
60	28	19,258	-61.5		276	19.6
50	29	[illegible]	-61.2		287	12.6
40	27	[illegible]	[illegible]		[illegible]	8.5
30	23	23,572	[illegible]		297	10.9
25	19	24,720	-58.7		[illegible]	11.3
20	16	26,122	-58.0		306	11.7
15	10	27,929	-56.9			

DAYTON, OHIO 984 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	297	- 2.1	83	230	2.1
1000	31	167				
950	31	575	- 2.6	82	[illegible]	[illegible]
900	31	1,004	- 2.7	72	259	14.0
850	31	1,457	- 2.7	60	264	19.2
800	31	1,938	- 4.	59	[illegible]	22.1
750	31	2,444	[illegible]	[illegible]	271	23.5
700	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
650	31	3,552	-10.2	50	[illegible]	28.4
600	31	4,171	-13.3	54	267	32.2
550	31	4,825	-17.1	56	267	34.6
500	31	5,538	-21.8	51	264	39.0
450	31	6,297	-27.2	[illegible]	262	[illegible]
400	31	7,144	-33.4	51	264	49.5
350	31	[illegible]	-40.3	53	[illegible]	54.8
300	31	9,104	-47.2		265	61.0
250	31	10,293	-53.3		265	64.7
200	31	11,717	-56.8		[illegible]	[illegible]
175	31	12,562	-56.8		266	62.4
150	31	13,538	-57.7		265	57.7
125	31	[illegible]	-59.2		[illegible]	49.5
100	31	16,075	-61.1		264	39.0
80	31	17,459	-61.7		265	30.1
70	31	[illegible]	-61.5		[illegible]	[illegible]
60	30	19,239	-61.5		270	18.3
50	30	20,370	-61.0		277	15.7
40	[illegible]	21,755	[illegible]		286	12.2
30	26	23,557	-59.1		294	8.9
25	[illegible]	24,698	-58.7		[illegible]	8.0
20	23	26,093	-57.9		[illegible]	10.7
15	15	27,922	-56.8		299	10.1
10	10	30,490	-55.5			

DEL RIO, TEXAS 982 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	314	5.3	54	345	1.9
1000	31	162				
950	31	587	[illegible]	47	159	1.7
900	31	1,032	[illegible]	42	208	4.5
850	31	1,504	[illegible]	[illegible]	255	6.2
800	31	2,003	6.2	31	268	10.3
750	31	2,529	4.3	29	275	13.4
700	31	3,090	1.4	28	266	16.1
650	31	3,679	- 1.6	30	[illegible]	18.3
600	31	4,317	- 5.7	30	260	22.9
550	31	4,988	-10.0	[illegible]	[illegible]	25.4
500	31	5,723	-15.1	28	268	30.3
450	31	6,507	-20.7	30	266	33.6
400	31	7,374	-27.0	31	[illegible]	40.8
350	31	8,323	-34.0	36	261	47.2
300	31	9,386	-41.7	[illegible]	[illegible]	55.4
250	31	10,600	-50.0		263	57.5
200	31	12,033	-57.2		266	64.3
175	31	12,872	-59.7		[illegible]	60.0
150	31	13,829	[illegible]		[illegible]	53.
125	[illegible]	14,944	-67.0		265	[illegible]
100	[illegible]	16,281	-69.8		[illegible]	35.0
80	28	17,609	-69.6		[illegible]	29.3
70	27	18,406	-68.3		261	24.9
60	25	[illegible]	-66.6		[illegible]	19.2
50	23	20,451	-63.4		258	16.3
40	21	[illegible]	[illegible]		259	17.9
30	21	[illegible]	-57.7		[illegible]	20.6
25	21	24,787	-56.0		[illegible]	23.1
20	21	26,215	-53.7		[illegible]	[illegible]
15	18	28,067	-52.0		[illegible]	44.1
10	10	30,689	-48.5			

DENVER, COLO. 836 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,611	[illegible]	67	[illegible]	4.1
1000	31	177				
950	31	586				
900	31	1,019				
850	31	1,474				
800	31	1,955	- .5	45	267	4.9
750	31	[illegible]	- 1.1	37	284	6.4
700	31	3,019	- 4.4	[illegible]	[illegible]	8.2
650	31	3,596	- 8.1	47	[illegible]	12.2
600	31	4,216	-11.9	49	294	17.3
550	31	4,874	-16.0	[illegible]	292	21.8
500	31	5,599	-20.7	41	[illegible]	23.3
450	31	6,356	[illegible]	42	282	[illegible]
400	31	7,200	-32.6	41	284	28.7
350	31	8,127	-39.4	37	291	30.9
300	31	9,166	-47.1		[illegible]	35.5
250	31	10,353	-54.3		290	40.2
200	31	11,769	-57.9		[illegible]	44.1
175	31	12,610	-58.0		287	43.1
150	31	13,582	-58.0		291	41.4
125	31	14,726	-60.0		281	35.5
100	31	16,111	-61.9		282	30.1
80	31	17,492	-62.0		282	19.4
70	31	18,319	-61.3		287	[illegible]
60	30	19,279	-60.9		295	10.3
50	30	20,414	-60.8		307	6.8
40	30	21,806	-59.9		344	3.5
30	28	23,611	-59.1		10	6.8
25	26	24,756	-58.0		22	7.2
20	23	26,167	-57.5		353	7.2
15	21	27,983	-57.3		354	9.3
10	7	30,543	-58.5			

DODGE CITY, KAN. 925 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	791	- 5.8	77	[illegible]	3.9
1000	31	174				
950	31	584				
900	31	1,009	- .2	58	334	5.4
850	31	1,467	.6	53	313	4.5
800	31	1,954	.4	47	297	[illegible]
750	31	2,473	- 1.1	43	288	11.1
700	31	3,019	- 3.6	41	[illegible]	14.
650	31	[illegible]	- 6.6	40	284	15.0
600	31	4,224	-10.4	40	272	17.5
550	31	4,886	[illegible]	[illegible]	277	19.2
500	31	5,603	-20.2	40	275	22.1
450	31	6,371	-26.1	40	277	24.3
400	31	7,219	-32.4	39	280	29.3
350	31	8,146	-39.5	36	279	35.2
300	31	9,135	-46.9		276	39.8
250	31	10,375	[illegible]		277	47.4
200	31	11,795	-57.8		278	51.9
175	31	12,639	-57.9		274	51.1
150	31	13,609	-58.2		275	[illegible]
125	30	14,751	-61.1		274	40.8
100	[illegible]	16,129	-63.3		275	34.0
80	29	17,500	-62.6		277	24.5
70	29	18,322	-62.5		275	16.5
60	29	19,274	-61.8		279	12.4
50	27	20,405	-61.1		291	9.1
40	26	21,792	-60.2		301	6.6
30	24	23,589	-59.1		302	6.4
25	24	24,732	-58.4		306	9.3
20	22	26,139	-57.7		[illegible]	10.3
15	21	27,961	-56.5		[illegible]	16.7
10	11	30,589	-53.4			

EL PASO, TEXAS 883 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,193	.3	46	290	2.5
1000	31	179				
950	31	597				
900	31	1,038				
850	31	1,502	6.5	37	294	5.6
800	31	[illegible]	4.2	36	293	10.1
750	31	2,520	1.7	39	284	15.0
700	31	3,074	- .7	37	273	20.2
650	31	3,660	- 3.6	31	272	22.0
600	31	4,292	- 7.3	36	276	20.8
550	31	4,958	-11.6	34	275	23.5
500	31	5,689	-16.6	33	282	26.2
450	31	6,468	-21.9	33	283	30.7
400	31	7,331	-28.3	34	283	35.7
350	31	8,275	-35.5	35	284	41.6
300	31	9,332	-43.2		284	44.1
250	31	[illegible]	-51.2		283	50.3
200	30	11,968	-57.4		277	52.8
175	30	12,808	-59.3		276	53.0
150	30	13,770	-61.1		273	50.5
125	29	14,995	-64.4		270	43.1
100	29	16,249	-67.3		270	36.7
80	29	17,592	-67.3		[illegible]	26.2
70	[illegible]	[illegible]	-65.8		270	20.8
60	29	19,337	-64.7		275	17.3
50	29	20,456	-62.3		281	10.9
40	27	21,843	-59.8		273	9.3
30	26	23,649	-57.6		262	13.8
25	23	24,806	-56.3		269	17.7
20	20	26,226	-54.9		273	23.3
15	12	28,064	-53.0		271	38.3

ELY, NEV. 808 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,908	- 7.0	[illegible]	[illegible]	[illegible]
1000	31	216				
950	31	629				
900	31	1,054				
850	31	1,514				
800	31	1,991			[illegible]	4.7
750	31	2,505	- 2.9	56	247	1.7
700	31	3,047	- 5.1	56	296	[illegible]
650	31	3,627	- 7.6	[illegible]	[illegible]	[illegible]
600	31	4,247	-10.6	[illegible]	[illegible]	[illegible]
550	31	4,906	-14.7	46	286	22.5
500	31	[illegible]	-19.7	45	287	26.2
450	31	6,393	-25.4	[illegible]	292	28.7
400	31	7,247	-31.8	[illegible]	291	32.4
350	31	8,178	-38.7	43	291	33.0
300	31	9,219	-46.5		[illegible]	39.2
250	31	10,407	[illegible]		291	45.6
200	31	11,817	[illegible]		295	43.5
175	29	12,659	-60.8		293	40.6
150	29	13,616	-60.8		291	[illegible]
125	29	14,746	-62.2		291	31.1
100	29	16,120	-63.0		[illegible]	27.6
80	29	17,491	[illegible]		299	17.1
70	29	18,311	-63.0		305	12.2
60	[illegible]	19,261	-62.2		[illegible]	[illegible]
50	[illegible]	[illegible]	-61.4		337	4.9
40	29	21,776	[illegible]		16	5.6
30	28	23,574	-59.4		[illegible]	5.8
25	27	24,717	-59.3		49	[illegible]
20	25	26,121	-58.2		47	7.2
15	23	27,936	[illegible]			5.4
10	12	30,486	-57.1			
7	7	[illegible]	[illegible]			

EMPALME, MEXICO 1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	12	11.7	64	[illegible]	2.9
1000	31	134	16.1	49	[illegible]	4.1
950	31	566	16.8	40	[illegible]	4.7
900	31	1,031	14.7	[illegible]	[illegible]	2.5
850	31	1,512	11.5	41	257	1.9
800	31	2,016	9.1	34	227	5.6
750	31	2,545	6.7	29	263	7.2
700	[illegible]	3,112	3.5	27	[illegible]	10.1
650	30	3,706	.2	25	[illegible]	[illegible]
600	[illegible]	4,347	- 4.0	27	270	18.3
550	[illegible]	5,019	- 8.7	32	278	21.4
500	[illegible]	5,759	-13.7	30	278	23.1
450	30	6,546	-19.6	27	[illegible]	26.4
400	30	7,417	-25.8	26	272	31.3
350	30	[illegible]	-33.4	[illegible]	272	33.6
300	[illegible]	9,434	-41.5	[illegible]	[illegible]	[illegible]
250	30	10,648	-50.3		273	44.1
200	29	[illegible]	-58.4		268	54.0
175	28	[illegible]	-61.2		271	50.9
150	28	13,852	-64.0		269	48.8
125	28	14,961	[illegible]		269	42.7
100	28	16,300	-69.5		[illegible]	32.2
80	27	[illegible]	-69.8		[illegible]	29.0
70	27	18,419	[illegible]		270	23.1
60	27	19,348	-65.9		274	15.3
50	27	[illegible]	-64.3		[illegible]	13.0
40	27	21,835	-60.7		264	[illegible]
30	26	23,642	-56.6		265	15.2
25	25	24,806	-54.6		[illegible]	20.2
20	25	[illegible]	[illegible]		269	29.7
15	24	28,106	-50.8		[illegible]	41.2
10	14	[illegible]	-47.			

*** FAIRBANKS, ALASKA 995 MB**

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	135	-28.8	72	11	1.7
1000	31	[illegible]			27	1.7
950	31	485	-17.0	96	[illegible]	5.1
900	31	[illegible]	-14.1	74	108	7.6
850	31	1,320	-13.4	67	99	4.5
800	31	1,782	-13.9	64	[illegible]	3.9
750	31	2,269	-16.0	64	110	.6
700	31	2,787	-18.6	61	[illegible]	2.3
650	31	3,333	-21.8	61	281	3.7
600	31	3,922	-25.3	61	294	5.6
550	31	4,545	-29.3	60	291	6.6
500	31	5,224	[illegible]	[illegible]	[illegible]	10.5
450	31	5,952	-37.5	51	298	15.0
400	31	6,763	-42.6	48	296	18.6
350	31	7,653	-48.5		[illegible]	[illegible]
300	31	8,656	-53.2		285	25.6
250	31	9,826	-53.7		284	[illegible]
200	31	11,269	-50.9		278	22.0
175	31	12,141	-49.5		274	[illegible]
150	31	[illegible]	-49.7		272	21.2
125	31	14,343	-50.0		266	19.2
100	31	15,800	-50.5		262	20.2
80	31	17,252	-51.2		265	20.8
70	31	[illegible]	-51.0		[illegible]	19.4
60	30	19,123	-52.1		[illegible]	20.4
50	30	20,304	-51.9		260	23.3
40	27	21,754	-52.4		265	24.9
30	26	23,612	-53.9		257	27.2
25	[illegible]	24,793	-54.8		281	21.8
20	15	26,291	-54.7		271	21.4
15	12	[illegible]	[illegible]		[illegible]	25.4
10	5	30,837	[illegible]			

FLINT, MICH. 990 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	- 4.3	79	240	4.1
1000	31	149				
950	31	556	- 5.1	85	[illegible]	9.9
900	31	976	- 6.1	83	267	12.6
850	31	1,426	- 6.2	73	270	14.0
800	31	1,900	- 6.6	64	273	17.5
750	31	2,401	- 8.4	[illegible]	[illegible]	20.6
700	31	2,936	-10.7	62	265	[illegible]
650	31	3,502	-13.1	57	263	26.8
600	31	4,111	-15.9	[illegible]	265	[illegible]
550	31	4,760	-19.7	53	267	35.4
500	31	5,464	-24.1	47	267	40.4
450	31	6,217	-29.5	48	266	43.9
400	31	7,054	[illegible]	50	265	47.4
350	31	7,971	-41.9	59	263	[illegible]
300	31	9,001	[illegible]		264	54.8
250	31	10,187	-53.1		263	57.9
200	31	11,617	-54.9		264	56.7
175	31	12,449	-54.9		267	52.8
150	31	13,453	[illegible]		264	49.4
125	31	14,612	-54.5		262	40.2
100	31	16,020	-58.6		262	30.5
80	31	17,420	-58.9		265	26.0
70	31	18,257	-59.0		272	20.2
60	31	19,223	-59.4		270	17.7
50	31	20,364	-59.2		281	13.4
40	31	21,762	-59.2		292	11.3
30	29	23,570	-58.9		307	9.3
25	26	24,713	-58.1		[illegible]	8.9
20	25	26,114	-58.1		295	12.4
15	25	27,928	-57.4		307	15.7
10	18	30,476	-56.		[illegible]	28.0

FORT WORTH, TEXAS 999 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	180	[illegible]	78	304	1.6
1000	31	166			345	6.0
950	31	[illegible]	5.6	64	242	5.4
900	31	1,029	6.5	51	252	[illegible]
850	31	1,497	[illegible]	43	255	11.7
800	31	1,992	[illegible]	[illegible]	256	14.
750	31	2,517	1.2	36	262	14.0
700	31	[illegible]	- 1.6	32	263	18.1
650	31	3,655	[illegible]	[illegible]	267	22.1
600	31	4,282	- 7.8	32	266	24.9
550	31	4,950	-12.2	33	264	27.4
500	31	5,676	-17.1	33	265	30.3
450	31	6,455	-22.9	34	266	35.2
400	31	7,312	-29.2	34	266	40.8
350	31	[illegible]	-36.2	30	266	[illegible]
300	31	9,305	[illegible]		268	51.9
250	31	10,509	-51.4		[illegible]	[illegible]
200	31	[illegible]	-57.4		271	57.1
175	31	12,777	-59.1		[illegible]	57.1
150	31	[illegible]	-60.6		[illegible]	[illegible]
125	30	14,869	-63.9		270	47.6
100	30	16,225	-67.0		270	[illegible]
80	29	17,567	[illegible]		268	23.7
70	[illegible]	18,374	-66.1		[illegible]	23.7
60	29	19,313	-64.4		268	16.9
50	29	20,430	-62.8		271	13.6
40	28	21,812	-60.4		273	14.0
30	27	23,613	-58.5		270	18.1
25	27	24,761	-57.4		276	22.0
20	24	26,178	-55.5		277	27.0
15	23	28,022	-53.2		[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	GLASGOW, MONT. [illegible]33 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]	- 9.[illegible]	79	132	1.2
1000	31	152				
950	31	[illegible]				
900	[illegible]	975	- 5.4	7[illegible]	[illegible]	7.2
850	31	1,426	- 3.1	64	287	14.[illegible]
800	31	1,906	- 4.0	55	296	17.5
750	31	[illegible]	- 6.7	53	[illegible]	17.5
700	31	[illegible]	- 9.6	[illegible]	292	19.0
650	31	[illegible]	-12.7	55	294	21.4
600	[illegible]	4,124	-16.5	[illegible]	[illegible]	22.5
550	31	[illegible]	-20.7	49	297	24.7
500	[illegible]	[illegible]	-25.4	48	[illegible]	26.2
450	31	[illegible]	[illegible]	49	298	29.1
400	31	7,05[illegible]	-37.[illegible]	4[illegible]	3[illegible]1	33.[illegible]
350	[illegible]	7,962	[illegible]		304	35.0
300	31	[illegible]	[illegible]		[illegible]	41.2
250	31	[illegible]	-55.[illegible]		299	39.8
200	[illegible]	[illegible]	[illegible]		292	[illegible]
175	31	[illegible]	[illegible]		293	34.8
150	[illegible]	13,401	-55.[illegible]		294	30.5
125	[illegible]	14,864	[illegible]		294	27.6
100	31	[illegible]	-56.[illegible]		291	22.1
80	29	[illegible]	[illegible]		297	18.3
70	29	[illegible]	-56.6		[illegible]	14.4
60	29	19,213	[illegible]		[illegible]	10.9
50	[illegible]	[illegible]	-57.1		[illegible]	[illegible]
40	[illegible]	[illegible]	-57.4		[illegible]	3.4
30	29	[illegible]	-57.8		13	8.4
25	[illegible]	[illegible]	-57.9		13	8.7
20	27	26,152	-58.1		[illegible]	11.3
15	[illegible]	27,969	-59.7		[illegible]	11.3
10	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
7	11	32,709	-62.3			
5	[illegible]	34,7[illegible]	-61.7			

Standard pressure surface (mb.)	* GRAND JUNCTION, COLO. 854 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,474	- 3.8	84	128	3.3
1000	31	207				
950	31	616				
900	31	1,052				
850	31	1,507			119	4.9
800	31	1,989	- 2.7	60	130	4.7
750	31	2,501	- 4.4	62	171	2.5
700	31	3,041	- 6.1	61	276	6.2
650	31	3,615	- 8.4	53	293	11.8
600	31	4,237	-11.7	54	296	16.7
550	31	4,894	-15.5	51	297	21.6
500	31	5,614	-19.[illegible]	46	298	26.2
450	31	6,380	-25.2	46	302	27.8
400	31	7,233	-31.6	43	305	30.7
350	31	8,164	[illegible]	45	[illegible]	32.8
300	31	9,204	-46.4		[illegible]	38.7
250	31	10,393	-54.1		302	42.7
200	30	11,806	-59.[illegible]		292	46.4
175	30	12,647	-59.[illegible]		294	43.[illegible]
150	[illegible]	13,615	-58.9		291	[illegible]
125	[illegible]	14,756	-60.4		285	34.0
100	30	16,139	-62.3		285	27.[illegible]
80	29	17,511	-62.5		289	19.4
70	28	18,337	-61.9		296	15.3
60	28	19,292	-61.3		306	11.1
50	27	20,428	-60.3		[illegible]	7.0
40	26	21,821	-59.5		1	5.6
30	22	23,633	-58.4		15	5.4
25	21	24,778	-58.0		22	5.4
20	21	26,184	-57.4		358	5.1
15	16	28,011	-56.2		31[illegible]	9.7
10	6	30,636	[illegible]			
7						
5						

Standard pressure surface (mb.)	* GREAT FALLS, MONT. 884 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	1,123	- 3.9	70	220	9.9
1000	31	140				
950	31	555				
900	31	989				
850	31	1,437	- .6	57	234	19.6
800	31	1,920	- 2.4	61	254	19.0
750	31	2,434	- 5.3	65	272	18.6
700	31	2,970	- 8.3	64	284	19.8
650	31	3,545	-11.3	59	288	24.1
600	31	4,153	-15.[illegible]	[illegible]	292	23.7
550	31	4,803	-19.6	[illegible]	[illegible]	23.3
500	31	5,508	-24.[illegible]	[illegible]	288	25.3
450	31	6,263	[illegible]	51	288	27.6
400	31	7,098	-35.8	52	288	30.3
350	31	8,014	-42.4	49	[illegible]	35.9
300	31	9,039	-49.6		289	41.4
250	31	10,217	-55.3		289	46.[illegible]
200	31	11,6[illegible]	-57.7		290	43.7
175	29	12,475	-56.		287	39.4
150	[illegible]	13,456	-56.0		283	36.5
125	[illegible]	[illegible]	-56.[illegible]		280	28.6
100	19	16,019	-57.[illegible]		282	19.6
80	18	17,428	-56.0		291	15.5
70	18	18,276	-56.5		[illegible]	10.5
60	18	19,253	-56.7		291	8.
50	18	20,409	-56.6		[illegible]	7.0
40	13	[illegible]	-56.7		[illegible]	5.6
30	17	23,655	-56.6		46	9.1
25	17	24,812	-56.3		58	9.0
20	17	26,231	-56.1		44	13.
15	15	28,078	-56.7		50	14.2
10	10	30,635	-59.2			
7	7	32,920	-59.9			
5						

Standard pressure surface (mb.)	GREEN BAY, WIS. 992 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	210	- 8.1	71	300	3.3
1000	31	[illegible]				
950	31	548	- 7.0	94	305	5.6
900	31	969	- 7.6	77	[illegible]	6.8
850	31	1,414	- 7.4	64	[illegible]	[illegible]
800	31	1,986	- 8.1	[illegible]	[illegible]	12.9
750	31	2,394	- 9.4	54	287	16.5
700	31	2,917	-11.[illegible]	57	286	19.8
650	31	3,480	-14.5	54	284	23.3
600	31	4,085	-17.2	[illegible]	284	27.6
550	31	4,733	-21.		280	32.9
500	31	5,431	-25.4	49	281	35.2
450	31	6,182	-30.7	49	282	35.4
400	30	7,015	-36.2	4[illegible]	284	40.4
350	30	7,930	-42.6	48	28[illegible]	43.7
300	30	8,957	-48.8		275	44.9
250	30	10,141	-53.9		277	46.2
200	30	11,568	-55.2		276	47.2
175	[illegible]	12,422	-54.3		275	43.9
150	30	13,409	-54.8		274	39.0
125	29	14,567	-55.7		276	31.7
100	29	15,983	-57.2		273	27.6
80	28	17,389	-57.9		284	21.6
70	28	18,230	-58.0		288	17.5
60	28	19,202	-58.2		290	13.2
50	27	20,349	-58.7		304	10.7
40	26	21,752	-59.2		317	11.1
30	24	23,548	-59.0		341	9.3
25	22	24,696	-58.6		338	8.4
20	21	26,107	-58.4		359	9.3
15	19	27,917	-58.3		351	10.3
10	12	30,448	-57.3			
7	5	32,727	-54.6			
5						

Standard pressure surface (mb.)	GREENSBORO, N. C. 988 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	273	1.5	81	319	1.4
1000	31	172				
950	31	588	3.3	64	286	5.6
900	31	1,025	2.5	57	[illegible]	[illegible]
850	31	1,[illegible]	2.0	55	263	12.6
800	31	1,976	[illegible]	50	259	17.7
750	31	2,493	- .5	51	260	21.0
700	31	3,044	- 3.0	53	263	26.6
650	31	3,628	- 5.9	44	262	29.5
600	31	4,2[illegible]	- 9.2	44	[illegible]	33.2
550	31	4,917	-1[illegible]	44	264	36.1
500	31	5,641	-18.3	40	265	39.[illegible]
450	31	6,413	-23.8	40	267	44.9
400	31	7,17[illegible]	-30.0	39	271	[illegible]
350	31	8,208	[illegible]	39	270	57.1
300	31	9,259	-44.3		269	62.4
250	31	10,460	-52.3		266	65.7
200	31	11,885	-57.5		[illegible]	71.1
175	31	12,7[illegible]	-58.1		265	69.3
150	31	13,694	-59.6		265	63.9
125	31	14,826	-62.9		266	53.8
100	31	16,192	-65.1		265	46.0
80	30	17,553	-64.6		266	33.2
70	29	18,369	-63.6		264	27.8
60	28	19,316	-63.7		266	21.9
50	29	20,438	-62.2		[illegible]	19.4
40	28	21,819	-61.1		280	14.0
30	27	23,614	-59.2		274	17.1
25	27	24,760	-57.8		279	18.1
20	26	26,172	-56.3		281	23.5
15	25	28,014	-53.6		276	28.9
10	24	30,643	-49.8		274	53.4
7	20	32,993	-46.4			
5						

Standard pressure surface (mb.)	GUAM, MARIANA IS. [illegible] MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	111	24.9	[illegible]	82	8.9
1000	31	95				
950	31	546	22.6	[illegible]	[illegible]	22.5
900	31	1,017	20.0	83	86	22.9
850	[illegible]	1,509	17.6	72	[illegible]	20.4
800	31	2,026	15.9	49	[illegible]	17.9
750	31	2,573	13.5	42	87	18.8
700	31	3,152	10.9	[illegible]	89	19.8
650	31	3,766	7.7	[illegible]	89	20.0
600	31	4,421	[illegible]	[illegible]	93	20.2
550	31	5,118	[illegible]	26	[illegible]	21.0
500	31	[illegible],877	- 5.2	24	98	23.5
450	31	6,696	-10.3	22	1[illegible]	22.7
400	31	7,596	-15.9	19	[illegible]	19.6
350	31	8,589	-22.7	20	90	16.7
300	31	9,701	-31.1	[illegible]	[illegible]	12.
250	31	[illegible]	-41.3		89	6.[illegible]
200	31	[illegible]	-53.4		1[illegible]	4.7
175	31	[illegible]	-60.3		105	4.7
150	[illegible]	[illegible]	[illegible]		[illegible]	5.9
125	31	15,302	-75.9		98	10.7
100	27	16,562	[illegible]		102	15.7
80	25	17,802	-82.[illegible]		102	[illegible]
70	24	18,56[illegible]	-76.0		158	[illegible]
60	24	19,462	[illegible]		275	9.5
50	24	20,560	-65.2		[illegible]	[illegible]
40	24	21,934	-60.6		260	13.2
30	23	[illegible]	[illegible]		[illegible]	9.1
25	22	[illegible]	-52.7		266	4.9
20	22	26,267	-49.2		51	1.2
15	[illegible]	28,265	-46.9		63	[illegible]
10	16	30,978	-41.5		[illegible]	24.9
7	7	33,406	-41.[illegible]			

Standard pressure surface (mb.)	HILO, HAWAII 1016 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	11	20.8	85	229	2.5
1000	31	145	21.6	80	241	[illegible]
950	31	589	18.5	85	81	5.2
900	31	1,051	15.2	85	91	6.2
850	31	1,535	12.7	83	[illegible]	5.6
800	31	2,043	10.3	77	86	6.4
750	31	2,582	8.4	52	85	8.0
700	31	3,147	6.	42	89	6.0
650	31	3,749	3.1	35	82	5.1
600	31	4,395	- .7	34	84	3.5
550	31	5,080	- 4.9	35	46	2.9
500	31	5,829	- 9.5	32	317	4.3
450	31	6,632	-15.0	[illegible]	312	6.6
400	31	7,517	-21.4	33	305	[illegible]
350	31	8,487	-29.0	33	299	12.0
300	31	9,572	-36.7	29	291	18.3
250	31	10,811	-45.6		285	25.4
200	31	12,268	-55.2		282	28.6
175	31	13,110	-60.3		283	29.1
150	31	14,059	-65.9		282	29.7
125	31	15,149	-71.5		286	25.8
100	30	16,453	-76.4		285	22.1
80	26	17,738	-75.9		295	13.2
70	26	18,513	-73.7		290	9.[illegible]
60	26	19,4[illegible]	[illegible]		259	6.2
50	25	20,535	-62.8		264	5.4
40	25	21,923	-59.3		276	9.4
30	24	23,739	-55.7		284	.7
25	24	24,907	-53.1		294	12.2
20	24	26,360	-48.9		296	14.[illegible]
15	24	28,264	-45.9		284	9.3
10	22	30,995	-41.9		207	1[illegible]
7	16	33,416	-41.3		[illegible]	10.7

Standard pressure surface (mb.)	HUNTINGTON, W. VA. 991 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	246	- .[illegible]	81	230	.6
1000	31	172				
950	31	585	.1	74	246	7.4
900	31	1,017	- 1.2	74	259	12.9
850	31	1,473	- 1.6	63	263	17.1
800	31	1,955	- 2.9	62	265	20.2
750	31	2,463	- 4.6	57	266	23.5
700	31	3,007	- 6.7	59	266	25.9
650	31	3,581	- 8.9	54	268	29.3
600	31	4,202	-11.7	53	266	32.4
550	31	4,860	-15.9	51	268	35.9
500	31	5,577	-20.7	50	266	40.
450	31	6,346	-26.2	47	265	44.3
400	31	7,193	-32.2	47	[illegible]	49.
350	31	8,121	-39.[illegible]	45	257	54.4
300	31	9,163	-45.9		266	62.4
250	31	[illegible]	-52.8		266	70.1
200	31	11,782	-56.7		265	70.3
175	31	12,627	-57.5		263	67.2
150	30	13,597	-58.7		264	61.2
125	29	14,738	-60.7		262	53.6
100	29	16,118	-62.5		263	41.6
80	29	17,433	-62.7		265	33.8
70	29	18,316	-62.3		267	28.0
60	29	19,270	[illegible]		265	21.8
50	27	20,395	-61.6		271	16.5
40	26	21,780	-60.2		260	12.4
30	25	23,580	-59.1		272	11.5
25	23	24,730	-57.9		284	13.[illegible]
20	18	26,145	-56.8		285	14.0
15	1[illegible]	27,972	-53.9		287	20.4
10						
7						

Standard pressure surface (mb.)	* INTERNAT. FALLS, MINN. 975 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	360	-15.0	73	212	1.2
1000	31	164				
950	31	554	-13.1	81	285	2.3
900	31	967	-10.9	82	276	5.8
850	31	1,408	- 9.9	75	287	9.9
800	31	1,876	-10.0	63	286	11.5
750	31	2,368	-11.5	59	290	14.8
700	31	2,900	-13.7	56	293	16.5
650	31	3,453	-16.5	55	295	17.9
600	31	4,058	-19.7	58	295	20.8
550	31	4,694	-23.5	54	294	22.1
500	31	5,391	-27.9	55	293	24.1
450	31	6,132	-32.9	54	292	26.8
400	31	6,960	-39.0	59	293	28.6
350	31	7,863	-45.3		283	32.4
300	31	8,877	-51.7		284	35.7
250	31	10,048	-55.1		285	39.2
200	31	11,475	-53.9		287	35.4
175	31	12,334	-53.3		287	34.0
150	31	13,326	-53.2		287	30.7
125	31	14,498	-54.2		287	27.0
100	31	15,925	-55.2		287	23.9
80	31	17,346	-56.1		296	19.
70	30	18,192	-56.5		299	16.5
60	29	19,170	-56.9		298	13.9
50	28	20,323	-57.4		315	13.4
40	28	21,730	-57.9		325	10.7
30	28	23,541	-58.7		335	11.3
25	26	24,691	-58.4		342	11.5
20	26	26,094	-58.6		342	13.0
15	23	27,897	-59.5		342	15.2
10	12	30,451	-60.5		312	[illegible]
7	5	32,521	-61.2			

Standard pressure surface (mb.)	JACKSON, MISS. 1009 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	94	6.0	86	62	.4
1000	31	165	6.4	82	119	1.2
950	31	587	7.4	79	231	5.4
900	31	1,033	6.9	71	257	10.1
850	31	1,502	5.6	63	260	14.2
800	31	1,997	3.4	57	256	16.3
750	31	2,518	1.5	51	259	18.3
700	31	3,072	- 1.0	46	260	20.6
650	31	3,657	- 3.7	46	266	22.9
600	31	4,289	- 7.5	45	264	26.6
550	31	4,952	-11.8	40	262	30.9
500	31	5,685	-16.7	41	261	34.4
450	31	6,460	-22.2	36	261	38.1
400	31	7,324	-28.4	34	261	46.0
350	31	8,267	-35.3	35	261	55.9
300	31	9,323	-43.1		261	64.5
250	31	10,530	-50.9		260	69.7
200	31	11,960	-57.0		263	76.1
175	31	12,802	[illegible]		262	75.9
150	31	13,762	-62.0		260	71.7
125	31	14,880	-65.2		260	60.2
100	29	16,228	-67.9		262	48.0
80	29	17,567	-68.0		263	35.4
70	29	18,371	-66.5		263	27.6
60	29	19,306	-65.3		263	[illegible]
50	28	20,419	-63.3		265	17.5
40	27	21,797	-61.1		272	15.5
30	26	23,587	-59.4		277	18.3
25	26	24,733	-57.4		277	20.8
20	26	26,149	-55.1		279	27.8
15	26	27,999	-51.6		273	43.1
10	24	30,649	-47.5		266	69.3
7	15	33,040	-41.9			

Standard pressure surface (mb.)	* JACKSONVILLE, FLA. 1021 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	[illegible]	7.9	89	336	[illegible]
1000	31	177	[illegible]	[illegible]	[illegible]	5.[illegible]
950	31	[illegible]	[illegible]	[illegible]	[illegible]	3.1
900	31	1,[illegible]	9.4	[illegible]	[illegible]	7.6
850	31	1,529	7.8	[illegible]	[illegible]	11.1
800	[illegible]	2,027	5.6	[illegible]	249	14.
750	[illegible]	2,555	3.6	45	[illegible]	17.1
700	[illegible]	3,112	1.5			21.[illegible]
650	[illegible]	3,7[illegible]2	- 1.1		259	26.6
600	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21.[illegible]
550	30	5,008	- 8.7	[illegible]	[illegible]	[illegible]
500	30	5,752	-13.7	[illegible]	25[illegible]	[illegible]
450	30	6,539	-19.4	[illegible]	261	38.0
400	30	7,411	-25.7	31	262	[illegible]
350	30	8,367	-32.6	24	264	53.2
300	30	[illegible]	-40.7		267	57.1
250	30	10,65[illegible]	-49.4		266	63.7
200	[illegible]	12,[illegible]82	-56.3		[illegible]	76.
175	29	[illegible]	-58.[illegible]			77.7
150	29	13,835	-62.3		[illegible]	73.2
125	[illegible]	15,00[illegible]	-66.		[illegible]	[illegible]
100	[illegible]	16,340	-69.0		264	[illegible]
80	[illegible]	17,667	-69.4		258	35.7
70	28	18,464	-68.4		26[illegible]	24.3
60	[illegible]	19,394	-66.1		266	1[illegible]
50	28	20,507	-63.1		271	16.5
40	[illegible]	[illegible]	[illegible]		[illegible]	1[illegible]
30	[illegible]	[illegible]	[illegible]		276	21.2
25	29	24,841	-56.		[illegible]	21.4
20	27	26,269	[illegible]		280	27.6
15	27	28,143	-48.5		272	41.4
10	25	30,847	-42.8		265	73.4
7	12	33,249	-41.2			

Standard pressure surface (mb.)	JOHN F. KENNEDY INT. ARPT.NY 1018 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	5	.8	58	31[illegible]	5.4
1000	31	150	.6	67	315	[illegible]
950	31	562	- 1.0	74	302	11.5
900	31	993	- 1.9	67	[illegible]	13.0
850	31	1,447	- 2.5	6[illegible]	[illegible]	17.3
800	31	1,928	- 3.1	57	276	[illegible]
750	31	2,442	- 4.6	59	275	25.4
700	31	2,979	- 6.9	[illegible]	271	29.2
650	31	3,557	- 9.5	[illegible]	27[illegible]	33.
600	31	4,170	-12.7	49	268	37.7
550	31	4,832	-16.9	[illegible]	[illegible]	42.5
500	31	5,539	-21.4	4[illegible]	269	46.4
450	31	6,307	-27.2	[illegible]	267	49.1
400	31	7,147	-33.6	[illegible]	266	54.6
350	31	8,071	-40.1	42	[illegible]	63.9
300	31	9,108	-47.0		[illegible]	65.3
250	31	10,299	-53.3		266	68.4
200	31	[illegible]	-56.1		271	67.4
175	31	12,573	-56.4		[illegible]	62.9
150	31	13,550	-57.2		271	52.6
125	31	14,599	-58.9		269	45.[illegible]
100	29	16,094	-60.8		266	34.6
80	[illegible]	17,480	-61.2		262	29.9
70	29	[illegible]	-61.2		262	24.7
60	29	19,265	-61.4		264	19.0
50	29	20,397	-60.8		267	14.8
40	28	21,790	-60.6		271	1[illegible]
30	27	23,585	-59.4		[illegible]	9.9
25	25	24,733	-5[illegible]		283	9.5
20	25	26,139	-57.7		[illegible]	8.4
15	24	27,965	-56.0		[illegible]	14.8
10	22	30,562	-52.4		274	35.0
7						

Standard pressure surface (mb.)	JOHNSTON I., PACIFIC AREA 1014 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	31	3	25.1	78	86	12.4
1000	31	120	24.2	79	79	15.7
950	31	56[illegible]	20.3	87	78	19.6
900	31	1,034	17.3	81	84	19.4
850	31	1,521	14.7	77	90	16.7
800	31	2,033	12.9	62	95	15.3
750	31	2,570	11.1	39	94	15.3
700	31	3,147	[illegible]	[illegible]	[illegible]	13.8
650	31	3,751	5.6	[illegible]	76	13.0
600	31	4,407	1.9	24	67	12.8
550	31	5,095	- 2.0	22	52	11.3
500	31	[illegible]	- 7.0	[illegible]	29	10.5
450	31	6,659	-12.5	23	14	11.5
400	31	7,558	-19.[illegible]		[illegible]	13.4
350	31	8,538	-26.2		343	13.6
300	31	9,634	-34.4	22	224	16.1
250	31	10,885	-43.7		[illegible]	22.7
200	31	[illegible]	[illegible]		298	25.9
175	31	13,194	-60.7		[illegible]	26.8
150	30	14,138	-67.4		297	24.7
125	30	15,219	-73.9		[illegible]	23.9
100	[illegible]	[illegible]	-80.3		299	15.9
80	28	17,756	-79.5		315	9.5
70	26	18,517	-75.6		[illegible]	5.6
60	26	19,419	-69.8		268	5.1
50	26	20,522	-63.5		253	9.3
40	26	21,909	-58.9		25[illegible]	9.7
30	25	23,726	-55.8		294	7.2
25	24	24,895	-52.9		327	5.1
20	22	26,345	-49.9		[illegible]	4.5
15	[illegible]	[illegible]	-46.7		105	3.1
10	18	30,958	-42.6		128	11.1
7	[illegible]	33,372	-40.7			

Standard pressure surface (mb.)	KEY WEST, FLORIDA 1019 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	27	3	19.8	83	60	6.4
1000	27	14[illegible]	18.4	79	67	1[illegible].3
950	27	594	15.4	80	90	9.5
900	27	1,057	12.8	76	1[illegible]	6.0
850	27	1,536	10.6	69	135	4.[illegible]
800	27	2,039	8.7	60	185	3.1
750	27	2,572	7.3	51	233	4.1
700	27	3,13[illegible]	5.1	[illegible]	263	5.2
650	27	3,737	2.1	48	269	8.4
600	27	4,382	- 1.6	46	263	13.2
550	27	[illegible]	- 5.4	40	266	15.9
500	[illegible]	[illegible]	-10.2	39	262	19.6
450	27	6,607	-16.1	40	264	23.7
400	27	7,491	-22.7	41	263	29.1
350	27	8,457	-29.8	42	265	36.9
300	27	9,538	-37.8	41	267	46.6
250	27	10,773	-46.4		266	58.3
200	27	12,227	-55.2		260	67.9
175	26	13,070	-59.9		263	[illegible]
150	26	14,024	-64.2		[illegible]	64.5
125	24	15,122	-68.8		270	51.5
100	21	16,442	-73.1		264	37.1
80	19	17,740	-73.5		271	22.7
70	18	18,524	-70.9		[illegible]	16.9
60	18	19,445	-67.0		270	13.6
50	18	20,557	-63.0		286	10.3
40	18	21,944	-59.6		[illegible]	11.1
30	15	23,760	-56.1		299	12.8
25	15	24,926	-53.7		302	16.1
20	15	26,376	-49.1		295	22.0
15	14	28,289	[illegible]		287	31.5
10	7	31,012	-39.1			
7						

Standard pressure surface (mb.)	KING SALMON, ALASKA 1003 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind	
					Direction	Speed
SURFACE	30	15	-13.3	71	24	5.6
1000	30	33			14	10.9
950	30	431	- 7.4	71	41	12.4
900	30	951	- 6.4	59	43	10.1
850	30	1,297	- 7.5	60	[illegible]	9.2
800	30	1,768	- 9.2	60	4[illegible]	6.8
750	30	2,265	-11.[illegible]	55	29	5.8
700	30	2,794	-13.5	51	21	5.1
650	30	3,350	-17.0	51	[illegible]	5.2
600	[illegible]	3,951	-20.7	53	337	4.9
550	30	4,587	-24.9	54	311	6.8
500	30	5,277	-29.4	50	311	8.4
450	30	6,021	-34.2	48	308	9.3
400	30	6,839	-39.7	46	303	[illegible]
350	[illegible]	7,740	-45.8		279	11.7
300	[illegible]	8,752	-51.7		271	14.8
250	30	9,926	-54.7		273	17.3
200	29	[illegible]	-53.0		269	19.5
175	29	12,216	-51.2		268	16.9
150	29	13,219	-50.7		268	15.0
125	29	14,405	-51.1		250	12.8
100	29	15,856	-51.3		[illegible]	10.3
80	28	17,310	-51.8		262	10.7
70	28	18,175	-51.6		254	10.1
60	[illegible]	19,175	-51.7		236	[illegible]
50	28	20,357	-52.0		221	6.2
40	28	21,803	-52.1		205	5.2
30	26	[illegible]	-52.7		[illegible]	5.6
25	[illegible]	24,840	-53.6		[illegible]	3.7
20	19	26,277	-54.2		288	5.1
15	11	28,130	-55.5			
10						
7						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

Standard pressure surface (mb.)	+ KOROR, CAROLINE IS. 1[illegible] MB						KOTZEBUE, ALASKA 1013 MB						KWAJALEIN, MARSHALL IS. 1009 MB						LAKE CHARLES, LA. 1[illegible] MB						LANDER, WYO. 827 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	30	27.6	94	71	4.3	31	[illegible]	-[illegible]1.[illegible]	75	92	3.5	31	4	26.8	81	66	15.9	31	5	9.[illegible]	89	42	3.3	31	1,696	- 7.1	69	193	2.1
1000	31	77	27.2	[illegible]	67	[illegible]	31	1[illegible]			90	3.9	31	83	26.4	82	63	16.9	31	14[illegible]	10.0	[illegible]	[illegible]	2.5	31	189				
950	31	525	[illegible]	[illegible]	76	11.5	31	4[illegible]	-1[illegible]	73	69	4.5	31	535	23.[illegible]	[illegible]	7[illegible]	19.	31	[illegible]	[illegible].7	[illegible]1	1[illegible]	5.[illegible]	31	594				
900	31	1,003	20.9	79	81	12.[illegible]	31	[illegible]	[illegible]	71	49	4.9	31	1,007	20.3	[illegible]	81	[illegible]	31	1,[illegible]17	8.5	61	235	8.4	31	1,025				
850	31	1,497	18.4	71	88	12.4	31	1,3[illegible]	-15.9	67	50	3.9	31	1,500	17.9	77	86	19.2	31	1,5[illegible]	7.[illegible]	5[illegible]	[illegible]	10.7	31	1,478				
800	31	[illegible]	[illegible]	64	[illegible]	[illegible]	31	1,[illegible]	-1[illegible]	59	26	2.3	31	2,018	15.9	69	[illegible]	17.[illegible]	31	2,007	5.3	[illegible]	245	13.6	31	1,955	- 2.5	54	216	1.7
750	31	[illegible]	[illegible]	59	91	14.4	31	[illegible]	-17.[illegible]	59	316	[illegible]	31	2,565	13.5	6[illegible]	91	19.[illegible]	31	2,53[illegible]	3.[illegible]	41	258	14.8	31	2,462	- 3.3	46	295	3.7
700	31	3,14[illegible]	[illegible]	54	94	16.5	31	[illegible],7[illegible]	-19.4	55	285	6.0	31	3,144	[illegible]	59	93	18.3	31	[illegible]	.[illegible]	41	265	17.1	31	3,01[illegible]	- 6.3	45	292	12.[illegible]
650	31	3,74[illegible]	4.4	53	[illegible]	17.5	31	3,32[illegible]	-2[illegible]	[illegible]	27[illegible]	7.8	31	3,757	6.9	56	91	19.6	31	3,[illegible]78	- 2.4	34	[illegible]	21.2	31	3,580	- 9.6	45	293	17.5
600	31	4,4[illegible]	2.7	[illegible]	95	1[illegible]	31	[illegible]	-[illegible]	54	275	9.7	31	4,411	3.[illegible]	56	89	21.0	31	4,312	- 6.1	[illegible]	262	25.3	31	4,201	-13.4	43	292	21.6
550	31	5,1[illegible]	- 1.2	52	94	19.2	31	4,[illegible]41	-[illegible]	52	276	9.9	31	5,111	-[illegible]	49	87	23.[illegible]	31	4,982	-10.4	[illegible]	[illegible]	28.4	31	4,853	-17.4	42	294	22.7
500	31	5,86[illegible]	- 5.5	[illegible]	92	19.6	31	5,11[illegible]	-[illegible]	50	[illegible]	13.6	31	5,8[illegible]	-[illegible]	42	84	25.6	31	5,71[illegible]	-15.[illegible]	[illegible]	259	33.4	31	5,567	-21.9	42	295	27.4
450	31	6,6[illegible]	-1[illegible]	46	[illegible]	[illegible]	31	[illegible],94[illegible]	-[illegible]	51	275	16.1	31	6,6[illegible]	-10.2	42	81	23.3	31	6,498	-[illegible]	30	261	39.6	31	6,326	-27.5	42	288	31.1
400	31	7,5[illegible]	-15.[illegible]	[illegible]	[illegible]	21.2	31	[illegible],71[illegible]	-4[illegible].7	[illegible]	264	18.5	31	7,585	-16.[illegible]	44	[illegible]	21.4	31	7,366	-27.0	31	[illegible]	44.0	31	7,172	-33.9	39	292	34.[illegible]
350	31	8,576	-2[illegible].4	34	95	[illegible]	31	[illegible]	-[illegible]		270	20.0	31	8,67[illegible]	-22.3	47	79	16.[illegible]	31	8,314	-34.[illegible]	3[illegible]	258	51.7	31	8,095	-40.7	45	281	40.2
300	31	9,680	-30.8	30	94	19.2	31	[illegible]	-[illegible]		271	22.3	31	9,694	-30.6	42	76	11.3	31	9,376	-4[illegible]	[illegible]	259	59.4	31	9,126	-48.4		289	45.1
250	31	1[illegible]	-41.[illegible]	35	99	19.0	31	[illegible]	-[illegible]		277	21.8	[illegible]	[illegible]	-41.1	37	[illegible]	[illegible].6	31	10,580	-49.9		263	67.2	31	10,307	-55.2		290	50.1
200	31	1[illegible],43[illegible]	-53.4		[illegible]	20.8	31	11,244	-52.2		272	19.9	31	1[illegible]	-53.4	32	129	[illegible].5	31	1[illegible]	-56.7		261	67.[illegible]	31	11,719	-58.5		290	48.6
175	31	13,077	-6[illegible].6		[illegible]	22.3	31	12,111	-51.[illegible]		265	19.8	30	1[illegible]	-60.7	31	142	1.4	31	[illegible]	-[illegible]		259	64.3	31	12,559	-57.6		291	43.1
150	31	14,[illegible]	-69.2		[illegible]	23.9	31	13,114	-50.9		255	20.4	30	[illegible]	-[illegible]	32	46	4.3	31	1[illegible],82[illegible]	-62.6		[illegible]	62.5	31	13,532	-58.[illegible]		287	39.2
125	31	15,2[illegible]	-76.3		88	26.9	31	14,[illegible]	-[illegible]		247	[illegible].2	27	15,295	-76.1		62	11.3	31	14,941	-66.1		[illegible]	55.8	31	14,678	-58.8		285	33.0
100	[illegible]	16,5[illegible]	-82.6		97	31.7	31	15,71[illegible]	-50.8		243	20.2	25	1[illegible]	-82.6		7	16.[illegible]	31	16,[illegible]81	-69.[illegible]		[illegible]	44.0	31	16,075	-59.9		287	18.9
80	[illegible]	17,9[illegible]6	-77.8		94	7.2	31	17,[illegible]	-51.7		241	22.5	24	17,806	-79.5		[illegible]	[illegible].7	31	17,6[illegible]	-69.0		261	35.7	31	17,46[illegible]	-60.7		291	17.7
70	30	18,5[illegible]	-72.0		281	5.4	31	18,069	-51.9		244	22.1	22	18,572	-74.5		264	[illegible].2	31	18,411	-67.8		[illegible]6	26.6	29	18,297	-59.6		294	13.2
60	30	19,499	-66.[illegible]		279	16.5	31	19,066	-52.6		243	21.2	22	1[illegible]	-69.5		272	16.1	31	19,343	-65.[illegible]		261	[illegible].4	28	19,259	-59.3		3[illegible]	6.6
50	29	20,612	-62.7		278	20.2	31	20,242	-53.2		247	26.4	22	20,596	-[illegible]		275	1[illegible]	31	[illegible]	-63.4		257	17.1	27	20,400	-58.6		331	3.7
40	28	21,995	-59.3		269	18.3	31	21,677	-54.1		251	28.2	[illegible]	21,[illegible]	-59.2		268	12.0	30	21,835	-60.9		[illegible]	15.9	26	21,799	-58.5		32	5.2
30	27	2[illegible]	-55.9		263	18.6	29	23,547	-55.5		252	31.5	21	2[illegible]	-56.6		274	13.4	[illegible]	23,635	-[illegible]		273	10.8	25	23,611	-58.3		62	9.1
25	26	24,974	-53.2		263	18.5	28	24,61[illegible]	-57.1		[illegible]	[illegible]	[illegible]	24,949	-53.3		290	5.2	[illegible]	24,787	-56.3		276	24.7	23	24,765	-57.9		63	10.9
20	25	2[illegible],42[illegible]	-49.9		268	7.	25	26,151	-57.9		269	38.7	[illegible]	26,396	-50.4		1[illegible]	3.1	[illegible]	26,21[illegible]	-[illegible]		[illegible]	34.6	23	26,172	-57.8		65	12.
15	24	28,313	-47.4		108	7.8	16	27,953	-60.3		272	49.3	20	28,296	-47.5		97	15.[illegible]	28	28,079	-50.2		272	46.	17	28,002	-57.2		52	10.7
10	19	30,993	-43.0		9[illegible]	34.6							17	31,001	-42.2		86	31.[illegible]	28	30,751	-45.7		267	62.2	6	30,571	-57.5			
7	10	3[illegible],4[illegible]	-38.2										13	33,434	-38.[illegible]		[illegible]	41.4	[illegible]	3[illegible]	-41.[illegible]									
5													6	[illegible]	-[illegible]															

Standard pressure surface (mb.)	* LIHUE, HAWAII 1014 MB						LITTLE ROCK, ARK. 1011 MB						MCGRATH, ALASKA 998 MB						+ MAJURO, MARSHALL IS. 1009 MB						+ MARCUS IS., N. PACIFIC 1015 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	36	21.2	85	51	5.8	31	79	3.6	81	324	1.[illegible]	31	1[illegible]3	-26.2	67	[illegible]8	.6	31	[illegible]	28.2	[illegible]	7[illegible]	9.0	31	9	24.2	76	77	1.7
1000	31	153	21.8	[illegible]	[illegible]	9.7	31	165	2.5	75	348	2.1	31	9[illegible]			7	4.[illegible]	31	81	27.1	77	74	11.7	31	137	22.4	73	78	2.3
950	31	590	18.5	87	64	13.[illegible]	31	582	4.0	68	256	3.7	31	475	-17.2	[illegible]	59	[illegible].7	31	529	[illegible]3.[illegible]	75	79	16.3	31	589	18.4	71	124	1.2
900	31	1,[illegible]59	15.1	[illegible]	7[illegible]	12.4	31	1,023	4.4	65	255	9.7	31	879	-12.4	71	67	1[illegible].5	31	1,004	20.3	73	[illegible]	18.1	31	1,042	15.3	73	241	2.9
850	31	1,542	12.4	[illegible]	83	11.1	31	1,489	3.7	59	259	13.6	31	1,[illegible]	-10.6	65	56	7.6	31	1,496	17.7	68	93	17.5	31	1,525	13.2	67	239	7.0
800	31	2,050	11.0	54	87	9.7	31	1,981	2.2	56	263	15.[illegible]	31	1,785	-11.7	64	50	3.9	31	2,014	15.5	59	94	18.3	31	2,035	11.9	51	247	10.5
750	31	2,595	9.5	4[illegible]	78	8.2	31	2,499	- .2	49	264	19.6	31	2,276	-13.8	61	19	3.5	31	2,558	1[illegible].2	54	91	18.1	31	2,574	10.8	40	253	16.1
700	31	3,158	6.8	32	78	4.9	31	3,050	- 2.9	51	263	22.0	31	2,80[illegible]	-16.3	56	332	4.1	31	3,139	10.0	55	89	19.2	31	3,148	8.4	38	259	19.2
650	31	3,757	3.5	29	51	4.7	31	3,629	- 5.7	42	264	24.5	31	3,350	-19.3	56	324	4.9	31	3,748	6.7	5[illegible]	[illegible]	18.8	31	3,754	5.2	32	260	22.9
600	31	4,408	- .5	18	348	2.7	31	4,258	- 9.5	39	264	27.4	31	3,946	-22.9	53	[illegible]1	6.8	31	4,405	[illegible].1	50	87	18.6	31	4,406	1.8	29	259	27.0
550	31	5,090	- 4.7	25	[illegible]	5.1	31	4,915	-13.9	39	266	31.3	31	4,574	-[illegible]	55	285	[illegible]	31	5,101	- .8	48	84	19.6	31	5,097	- 2.5	27	261	29.5
500	31	5,84[illegible]	- 9.8	26	303	7.2	31	5,642	-18.7	4[illegible]	267	35.5	31	5,262	-31.3	56	258	10.9	31	5,861	- 4.9	40	83	19.9	31	5,852	- 7.2	26	262	32.6
450	31	6,642	-15.0	25	300	8.[illegible]	30	6,410	-24.0	38	264	39.2	[illegible]	[illegible]	-36.1	[illegible]	[illegible]	15.3	31	6,682	- 9.7	38	81	19.6	31	6,662	-12.2	23	263	37.9
400	31	7,527	-21.6	26	298	12.8	30	7,268	-30.1	36	263	44.5	31	6,810	-41.6	48	249	17.7	31	7,585	-15.0	37	77	16.7	31	7,556	-18.4	23	266	42.3
350	31	8,497	-28.8	27	299	16.3	30	8,205	-37.2	36	265	49.3	30	7,707	-47.4		261	19.4	31	8,58[illegible]	-21.7	32	68	13.2	31	8,540	-25.4	22	267	46.4
300	31	9,5[illegible]	-37.5	[illegible]	301	19.	30	9,2[illegible]	-44.7		267	53.9	[illegible]	8,714	-52.6		264	24.3	31	9,700	-29.9	30	73	9.9	31	9,640	-33.4	24	274	50.3
250	31	10,814	-46.6		302	26.2	30	10,454	-51.8		270	61.4	30	9,886	-54.2		263	24.1	31	10,973	-39.9	29	67	5.6	31	10,896	-42.9		275	50.9
200	31	12,264	-55.6		[illegible]	31.9	30	11,882	-56.9		265	67.6	30	11,324	-51.9		266	22.0	31	12,457	-52.7		7	1.	31	12,365	-53.8		275	55.9
175	31	13,1[illegible]	-60.2		302	34.9	30	12,726	-57.7		264	68.2	[illegible]	12,192	-50.5		265	21.[illegible]	31	13,306	-59.8		356	4.5	31	13,211	-60.1		275	55.8
150	30	14,054	-65.2		293	30.7	30	13,694	-59.8		265	65.5	30	13,198	-50.4		265	21.[illegible]	31	14,252	-67.5		12	3.7	31	14,157	-66.9		275	54.2
125	29	15,149	-70.8		287	32.1	30	14,825	-62.9		265	55.6	[illegible]	14,387	-50.5		255	19.8	31	15,3[illegible]	-74.8		55	7.9	30	15,238	-73.8		272	51.9
100	27	16,453	-75.6		288	23.3	30	16,189	-65.6		263	44.3	30	15,842	-50.4		256	17.7	30	16,602	-81.8		70	16.7	30	16,520	-79.1		267	42.9
80	27	17,738	-76.9		279	15.5	30	17,547	-65.3		263	32.6	[illegible]	17,295	-51.2		242	17.3	29	17,958	-78.2		56	4.9	30	17,783	-79.4		265	28.9
70	26	18,511	-73.9		288	1[illegible].6	30	18,359	-65.1		264	26.0	[illegible]	18,161	-51.4		238	16.1	29	18,632	-71.7		276	12.4	30	18,545	-76.2		265	21.4
60	26	19,422	-68.3		271	5.8	30	19,301	-63.8		266	19.8	30	19,163	-51.5		241	17.1	29	19,551	-66.3		269	20.4	[illegible]	19,448	-69.5		269	13.6
50	26	[illegible],528	-63.9		261	5.2	29	20,421	-62.3		27[illegible]	15.3	30	20,347	-51.5		242	19.5	28	20,669	-61.7		263	22.0	30	20,554	-63.0		261	9.7
40	25	21,910	-59.8		27[illegible]	6.9	29	21,806	-60.6		273	12.8	30	21,792	-52.4		244	[illegible].6	27	22,069	-57.6		269	19.6	30	21,949	-57.6		264	10.5
30	23	23,719	-56.8		299	10.1	26	23,609	-59.2		275	14.2	28	23,644	-53.7		250	20.8	27	23,899	-54.4		272	16.9	30	23,781	-53.5		250	6.2
25	23	24,881	-54.1		302	13.2	24	24,751	-5[illegible].1		279	15.7	28	24,813	-54.7		250	22.9	27	25,073	-52.0		263	13.0	27	24,964	-50.9		249	10.3
20	22	[illegible],328	-49.6		298	14.4	22	26,170	-56.2		279	20.0	27	26,234	-56.2		252	26.4	27	26,532	-48.3		257	6.4	26	26,424	-48.0		257	15.2
15	22	28,223	-46.[illegible]		266	15.0	19	27,996	-54.2		278	[illegible]	14	28,136	-56.5				25	28,431	-46.7		88	11.3	24	28,331	-44.0		268	15.3
10	21	30,937	-41.8		236	23.1	9	30,647	-4[illegible]										23	31,151	-41.1		94	37.7	22	31,079	-39.3		282	19.8
7	21	33,358	-40.1		251	27.0													11	33,563	-38.2				17	33,534	-37.3		272	33.6
5	14	35,67[illegible]	-38.6		272	29.3																			8	35,871	-37.0			
4	7	37,[illegible]	-3[illegible].																											

Standard pressure surface (mb.)	* MEDFORD, OREG. 971 MB						MERIDA, MEXICO 1018 MB						* MIAMI, FLA. 1018 MB						* MIDLAND, TEXAS 917 MB						MONTERREY, MEXICO 969 MB					
	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	4[illegible]1	3.5	[illegible]	189	1.4	31	11	15.8	[illegible]5	72	3.3	31	4	15.6	85	6	2.3	31	874	- 1.[illegible]	58	[illegible]	2.1	28	423	8.4	64	309	6.4
1000	31	161					31	159	1[illegible]	83	79	[illegible]	31	159	17.5	74	42	5.4	31	173					28	161				
950	31	579	3.6	85	19[illegible]	1.7	31	597	17.8	77	105	9.7	31	595	15.3	76	82	6.2	31	586					28	58[illegible]	11.0	53	324	7.0
900	31	1,018	[illegible].5	71	1[illegible]	6.4	31	1,063	14.9	77	112	5.8	31	1,054	12.4	69	105	5.9	31	1,024	4.6	49	25[illegible]	2.[illegible]	28	1,040	11.3	44	318	6.4
850	31	1,482	2.2	64	213	9.5	31	1,546	12.9	66	25[illegible]	[illegible].6	31	1,532	10.5	60	14[illegible]	[illegible].1	31	1,493	6.8	38	274	8.7	28	1,517	10.9	37	28[illegible]	4.7
800	31	1,970	- [illegible]	[illegible]	229	12.6	31	2,054	11.0	52	259	3.9	31	2,035	[illegible].6	45	208	[illegible].1	31	1,990	5.3	31	288	11.9	28	2,021	8.7	38	260	7.4
750	31	2,481	- 2.8	62	244	16.3	31	2,586	8.5	49	251	6.2	31	2,571	7.3	32	249	6.2	31	2,515	2.6	31	285	14.4	28	2,551	6.7	40	261	12.6
700	31	3,029	- 5.6	62	255	20.4	30	3,159	5.7	45	[illegible]	7.[illegible]	31	3,134	4.[illegible]	[illegible]	255	9.9	31	3,070	- .2	31	274	18.3	28	3,117	3.5	41	262	16.1
650	31	3,604	- 8.7	62	261	22.5	30	3,759	3.2	27	243	8.9	31	3,734	1.9	31	259	14.2	31	3,659	- [illegible].4	32	268	19.6	28	3,712	.3	42	261	15.9
600	31	4,224	-12.4	57	267	25.4	30	4,407	- .1	[illegible]1	241	9.7	31	4,377	- 1.9	[illegible]	264	16.5	31	4,289	- 7.1	[illegible]	268	[illegible]3.1	28	4,354	- 3.1	39	258	19.4
550	31	4,877	-16.7	49	272	29.7	[illegible]	5,091	- 4.[illegible]	23	258	12.6	31	5,058	- 6.1	26	263	20.6	31	4,955	-11.3	34	267	27.6	28	5,034	- 7.4	37	259	24.9
500	31	5,594	-21.2	[illegible]	272	33.[illegible]	30	5,844	- 8.7	21	257	16.9	31	5,804	-10.9	28	265	23.9	31	5,685	-16.[illegible]	4[illegible]	270	[illegible].9	28	5,774	-12.2	40	259	29.[illegible]
450	31	6,359	-26.5	47	273	37.3	30	6,649	-13.9	21	257	22.9	31	6,599	-16.6	27	263	29.[illegible]	31	6,46[illegible]	-22.1	39	270	34.6	28	6,568	-17.8	39	258	32.1
400	31	7,206	-32.4	49	273	39.2	30	7,540	-20.2	22	257	27.	31	7,4[illegible]1	-22.9	[illegible]	[illegible]	34.[illegible]	31	7,326	-28.5	36	[illegible]	38.7	28	7,442	-24.3	40	260	35.5
350	31	8,135	-39.1	44	272	43.[illegible]	29	8,514	-27.6	21	259	32.4	31	8,446	-30.3	27	265	39.2	31	[illegible]	-35.6	[illegible]	266	44.[illegible]	29	8,401	-31.8	38	257	45.6
300	31	9,175	-46.6		276	49.7	29	9,602	-36.5	23	260	35.9	31	9,525	-38.5	24	267	4[illegible].9	31	9,225	-43.3		265	49.[illegible]	28	9,47[illegible]	-40.2	30	26[illegible]	51.9
250	31	10,363	-54.4		[illegible]	[illegible]	[illegible]	10,836	-45.9		254	43.1	[illegible]	10,755	-47.1		266	[illegible].4	31	10,532	-50.7		264	[illegible]3.6	[illegible]	10,691	-49.1		261	55.9
200	31	11,774	-59.3		[illegible]	[illegible]	27	12,286	-55.4		242	47.9	29	1[illegible]	-55.9		261	75.4	30	11,963	-57.1		265	54.4	27	12,122	-57.9		258	61.4
175	31	12,610	-59.3		278	47.4	26	13,125	-60.2		246	48.4	28	13,043	-60.3		262	70.7	29	12,805	-58.1		267	54.2	27	1[illegible]	-61.4		256	55.9
150	[illegible]	13,583	-59.3		279	41.[illegible]	26	14,[illegible]74	-[illegible]4.9		249	42.9	[illegible]7	13,993	-64.6		264	66.	[illegible]	13,769	-60.9		268	51.5	27	13,905	-6[illegible].2		257	52.3
125	[illegible]	14,725	-60.5		277	32.1	25	15,173	-69.6		253	38.5	26	15,094	-69.5		264	56.3	29	14,894	-63.8		270	44.3	27	15,005	-69.1		252	46.4
100	27	16,112	-60.9		286	25.4	25	16,487	-74.4		254	30.7	26	16,408	-74.1		[illegible]	42.7	[illegible]	16,250	-66.7		271	35.9	[illegible]	16,325	-72.6		254	40.8
80	27	17,502	-60.2		286	13.4	22	17,774	-75.5		249	16.1	25	17,7[illegible]1	-74.2		260	27.[illegible]	27	17,596	-67.[illegible]		267	28.6	27	17,638	-72.3		257	27.8
70	[illegible]	18,334	-60.3		288	11.1	22	18,550	-72.8		258	8.4	24	18,485	-72.2		259	17.3	27	18,405	-65.5		[illegible]	23.3	27	18,426	-70.7		256	24.5
60	26	19,294	-60.4		291	8.2	22	19,466	-67.9		294	5.6	23	1[illegible]	-[illegible]7.9		267	14.2	26	19,345	-64.7		273	15.[illegible]	[illegible]	19,[illegible]	-67.7		250	13.9
50	26	20,433	-59.7		317	4.7	21	20,572	-63.1		214	2.3	22	20,505	-64.1		268	14.[illegible]	26	20,462	-62.9		277	12.[illegible]	27	20,459	-64.2		250	13.4
40	[illegible]6	21,830	-58.9		17	2.5	20	21,960	-58.2		55	9.7	22	21,983	-60.4		269	14.	25	21,842	-60.9		266	10.9	26	21,841	-60.3		243	10.7
30	[illegible]6	23,637	-58.6		67	9.3	[illegible]	2[illegible],7[illegible]	-53.9		19	9.[illegible]	21	23,684	-5[illegible].		278	14.	24	23,640	-5[illegible].6		273	14.[illegible]	24	23,658	-[illegible]4.4		253	[illegible]
25	[illegible]	24,787	-57.9		71	11.5	17	24,969	-50.7		353	11.9	21	24,844	-54.2		282	17.9	24	[illegible]	-56.8		[illegible]	19.[illegible]	24	24,824	-53.7		256	23.3
20	25	26,195	-57.5		66	12.8	14	26,428	-46.7		[illegible]	13.4	20	26,287	-50.1		[illegible]	21.4	24	26,211	-55.0		275	23.1	23	26,269	-51.3		264	27.2
15	25	28,011	-57.8		[illegible]	10.9	14	28,358	-42.3		27[illegible]	11.8	16	28,189	-45.2		275	36.9	22	28,05[illegible]	-53.1		273	34.4	23	28,151	-4[illegible]		266	40.2
10	[illegible]	30,561	-[illegible].4		[illegible]	7.6	10	31,117	-40.3				14	30,939	-39.8		269	51.1	20	30,692	-49.0		267	52.9	10	30,9[illegible]	-43.9			
7	16	32,842	-55.8		[illegible]	13.2							7	[illegible]	-39.4				17	33,[illegible]	-45.6		265	7[illegible].9						
5	[illegible]	34,9[illegible]	-55.[illegible]																											

See reference note at end of table

RAWINSONDE DATA

Average monthly values

MONTGOMERY, ALA.
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	41	5.4	[illegible]	15	[illegible]
1000	31	173	[illegible]	[illegible]	46	1.4
950	31	596	7.6	70	222	3.7
900	31	1,042	7.1	66	254	8.0
850	31	1,511	5.7	61	260	11.8
800	31	2,007	4.1	54	265	16.1
750	31	[illegible]	[illegible]	[illegible]	[illegible]	19.8
700	31	[illegible]	- .5	51	265	22.5
650	31	[illegible]	- 3.6	[illegible]	264	[illegible]
600	31	[illegible]	- 6.5	[illegible]	[illegible]	28.7
550	31	[illegible]	-10.9	39	259	30.9
500	31	[illegible]	-15.9	[illegible]	261	35.5
450	31	[illegible]	[illegible]	[illegible]	261	[illegible]
400	31	[illegible]	-27.5	36	260	[illegible]
350	31	8,297	-34.5	[illegible]	[illegible]	53.2
300	31	[illegible]	[illegible]		[illegible]	62.4
250	31	10,567	-50.4		259	68.2
200	[illegible]	[illegible]	[illegible]		262	[illegible]
175	29	[illegible]	-59.9		[illegible]	72.8
150	29	[illegible]	-61.9		[illegible]	[illegible]
125	[illegible]	[illegible]	[illegible]		260	[illegible]
100	[illegible]	16,263	[illegible]		262	46.2
80	26	[illegible]	-67.7		[illegible]	32.9
70	26	[illegible]	[illegible]		[illegible]	[illegible]
60	[illegible]	[illegible]	[illegible]		261	[illegible]
50	[illegible]	20,453	-62.7		[illegible]	15.9
40	[illegible]	[illegible]	[illegible]		268	15.7
30	[illegible]	[illegible]	-57.7		273	16.5
25	[illegible]	[illegible]	[illegible]		270	[illegible]
20	26	26,223	-53.5		275	27.6
15	24	28,089	[illegible]		273	36.5
10	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
7	23	33,183	-41.4		264	78.9
5	21	[illegible]	[illegible]			

* NANTUCKET, MASS.
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	14	1.3	75	308	5.2
1000	31	135	1.9	[illegible]	[illegible]	[illegible]
950	31	545	- .6	81	286	10.7
900	31	979	- 1.5	69	271	14.4
850	31	1,434	- 2.2	[illegible]	272	16.9
800	31	1,915	- 3.2	[illegible]	268	19.2
750	31	2,424	- 4.6	[illegible]	264	[illegible]
700	31	2,966	- 6.9	50	262	25.4
650	31	3,540	- 9.4	[illegible]	262	29.7
600	31	[illegible]	-13.0	[illegible]	263	36.1
550	[illegible]	4,811	-17.1	47	262	[illegible]
500	[illegible]	5,525	[illegible]	44	264	40.4
450	[illegible]	6,287	-26.7	[illegible]	265	[illegible]
400	[illegible]	7,134	-32.7	[illegible]	265	44.3
350	[illegible]	8,061	-39.5	41	264	[illegible]
300	[illegible]	[illegible]	-46.3		262	57.7
250	[illegible]	[illegible]	-52.6		266	64.9
200	29	11,725	-55.3		265	61.0
175	[illegible]	[illegible]	[illegible]		267	[illegible]
150	[illegible]	[illegible]	[illegible]		266	50.7
125	[illegible]	14,714	-57.5		[illegible]	45.1
100	[illegible]	[illegible]	-60.1		260	[illegible]
80	26	[illegible]	[illegible]		265	26.8
70	25	[illegible]	-60.6		266	21.4
60	25	[illegible]	[illegible]		[illegible]	19.2
50	4	20,422	-60.3		264	15.3
40	23	21,810	[illegible]		273	12.6
30	[illegible]	23,608	-58.9		281	11.7
25	23	[illegible]	-58.3		284	12.0
20	22	[illegible]	[illegible]		[illegible]	15.0
15	[illegible]	27,973	-56.3		284	20.2
10	22	30,561	-54.1		273	39.4
7	19	[illegible]	-50.2		273	[illegible]
5	[illegible]	34,951	-47.5			

* NASHVILLE, TENN.
999 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	180	1.4	82	80	1.2
1000	31	172			64	2.3
950	31	586	1.7	72	[illegible]	4.5
900	31	1,022	1.4	70	242	8.9
850	31	1,483	1.1	61	256	13.6
800	31	1,970	- .4	57	262	18.1
750	31	2,495	- 2.5	58	266	[illegible]
700	31	3,030	- 4.3	54	[illegible]	24.9
650	31	3,611	- 6.6	47	269	28.2
600	31	4,234	-10.0	51	270	33.0
550	31	4,896	-14.2	50	267	35.7
500	31	5,617	[illegible]	46	264	39.0
450	31	6,391	-24.3	44	264	42.5
400	31	7,243	-30.6	42	263	[illegible]
350	31	[illegible]	-37.4	40	261	51.1
300	31	[illegible]	-45.0		260	56.5
250	31	[illegible]	[illegible]		261	64.1
200	31	11,851	-56.7		263	68.0
175	31	12,696	-57.5		263	67.2
150	31	13,666	-59.4		262	61.4
125	29	14,802	-61.5		264	54.8
100	29	16,176	-63.9		263	[illegible]
80	[illegible]	[illegible]	[illegible]		265	34.8
70	28	18,359	-63.1		266	27.2
60	27	19,305	-62.6		270	21.8
50	27	20,432	-61.4		269	16.7
40	27	21,819	-60.3		279	10.7
30	27	23,620	-58.3		278	[illegible]
25	[illegible]	24,767	-57.1		285	14.6
20	25	26,186	-55.8		[illegible]	15.9
15	25	28,026	-53.5		275	25.6
10	24	30,652	-49.5		271	46.2
7	23	33,003	-45.5		265	71.9
5	[illegible]	35,244	-42.7			

NOME, ALASKA
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	-15.4	69	31	3.9
1000	31				58	3.9
950	31	478	-13.0	70	[illegible]	4.7
900	31	887	-13.9	[illegible]	33	5.2
850	[illegible]	1,321	-13.8	62	16	[illegible]
800	31	[illegible]	-14.4	[illegible]	339	[illegible]
750	31	2,274	-16.1	[illegible]	[illegible]	[illegible]
700	31	2,797	-18.6	[illegible]	312	[illegible]
650	31	[illegible]	-21.6	52	[illegible]	5.6
600	31	3,923	-25.1	[illegible]	[illegible]	7.2
550	31	4,552	-29.1	49	290	7.6
500	31	5,227	-33.5	46	284	9.3
450	31	[illegible]	-38.2	44	280	8.7
400	31	[illegible]	-43.3	49	272	10.7
350	31	7,652	-48.5		250	12.0
300	31	8,656	-53.0		246	14.8
250	31	9,927	-54.3		242	14.6
200	30	[illegible]	-52.8		235	15.3
175	30	[illegible]	-51.7		231	15.3
150	30	13,110	-51.2		[illegible]	15.5
125	30	14,295	-51.5		229	16.3
100	30	15,744	-51.2		220	16.9
80	30	[illegible]	-51.8		225	17.7
70	30	18,058	-51.9		225	18.6
60	30	19,057	-52.4		230	18.5
50	30	20,234	-53.0		232	20.4
40	30	21,671	-53.6		239	22.0
30	29	23,513	-55.4		242	26.8
25	27	24,668	-56.6		247	28.0
20	20	26,110	[illegible]		246	35.4
15						
10						
7						
5						

* NORTH PLATTE, NEBR.
918 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	- 9.0	74	[illegible]	[illegible]
1000	31	[illegible]				
950	31	[illegible]				
900	31	[illegible]	- 4.4	67	311	[illegible]
850	31	[illegible]	- 1.9	56	[illegible]	[illegible]
800	31	[illegible]	- 2.6	51	[illegible]	11.1
750	31	[illegible]	- 3.5	52	293	14.4
700	31	[illegible]	- 5.7	53	298	19.3
650	31	[illegible]	- 8.9	[illegible]	[illegible]	[illegible]
600	31	[illegible]	-12.3	55	288	19.9
550	31	[illegible]	-16.3	50	287	22.1
500	31	[illegible]	-21.2	47	282	24.5
450	31	[illegible]	-26.8	49	282	28.7
400	31	[illegible]	-33.4	47	281	31.5
350	31	[illegible]	[illegible]	[illegible]	281	34.4
300	31	[illegible]	[illegible]		283	[illegible]
250	31	10,301	-55.3		288	44.9
200	31	[illegible]	-57.4		287	44.1
175	31	[illegible]	-57.2		[illegible]	[illegible]
150	31	[illegible]	-57.4		284	41.8
125	31	[illegible]	[illegible]		[illegible]	36.7
100	[illegible]	16,076	-60.3		[illegible]	27.8
80	31	17,466	-60.8		286	19.8
70	31	18,296	-60.5		291	16.3
60	31	19,257	-60.0		[illegible]	11.1
50	30	20,394	-59.7		[illegible]	7.8
40	28	21,793	[illegible]		333	6.4
30	27	23,594	[illegible]		[illegible]	[illegible]
25	27	24,739	-58.2		[illegible]	7.2
20	[illegible]	[illegible]	-57.9		[illegible]	[illegible]
15	24	27,957	-57.9		343	7.9
10	23	30,520	-56.3		[illegible]	18.5
7	[illegible]	32,819	-54.5		278	25.3
5						

* OAKLAND, CALIF.
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	6	7.2	99	125	2.1
1000	31	158	8.4	78	1	2.3
950	31	582	[illegible]	70	36	1.7
900	31	[illegible]	[illegible]	[illegible]	325	3.5
850	31	1,499	[illegible]	49	[illegible]	5.4
800	31	[illegible]	[illegible]	[illegible]	[illegible]	7.8
750	31	2,517	1.3	39	287	11.1
700	31	3,068	- 1.2	37	286	[illegible]
650	31	3,653	- 4.6	37	286	19.0
600	31	4,282	- 8.0	[illegible]	285	22.7
550	31	4,948	-12.4	35	286	24.3
500	[illegible]	[illegible]	-17.6	[illegible]	287	27.4
450	31	6,448	-22.9	38	287	[illegible]
400	31	7,309	-29.2	40	290	34.8
350	31	8,248	-36.5	[illegible]	289	39.1
300	31	[illegible]	-44.7		287	44.7
250	31	10,494	[illegible]		[illegible]	47.2
200	31	11,900	-61.0		297	41.8
175	31	12,730	[illegible]		289	[illegible]
150	31	[illegible]	[illegible]		[illegible]	36.7
125	30	14,817	-63.0		[illegible]	29.9
100	29	16,190	-63.8		290	24.1
80	29	17,550	-63.1		[illegible]	14.2
70	26	18,371	-62.4		[illegible]	[illegible]
60	26	19,322	-61.7		[illegible]	7.6
50	[illegible]	20,457	-60.8		327	[illegible]
40	23	21,846	[illegible]		1	4.7
30	23	[illegible]	-59.3		[illegible]	[illegible]
25	23	24,797	[illegible]		45	5.6
20	22	[illegible]	[illegible]		[illegible]	3.7
15	21	28,011	[illegible]		329	5.1
10	17	30,603	[illegible]		279	16.7
7	13	[illegible]	-51.4		286	[illegible]
5	6	[illegible]	-47.7			

OKLAHOMA CITY, OKLA.
972 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	77	[illegible]	1.6
1000	31	[illegible]				
950	31	575	1.6	59	238	1.9
900	31	1,008	[illegible]	52	241	7.6
850	31	1,472	[illegible]	48	240	10.9
800	31	1,962	2.1	41	248	13.8
750	31	2,479	.3	[illegible]	252	15.3
700	31	3,032	- 2.9	[illegible]	259	18.1
650	31	3,613	- 6.1	31	261	21.6
600	31	4,238	- 9.8	31	264	22.7
550	31	4,898	-14.1	32	269	26.4
500	31	5,621	[illegible]	28	[illegible]	32.1
450	31	6,392	-24.1	31	268	35.4
400	31	[illegible]	-30.4	[illegible]	267	40.4
350	31	8,181	-37.3	35	[illegible]	48.2
300	[illegible]	9,227	[illegible]		267	53.8
250	31	10,424	-52.1		268	57.9
200	31	11,849	-57.3		268	58.7
175	31	12,691	[illegible]		267	61.8
150	[illegible]	13,654	[illegible]		269	56.1
125	[illegible]	[illegible]	-62.1		266	47.8
100	30	16,158	-64.5		266	39.6
80	30	17,521	-64.6		267	29.4
70	[illegible]	18,336	[illegible]		[illegible]	21.6
60	30	19,283	-63.0		271	17.1
50	[illegible]	20,407	-62.1		274	12.4
40	30	21,792	-60.4		[illegible]	12.6
30	30	23,590	[illegible]		286	[illegible]
25	[illegible]	[illegible]	[illegible]		285	14.6
20	27	26,146	-57.1		283	18.5
15	13	27,978	-55.2		[illegible]	22.7
10	[illegible]	30,610	-52.8			
7						
5						

OMAHA, NEBR.
970 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	403	- 6.3	76	322	1.9
1000	31	163				
950	31	566	- 3.8	73	314	4.1
900	31	995	- 2.4	55	319	8.5
850	31	1,448	- 2.4	49	312	[illegible]
800	31	1,929	- 3.5	48	313	12.0
750	31	2,439	- 4.7	47	299	[illegible]
700	31	[illegible]	- 6.8	48	291	18.3
650	31	3,551	- 9.7	50	290	22.1
600	31	4,169	-13.2	53	285	26.4
550	31	4,825	-17.2	50	284	28.4
500	31	5,535	-22.1	46	286	28.4
450	31	6,297	-27.6	49	286	32.9
400	31	7,139	-33.9	44	287	37.5
350	31	8,061	-41.0	50	286	41.4
300	31	9,092	-48.6		285	44.7
250	31	10,273	-55.0		286	48.8
200	31	11,686	-57.4		280	45.6
175	31	12,531	-56.6		[illegible]	46.8
150	31	[illegible]	-56.9		278	41.2
125	31	14,660	-58.2		278	36.3
100	31	16,059	-59.7		279	29.3
80	31	17,454	-60.1		[illegible]	22.1
70	31	18,286	-60.1		284	16.1
60	30	19,245	-59.9		288	13.0
50	30	[illegible]	-59.5		[illegible]	9.3
40	29	21,782	-59.3		328	[illegible]
30	29	23,536	-58.8		346	5.6
25	25	24,729	-58.7		340	6.6
20	[illegible]	26,140	[illegible]		[illegible]	[illegible]
15	17	27,966	-57.6		11	5.1
10	11	30,534	-57.1			
7						
5						

PAGO PAGO, AMERICAN SAMOA
+ 1009 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	28.4	77	105	10.7
1000	31	83	27.1	74	103	10.9
950	31	532	22.9	73	97	11.7
900	31	1,005	19.7	75	92	12.0
850	31	1,497	17.5	67	86	9.9
800	31	2,015	15.5	60	[illegible]	8.0
750	31	2,562	12.8	55	66	5.8
700	31	3,139	9.9	49	51	4.3
650	31	3,751	6.7	43	81	3.5
600	31	4,405	3.2	37	102	1.7
550	31	[illegible]	- .9	34	165	1.2
500	31	5,861	- 5.3	34	224	3.5
450	31	6,681	-10.3	33	240	5.2
400	31	7,580	-15.8	33	261	7.2
350	31	8,574	-22.6	[illegible]	264	12.2
300	31	9,688	-30.6	27	269	16.9
250	31	10,956	-40.8	25	273	19.2
200	31	12,435	-53.0		262	24.1
175	31	13,283	-59.9		252	27.4
150	31	14,229	-67.0		[illegible]	26.6
125	31	15,312	-73.4		241	23.1
100	31	16,597	-79.3		[illegible]	10.5
80	31	17,866	[illegible]		[illegible]	2.3
70	31	18,643	-71.7		96	5.4
60	31	19,564	-67.2		96	8.5
50	31	20,675	-62.8		77	9.9
40	31	22,067	-58.2		66	[illegible]
30	31	23,894	-53.6		73	[illegible]
25	30	25,076	-50.9		85	14.8
20	29	26,544	-47.2		87	21.0
15	29	28,465	-43.4		87	29.5
10	[illegible]	31,220	-39.6		90	46.0
7	18	[illegible]	[illegible]			
5						

* PEORIA, ILL.
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	200	- 3.3	83	297	2.1
1000	31	159				
950	31	569	- 3.8	79	284	5.9
900	31	991	- 2.6	[illegible]	280	10.9
850	31	1,445	- 2.8	58	278	15.9
800	31	1,925	- 4.0	56	[illegible]	20.0
750	[illegible]	2,435	[illegible]	54	[illegible]	[illegible]
700	31	2,971	- 8.3	54	277	22.5
650	31	3,542	-10.8	54	275	[illegible]
600	30	4,155	-14.2	58	[illegible]	29.3
550	30	4,809	-18.0	50	[illegible]	36.3
500	[illegible]	5,516	-22.6	47	[illegible]	38.9
450	[illegible]	6,282	-27.6	44	[illegible]	42.3
400	30	7,118	-33.9	46	[illegible]	45.1
350	30	8,041	-40.7	51	272	50.3
300	30	9,075	-48.0		271	53.0
250	30	10,258	-54.6		267	57.5
200	30	11,675	-57.2		[illegible]	60.6
175	30	12,520	-57.0		270	56.3
150	30	13,497	-57.3		269	51.7
125	30	14,646	-58.8		268	43.1
100	29	16,033	-60.2		269	36.3
80	29	[illegible]	-61.2		[illegible]	[illegible]
70	29	18,249	-61.2		272	21.9
60	28	19,202	-61.2		283	17.9
50	28	20,334	-60.8		[illegible]	[illegible]
40	28	21,723	-60.3		[illegible]	8.7
30	28	23,516	-60.2		319	[illegible]
25	28	24,655	-59.7		322	7.0
20	27	26,054	-58.7		328	8.2
15	24	27,867	-57.8		314	10.3
10	22	30,435	-55.2		284	[illegible]
7	21	32,729	-51.7		274	49.6
5	11	34,911	-47.9			

* PITTSBURGH, PA.
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	- 2.1	77	[illegible]	3.5
1000	[illegible]	[illegible]				
950	31	574	- 2.2	77	244	8.5
900	31	1,002	- 3.5	76	253	15.7
850	31	[illegible]	- 4.2	67	261	18.5
800	31	[illegible]	- 5.1	[illegible]	268	21.6
750	31	[illegible]	- 6.9	59	271	24.3
700	31	2,974	- 9.7	55	271	26.2
650	31	3,544	[illegible]	54	269	28.7
600	31	4,159	[illegible]	48	[illegible]	32.2
550	31	4,811	-17.7	48	266	36.5
500	31	5,521	-22.3	46	264	[illegible]
450	31	6,231	-27.3	47	[illegible]	[illegible]
400	31	7,124	-32.8	48	258	50.7
350	31	8,047	-40.6	53	267	55.6
300	31	[illegible]	-47.1		[illegible]	63.1
250	31	10,273	-53.1		267	67.4
200	30	11,704	-56.1		[illegible]	54.1
175	[illegible]	12,551	-56.6		266	61.8
150	30	13,529	[illegible]		265	54.4
125	[illegible]	14,675	-59.1		[illegible]	46.4
100	[illegible]	[illegible]	[illegible]		267	36.9
80	[illegible]	17,455	-61.3		263	27.8
70	29	18,286	[illegible]		264	23.3
60	[illegible]	[illegible]	-61.3		[illegible]	[illegible]
50	29	[illegible]	-60.8		274	16.5
40	29	21,763	-60.5		276	13.8
30	29	23,557	[illegible]		283	12.0
25	29	[illegible]	-58.5		[illegible]	12.4
20	29	26,106	-57.3		293	12.8
15	27	[illegible]	-56.2		[illegible]	16.5
10	26	30,528	-53.6		[illegible]	22.5
7	24	[illegible]	-50.4		271	49.0
5	11	35,064	-47.0			

PONAPE, CAROLINE IS.
+ 1003 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	39	28.2	79	74	[illegible]
1000	31	68	27.9	79	77	[illegible]
950	31	512	24.2	78	80	[illegible]
900	31	995	20.7	78	84	18.3
850	31	[illegible]	18.0	73	86	19.2
800	31	2,006	15.6	65	[illegible]	16.9
750	31	2,549	13.2	55	[illegible]	16.1
700	31	3,131	10.5	52	89	17.7
650	31	3,741	[illegible]	52	90	19.8
600	31	[illegible]	[illegible]	50	87	20.4
550	31	5,095	- .6	48	[illegible]	22.1
500	31	5,858	- 4.5	[illegible]	92	23.9
450	31	[illegible]	- 9.2	36	[illegible]	23.7
400	31	7,594	-14.7	33	81	21.2
350	31	8,582	-21.4	32	78	18.3
300	31	[illegible]	-29.8	32	80	13.8
250	31	[illegible]	[illegible]	29	87	[illegible]
200	31	[illegible]	-52.1		95	9.5
175	31	[illegible]	[illegible]		[illegible]	7.8
150	[illegible]	[illegible]	[illegible]		[illegible]	11.1
125	31	15,336	-74.9		75	16.7
100	31	16,604	-82.9		[illegible]	24.1
80	31	17,954	[illegible]		76	[illegible]
70	[illegible]	18,625	-72.7		300	7.4
60	29	19,545	-67.1		273	15.3
50	28	[illegible]	-62.6		[illegible]	21.4
40	28	22,046	-58.4		275	22.3
30	27	[illegible]	[illegible]		274	19.9
25	27	25,034	[illegible]		249	[illegible]
20	27	26,482	-50.3		251	9.9
15	25	28,369	[illegible]		112	[illegible]
10	21	31,079	-42.7		94	36.9
7	13	[illegible]	-38.7			
5	[illegible]	[illegible]	-32.9			

PORTLAND, ME.
1015 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	20	- 4.4	76	312	2.5
1000	31	136	- 3.2	72	337	4.1
950	31	541	- 3.6	72	296	6.4
900	31	969	- 4.5	71	281	8.9
850	31	1,419	[illegible]	69	[illegible]	9.9
800	31	1,896	- 5.4	57	269	13.0
750	31	[illegible]	- 7.4	56	265	17.7
700	31	2,936	- 9.7	53	[illegible]	21.2
650	31	3,502	-12.9	[illegible]	263	26.2
600	31	[illegible]	-15.8	56	261	30.7
550	31	4,760	-19.7	56	[illegible]	34.6
500	31	5,466	-24.2	52	258	37.9
450	31	6,221	-29.3	46	259	41.2
400	[illegible]	7,059	[illegible]	40	[illegible]	[illegible]
350	31	7,979	-41.0	[illegible]	257	51.5
300	31	[illegible]	-47.7		[illegible]	[illegible]
250	31	[illegible]	[illegible]		259	56.3
200	31	11,630	-55.0		[illegible]	55.4
175	[illegible]	12,484	-55.1		[illegible]	49.9
150	31	13,467	-55.2		260	[illegible]
125	31	14,629	-56.7		[illegible]	37.5
100	31	[illegible]	-59.2		[illegible]	33.4
80	30	[illegible]	-59.3		257	[illegible]
70	[illegible]	18,267	-59.4		[illegible]	21.2
60	[illegible]	19,231	-59.7		260	18.6
50	[illegible]	20,369	-59.7		261	13.8
40	29	[illegible]	-60.4		273	13.9
30	[illegible]	[illegible]	[illegible]		[illegible]	13.6
25	28	24,692	[illegible]		287	[illegible]
20	[illegible]	[illegible]	-58.7		[illegible]	17.1
15	[illegible]	[illegible]	[illegible]		286	22.7
10	26	[illegible]	-56.3		[illegible]	35.2
7	[illegible]	32,737	[illegible]		[illegible]	[illegible]
5	12	34,914	-49.9			

QUILLAYUTE, WASH.
1005 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	58	6.0	97	148	4.1
1000	31	99			155	5.2
950	31	[illegible]	[illegible]	[illegible]	181	15.7
900	31	957	[illegible]	[illegible]	195	19.8
850	31	1,417	[illegible]	84	[illegible]	22.7
800	31	1,899	- 3.1	[illegible]	216	22.3
750	[illegible]	2,409	[illegible]	73	222	24.1
700	31	2,940	- 8.2	69	228	24.5
650	31	3,515	-11.4	69	234	[illegible]
600	[illegible]	4,130	-15.3	70	241	[illegible]
550	31	4,779	-19.3	[illegible]	242	28.7
500	31	[illegible]	-24.3	65	249	29.7
450	30	6,242	[illegible]	[illegible]	[illegible]	33.0
400	30	7,077	-35.5	56	251	35.7
350	30	7,993	-42.1	[illegible]	254	40.8
300	[illegible]	[illegible]	-49.2		252	[illegible]
250	[illegible]	10,199	-54.7		264	52.3
200	[illegible]	11,617	-54.6		263	45.4
175	30	12,464	-54.0		266	37.7
150	30	13,447	-55.3		266	32.6
125	27	14,514	[illegible]		[illegible]	27.8
100	26	16,036	-57.1		271	23.5
80	24	17,443	-57.5		273	15.2
70	24	18,296	-57.0		279	[illegible]
60	21	19,244	-56.5		[illegible]	6.4
50	21	20,422	-56.1		302	3.9
40	18	21,344	-55.8		[illegible]	[illegible]
30	16	23,693	-55.9		69	[illegible]
25	[illegible]	24,844	-56.2		[illegible]	11.7
20	[illegible]	26,254	-57.3		[illegible]	15.3
15	12	28,053	-58.4		74	11.3
10	[illegible]	[illegible]	[illegible]			
7						
5						

RAPID CITY, S. DAK.
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	966	- 4.9	75	316	2.7
1000	31	160				
950	31	567				
900	31	997			325	3.5
850	31	1,449	- 2.6	[illegible]	[illegible]	[illegible]
800	31	1,929	[illegible]	59	[illegible]	12.4
750	31	2,433	- 5.2	57	309	17.7
700	31	2,978	[illegible]	[illegible]	[illegible]	18.5
650	31	3,545	-10.8	59	[illegible]	20.4
600	31	4,163	-14.3	57	[illegible]	23.3
550	31	4,812	-18.5	52	294	24.9
500	31	5,522	-23.2	49	[illegible]	27.6
450	31	6,279	-28.6	[illegible]	285	30.7
400	31	[illegible]	-35.2	49	[illegible]	[illegible]
350	31	8,034	-42.2	45	282	[illegible]
300	31	9,059	-49.4		284	42.7
250	31	10,235	-56.0		[illegible]	[illegible]
200	31	11,646	-57.7		294	40.2
175	31	12,489	-57.2		291	40.2
150	31	13,467	-56.7		[illegible]	36.7
125	31	14,620	-57.7		[illegible]	31.1
100	31	16,025	-58.9		[illegible]	25.1
80	31	17,424	-59.3		[illegible]	[illegible]
70	31	18,259	-59.2		293	13.2
60	31	19,229	[illegible]		[illegible]	[illegible]
50	31	20,372	-59.0		327	7.6
40	31	21,771	-59.1		351	7.8
30	31	[illegible]	-58.8		17	[illegible]
25	27	24,731	-57.9		[illegible]	10.7
20	21	26,149	-57.7		[illegible]	10.3
15	19	27,970	-58.0		39	13.4
10	9	30,541	-57.1			
7						
5						

See reference note at end of table

RAWINSONDE DATA

Average monthly values

ST. CLOUD, MINN.
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	315	-11.1	77	14	.8
1000	31	1[illegible]7				
950	31	55[illegible]	- 9.0	97	3[illegible]8	[illegible].3
900	31	[illegible]7[illegible]	- 6.9	73	296	6.4
850	31	1,43[illegible]	- 6.2	67	299	11.1
800	31	1,[illegible]93	- 7.4	5[illegible]	[illegible]	14.
750	31	2,[illegible]94	- 8.6	55	301	16.1
700	31	[illegible]	-10.9	[illegible]	[illegible]	18.1
650	31	3,492	-13.8	53	[illegible]	[illegible].8
600	30	4,102	-17.1	[illegible]	[illegible]	23.1
550	30	4,748	-21.0	55	294	[illegible]7.4
500	30	[illegible],443	-25.7	55	291	[illegible]
450	30	6,197	-31.[illegible]	51	[illegible]	35.
400	30	7,[illegible]29	-37.[illegible]	45	[illegible]	38.[illegible]
350	30	7,93[illegible]	-43.4		[illegible]	43.[illegible]
300	[illegible]	8,9[illegible]1	-50.1		[illegible]	47.[illegible]
250	30	1[illegible],1[illegible]7	-55.2		[illegible]	44.1
200	[illegible]	11,557	[illegible]		[illegible]	41.4
175	[illegible]	12,410	-54.[illegible]		[illegible]	3[illegible].7
150	30	13,396	-54.[illegible]		284	34.[illegible]
125	[illegible]	14,5[illegible]	-55.[illegible]		282	[illegible]
100	30	15,976	-57.1		284	25.[illegible]
80	[illegible]	17,384	-57.7		[illegible]	[illegible]
70	30	18,226	-57.7		[illegible]	16.1
60	3[illegible]	19,197	-58.		[illegible]37	13.4
50	2[illegible]	20,345	-58.1		[illegible]	1[illegible]
40	29	21,746	-58.[illegible]		[illegible]	9.1
30	29	23,551	-58.6		3[illegible]	8.4
25	29	[illegible]	-58.[illegible]		[illegible]	[illegible]
20	24	26,112	-57.[illegible]		16	11.5
15	17	27,914	-59.2		28	13.8
10	1	[illegible],529	-[illegible]			
7						
5						

ST. PAUL IS., ALASKA
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	[illegible]1	[illegible]	10.5
1000	31	[illegible]			[illegible]	1[illegible]
950	31	432	- 2.7	77	67	11.5
900	31	[illegible]	- 5.7	7[illegible]	[illegible]	1[illegible].5
850	31	1,30[illegible]	- 7.4	7[illegible]	83	[illegible].3
800	31	1,774	- 9.5	[illegible]	[illegible]	6.[illegible]
750	31	2,272	-11.[illegible]	[illegible]	139	4.1
700	31	2,796	-14.7	53	76	2.7
650	31	3,354	-17.5	4[illegible]	8[illegible]	1.4
600	31	3,950	-21.1	45	1[illegible]	1.7
550	31	[illegible],5[illegible]	-25.1	43	[illegible]	[illegible].3
500	31	5,275	-29.9	45	224	5.4
450	31	6,014	-34.9	42	[illegible]	7.8
400	31	6,832	-40.3	42	244	8.5
350	31	7,731	-46.1		24[illegible]	1[illegible].7
300	31	8,743	-51.6		240	14.[illegible]
250	31	9,917	-54.[illegible]		24[illegible]	15.[illegible]
200	31	11,[illegible]46	-54.3		235	15.
175	31	12,205	-52.6		229	14.4
150	31	13,202	-51.7		226	15.3
125	31	14,385	-51.7		230	15.2
100	31	15,833	-51.6		228	13.4
80	31	17,[illegible]	-52.2		223	13.2
70	31	18,142	-52.[illegible]		222	12.4
60	31	19,138	-5[illegible]		216	11.1
50	3[illegible]	20,318	-52.		218	9.7
40	30	21,764	-51.[illegible]		215	9.1
30	3[illegible]	23,6[illegible]	-52.0		232	8.2
25	[illegible]	24,807	-52.4		231	8.[illegible]
20	30	26,247	-53.3		251	7.8
15	[illegible]	28,[illegible]	-55.0		277	12.6
10	[illegible]	30,691	-57.1		297	[illegible].8
7	8	3[illegible],943	-59.8			
5						

SALEM, OREG.
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	61	6.[illegible]	86	179	7.6
1000	31	133			185	8.7
950	31	5[illegible]1	6.[illegible]	75	201	16.3
900	31	99[illegible]	3.3	79	219	19.2
850	31	1,456	.5	77	[illegible]	21.2
800	30	1,947	- 1.5	68	239	22.[illegible]
750	3[illegible]	2,455	- 4.[illegible]	67	238	2[illegible].7
700	30	3,001	- 7.2	63	252	25.1
650	3[illegible]	3,570	-10.5	64	255	26.4
600	30	4,187	-14.2	[illegible]	260	29.3
550	30	4,835	-1[illegible]	[illegible]	267	[illegible].4
500	30	5,548	-22.7	[illegible]4	272	35.9
450	30	6,303	-27.[illegible]	52	274	37.[illegible]
400	30	7,149	-33.[illegible]	46	279	41.6
350	30	8,[illegible]72	-4[illegible].8	50	27[illegible]	44.9
300	30	9,1[illegible]4	-47.9		[illegible]76	[illegible]1.[illegible]
250	30	10,297	-54.5		270	[illegible]7.[illegible]
200	30	11,700	-58.2		270	49.3
175	30	12,539	-[illegible].7		[illegible]	4[illegible].1
150	30	13,50[illegible]	-57.[illegible]		[illegible]	3[illegible]
125	30	14,657	-58.[illegible]		27[illegible]	33.6
100	30	16,060	-58.4		[illegible]71	23.7
80	30	17,461	-59.1		[illegible]	16.1
70	29	18,298	-59.3		[illegible]	11.8
60	29	19,264	-58.[illegible]		274	7.[illegible]
50	28	20,415	-57.9		302	2.9
40	27	21,821	-58.3		45	[illegible].1
30	24	23,640	-58.0		7[illegible]	1[illegible].1
25	23	24,785	-57.[illegible]		77	14.6
20	21	26,1[illegible]	-58.3		75	14.[illegible]
15	16	28,002	-59.7		8[illegible]	17.3
10	7	30,6[illegible]	-60.1			
7						
5						

SALT LAKE CITY, UTAH
874 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,288	- 2.5	8[illegible]	142	3.1
1000	31	208				
950	31	625				
900	31	1,055				
850	31	1,509	- 2.[illegible]	81	162	4.[illegible]
800	31	1,990	- 3.3	70	196	5.[illegible]
750	31	2,5[illegible]	- 4.[illegible]	6[illegible]	[illegible]	7.[illegible]
700	31	3,041	- 7.[illegible]	67	[illegible]1	1[illegible].5
650	31	3,620	- 9.7	59	291	16.[illegible]
600	31	4,231	-12.3	[illegible]7	297	20.8
550	31	4,992	-16.2	54	291	24.9
500	31	5,604	-20.9	51	291	26.8
450	31	6,[illegible]77	-26.4	40	297	3[illegible].1
400	31	7,216	-32.[illegible]	40	286	32.6
350	31	8,142	-3[illegible]	47	[illegible]	[illegible].7
300	31	9,1[illegible]	-47.1		[illegible]	4[illegible].7
250	31	10,366	-54.4		[illegible]93	47.4
200	31	11,777	-5[illegible].1		[illegible]	4[illegible]
175	31	12,613	-5[illegible]		[illegible]	4[illegible].8
150	31	13,578	-5[illegible].1		[illegible]	41.6
125	31	14,717	-61.		[illegible]	35.
100	29	16,103	-61.7		288	27.
80	29	17,4[illegible]	-6[illegible].		[illegible]	16.3
70	29	18,315	-6[illegible]		[illegible]	12.8
60	2[illegible]	19,275	-60.6		[illegible]	8.5
50	2[illegible]	20,411	-6[illegible].1		3[illegible]	6.8
40	2[illegible]	21,805	-5[illegible]		13	6.4
30	28	23,609	-[illegible]		37	8.5
25	26	[illegible],7[illegible]	-5[illegible].4		4[illegible]	[illegible]
20	[illegible]	26,15[illegible]	-57.4		[illegible]	7.6
15	19	27,96[illegible]	-57.5		12	5.4
10	[illegible]	[illegible],54[illegible]	-5[illegible]			
7						
5						

SAN DIEGO, CALIF.
1002 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	124	9.4	86	9[illegible]	1.7
1000	31	140			7[illegible]	2.[illegible]
950	31	574	13.1	51	[illegible]	[illegible]
900	31	1,024	11.5	45	273	2.[illegible]
850	31	1,500	9.[illegible]	39	284	2.9
800	31	2,000	7.0	3[illegible]	297	6.2
750	31	2,527	4.4	34	307	9.1
700	31	3,[illegible]87	1.3	36	296	12.4
650	31	3,675	- 2.1	33	299	15.[illegible]
600	31	4,312	- 5.[illegible]	31	297	19.[illegible]
550	31	4,981	-1[illegible]	[illegible]3	298	23.1
500	31	5,716	-15.[illegible]	31	301	24.[illegible]
450	31	6,496	-21.[illegible]	[illegible]2	29[illegible]	[illegible].6
400	31	7,361	-27.9	[illegible]3	[illegible]97	[illegible]1.1
350	31	8,306	-34.8	31	295	33.4
300	31	9,364	-42.9	30	298	38.1
250	31	10,57[illegible]	-51.6		[illegible]	4[illegible]
200	31	11,991	-58.[illegible]		[illegible]	44.5
175	31	12,825	-6[illegible].7		285	44.9
150	31	13,781	-62.4		[illegible]	[illegible]1.[illegible]
125	[illegible]	14,905	-65.0		281	39.7
100	[illegible]	16,258	-67.2		279	[illegible]
80	30	17,602	-66.8		277	[illegible]
70	29	18,412	-6[illegible]		276	15.[illegible]
60	[illegible]	19,[illegible]52	-[illegible]		[illegible]	1[illegible].6
50	[illegible]8	20,471	-[illegible]		[illegible]	7.[illegible]
40	25	21,858	-[illegible]		293	4.[illegible]
30	[illegible]	[illegible]	-[illegible]		288	7.[illegible]
25	22	24,823	-56.1		279	11.3
20	21	26,24[illegible]	-5[illegible]		268	16.9
15	20	28,080	-5[illegible]		[illegible]	26.[illegible]
10	18	30,705	-4[illegible]		[illegible]	47.4
7	15	33,062	-45.4		[illegible]71	64.[illegible]
5	6	35,330	-44.[illegible]			

* SAN JUAN, P. R.
1[illegible]14 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	[illegible]	[illegible]	1[illegible]	[illegible]
1000	31	1[illegible]4	[illegible]	[illegible]	7	[illegible].7
950	31	5[illegible]	[illegible].1	84	[illegible]	13.
900	31	1,036	16.[illegible]	[illegible]	[illegible]	1[illegible].4
850	31	1,521	13.[illegible]	[illegible]	[illegible]7	1[illegible].
800	31	2,030	11.1	7[illegible]	[illegible]	11.3
750	31	2,566	[illegible]	[illegible]	[illegible]	1[illegible]
700	31	3,138	7.4	[illegible]	[illegible]	9.2
650	31	3,740	[illegible]	[illegible]	4[illegible]	5.6
600	31	4,396	1.[illegible]	[illegible]	[illegible]	4.1
550	31	5,081	- [illegible].7	4	[illegible]	4.1
500	31	5,841	- 7.[illegible]	7	311	7.[illegible]
450	31	6,646	-1[illegible]	[illegible]	[illegible]	11.3
400	31	7,541	-19.	[illegible]	297	18.5
350	31	8,520	-[illegible]	[illegible]	[illegible]	24.[illegible]
300	31	9,619	-[illegible]	[illegible]4	[illegible]	35.5
250	31	10,873	-43.[illegible]		[illegible]	41.6
200	[illegible]	12,337	-[illegible]			43.7
175	30	13,178	-[illegible]1.		[illegible]	41.4
150	30	14,122	-67.1		[illegible]	34.8
125	30	15,206	-7[illegible]		[illegible]	28.6
100	29	16,497	-7[illegible]		[illegible]	22.3
80	29	17,770	-77.4		3[illegible]	11.8
70	[illegible]	18,541	-7[illegible]		311	7.8
60	27	19,452	-6[illegible].7		297	8.4
50	27	20,557	-6[illegible]		31[illegible]	5.8
40	27	21,942	-6[illegible]		[illegible]	6.[illegible]
30	26	23,765	-[illegible]4.4		330	5.1
25	26	24,938	-[illegible]		[illegible]	3.9
20	26	26,395	-[illegible]		[illegible]	5.1
15	26	28,319	-4[illegible].7		21[illegible]	2.9
10	24	31,072	-3[illegible].7		[illegible]	1.6
7	11	33,526	-[illegible]7.			
5						

SAN NICOLAS, CALIF.
996 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	174	12.2	73	304	7.4
1000	31	141				
950	31	574	13.7	35	312	6.8
900	31	1,028	12.0	[illegible]	311	5.4
850	31	1,503	9.5	27	305	6.2
800	31	[illegible]	7.0	2[illegible]	303	8.4
750	31	2,532	[illegible].0	[illegible]1	307	10.9
700	31	3,091	1.9	22	3[illegible]4	13.8
650	31	3,68[illegible]	- 1.7	25	298	16.9
600	31	4,317	- 5.9	28	296	18.8
550	31	4,992	-10.[illegible]	28	299	21.4
500	31	5,717	-16.	29	300	25.6
450	31	6,503	-21.0	29	299	27.4
400	31	7,363	-27.[illegible]	27	298	29.[illegible]
350	31	8,310	-34.7	26	298	32.[illegible]
300	31	9,367	-43.2	29	295	38.3
250	31	10,571	-52.1	27	297	42.[illegible]
200	31	11,98[illegible]	-59.7	27	291	48.6
175	31	12,820	-61.3	26	287	43.9
150	3[illegible]	13,777	-63.2	25	2[illegible]1	44.1
125	30	14,892	-65.8		282	42.3
100	29	16,239	-67.[illegible]		28[illegible]	32.8
80	28	17,585	-66.7		285	21.8
70	28	18,396	-65.4		285	14.4
60	28	19,336	-64.7		293	10.1
50	27	20,456	-62.6		310	6.4
40	26	21,839	-60.6		300	4.5
30	23	23,647	-57.8		297	10.1
25	22	24,803	-56.6		269	9.9
20	21	26,225	-55.5		272	13.4
15	[illegible]	28,073	-5[illegible].4		272	[illegible].4
10	16	30,707	-49.[illegible]		269	44.9
7	7	33,074	-46.			
5						

* SAULT STE. MARIE, MICH.
[illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	221	- 8.6	79	44	1.6
1000	31	14[illegible]				
950	31	537	- 8.[illegible]	57	[illegible]	.9
900	31	958	- 9.5	[illegible]	[illegible]	7.[illegible]
850	31	1,39[illegible]	- 9.7	76	[illegible]	11.1
800	31	1,867	-10.1	68	[illegible]	13.2
750	31	[illegible],364	-11.5	59	[illegible]	15.2
700	31	[illegible],890	-13.7	[illegible]	[illegible]	1[illegible]
650	31	3,44[illegible]	-16.[illegible]	54	[illegible]	[illegible].9
600	31	4,051	-1[illegible]	[illegible]	[illegible]	[illegible]
550	31	4,692	-[illegible]	51	277	[illegible]
500	31	[illegible],388	-[illegible]	[illegible]	27[illegible]	28.2
450	31	[illegible],135	-[illegible]	[illegible]	274	29.9
400	31	6,963	-[illegible]7.4	[illegible]	272	[illegible].4
350	31	7,872	-43.4	49	267	37.7
300	31	[illegible]	-49.1		265	44.[illegible]
250	31	10,079	-5[illegible]		264	48.[illegible]
200	31	11,512	-54.[illegible]		[illegible]	47.4
175	31	12,[illegible]	-5[illegible]		[illegible]	41.[illegible]
150	31	13,[illegible]	-5[illegible].4		266	[illegible]
125	31	14,52[illegible]	-54.6		267	[illegible]
100	31	15,951	-5[illegible]		271	[illegible]
80	30	17,364	-57.[illegible]		278	22.3
70	3[illegible]	18,207	-57.4		281	17.9
60	30	19,181	-57.9		286	13.2
50	30	20,329	-58.2		289	1[illegible]
40	29	21,731	-58.7		308	11.5
30	28	[illegible],535	-59.1		[illegible]	11.[illegible]
25	27	24,683	-59.1		345	1[illegible].9
20	26	26,094	-58.6		349	1[illegible].7
15	[illegible]	27,[illegible]	-58.9		334	1[illegible].9
10	21	30,444	-58.0		308	2[illegible]
7	16	32,747	-56.1		291	[illegible].1
5	6	34,911	-54.2			

SHEMYA, ALASKA
[illegible]92 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	1.4	[illegible]	[illegible]	5.2
1000	31	- 28				
950	31	380	- 1.4	84	1[illegible]	6.2
900	31	812	- 4.[illegible]	[illegible]	12[illegible]	6.8
850	31	1,2[illegible]	- 6.7	7[illegible]	1[illegible]	5.6
800	31	1,732	- 9.	60	131	6.4
750	31	2,225	-12.4	[illegible]	133	5.8
700	31	2,75[illegible]	-15.7	[illegible]	[illegible]	7.
650	31	[illegible]	-19.1	58	1[illegible]	7.6
600	31	[illegible]	-2[illegible]	58	1[illegible]	8.9
550	31	4,52[illegible]	-26.[illegible]	54	1[illegible]	10.1
500	31	[illegible],214	-31.1	49	162	12.2
450	31	[illegible],946	-3[illegible]	4[illegible]	1[illegible]	12.8
400	31	6,761	-41.[illegible]	44	16[illegible]	16.3
350	31	7,656	-4[illegible]		175	18.3
300	31	[illegible]	-5[illegible]		1[illegible]	19.0
250	30	[illegible],838	-55.1		191	19.4
200	3[illegible]	11,[illegible]	-5[illegible]		[illegible]	19.6
175	3[illegible]	12,133	-51.[illegible]		[illegible]14	19.[illegible]
150	30	13,[illegible]	-51.1		[illegible]16	19.2
125	3[illegible]	14,321	-5[illegible]		[illegible]	[illegible]
100	30	15,772	-51.[illegible]		219	19.[illegible]
80	29	17,221	-51.1		219	18.8
70	2[illegible]	18,[illegible]87	-51.[illegible]		221	17.1
60	29	19,089	-51.[illegible]		217	15.5
50	29	20,274	-5[illegible]		218	13.2
40	29	21,726	-5[illegible].6		[illegible]	1[illegible]
30	29	23,60[illegible]	-50.[illegible]		244	[illegible]
25	2[illegible]	24,79[illegible]	-5[illegible]		262	7.
20	28	26,240	-51.2		278	7.[illegible]
15	2[illegible]	28,114	-52.0		282	12.8
10	25	30,717	-55.3		27[illegible]	13.2
7	15	32,967	-5[illegible].4			
5						

* SHREVEPORT, LA.
1010 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	79	5.[illegible]	9[illegible]	[illegible]32	1.4
1000	31	162	4.9	90	[illegible]	.[illegible]
950	31	588	5.7	79	217	6.4
900	31	1,026	6.8	62	246	[illegible]
850	31	1,495	[illegible].4	55	255	11.5
800	31	1,990	[illegible].6	51	258	13.4
750	31	2,509	1.[illegible]	45	256	15.5
700	31	3,[illegible]65	- 1.5	4[illegible]	25[illegible]	1[illegible]
650	31	3,649	- 4.4	[illegible]6	256	[illegible].7
600	3[illegible]	4,[illegible]	- 8.1	[illegible]4	261	[illegible]
550	30	4,947	-12.[illegible]	33	263	[illegible]
500	30	5,672	-17.1	34	[illegible]	33.4
450	3[illegible]	6,450	-[illegible].7	[illegible]	[illegible]	38.7
400	30	7,310	-2[illegible]	31	260	43.1
350	30	[illegible],251	-35.8	32	260	51.3
300	3[illegible]	9,306	-43.5		264	[illegible].1
250	30	1[illegible],512	-5[illegible].9		265	6[illegible]
200	30	11,942	-5[illegible]		264	[illegible]
175	30	12,7[illegible]	-5[illegible]		266	[illegible]
150	3[illegible]	13,744	-61.[illegible]		263	58.[illegible]
125	3[illegible]	14,[illegible]66	-[illegible]		264	[illegible].5
100	[illegible]	16,223	-67.[illegible]		263	43.1
80	24	17,563	-68.3		[illegible]64	34.
70	24	18,367	-66.[illegible]		[illegible]	[illegible].4
60	23	19,302	-6[illegible]		263	1[illegible]
50	2[illegible]	[illegible],416	-63.4		[illegible]	15.[illegible]
40	[illegible]	21,7[illegible]	-61.2		[illegible]	[illegible]
30	22	23,585	-59.0		[illegible]74	15.9
25	22	24,732	-57.4		[illegible]	[illegible]
20	20	26,149	-55.3		279	[illegible]
15	17	28,005	-51.8		[illegible]	[illegible]5.7
10	15	30,654	-47.9		266	[illegible]6.5
7	12	33,026	-42.6		264	7[illegible]
5						

SPOKANE, WASH.
931 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	717	.1	[illegible]6	164	[illegible]
1000	31	14				
950	31	[illegible]				
900	31	[illegible]	[illegible]		1[illegible]	[illegible]
850	31	1,449	- [illegible].5	76	[illegible]	1[illegible]
800	31	1,932	- [illegible]	[illegible]	[illegible]	1[illegible].7
750	31	2,438	- [illegible]	71	[illegible]	1[illegible]
700	31	[illegible]	- [illegible]	[illegible]	257	17.[illegible]
650	31	[illegible]	-11.7	[illegible]	262	[illegible]
600	31	4,161	-15.1	[illegible]	267	[illegible]
550	31	4,8[illegible]	-19.5	[illegible]	[illegible]	2[illegible]
500	31	[illegible]	-[illegible]	[illegible]	[illegible]	[illegible]
450	31	[illegible]	-[illegible]	[illegible]	[illegible]	[illegible]
400	[illegible]	[illegible]	-3[illegible]	[illegible]	[illegible]	[illegible]
350	31	[illegible]	-41.[illegible]	[illegible]	[illegible]	[illegible]
300	31	9,052	-48.9		281	44.1
250	31	10,233	-54.4		2[illegible]	[illegible]1.1
200	31	11,650	-57.1		281	47.8
175	31	12,496	-5[illegible]		279	4[illegible]
150	31	13,478	-5[illegible]		280	[illegible].1
125	31	14,638	-5[illegible]		279	[illegible]
100	31	16,051	-57.4		[illegible]	[illegible].1
80	31	17,463	-[illegible]7.		[illegible]	1[illegible]
70	31	18,308	-5[illegible].1		[illegible]1	1[illegible]
60	[illegible]	[illegible],282	-[illegible]		[illegible]	[illegible]
50	[illegible]	20,435	-[illegible]		312	[illegible]
40	[illegible]	21,849	-[illegible]		[illegible]	[illegible].1
30	[illegible]	23,676	-[illegible]		[illegible]	7.[illegible]
25	[illegible]	[illegible],834	-[illegible]		[illegible]	1[illegible]
20	[illegible]	[illegible]	-[illegible]7.		[illegible]	1[illegible]
15	[illegible]4	[illegible]	[illegible]		[illegible]	1[illegible]
10	14	[illegible],612	-[illegible]		[illegible]	16.7
7	7	32,885	[illegible]			
5	[illegible]	34,917	-[illegible]			

SWAN ISLAND, W. I.
1013 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	10	24.1	78	[illegible]7	9.7
1000	31	124	[illegible]3.	7[illegible]	41	11.8
950	31	576	1[illegible]	84	53	14.4
900	31	1,037	16.[illegible]	[illegible]1	57	12.[illegible]
850	31	1,52[illegible]	13.	75	[illegible]	8.4
800	31	2,033	11.[illegible]	[illegible]	[illegible]	6.[illegible]
750	31	2,578	[illegible].7	[illegible]1	7[illegible]	4.[illegible]
700	31	3,143	7.	4[illegible]	[illegible]	[illegible]
650	31	3,749	4.4	4	94	2.5
600	31	4,39[illegible]	1.	[illegible]	[illegible]17	1.4
550	31	5,087	- [illegible].	[illegible]	[illegible]	6.6
500	31	[illegible]	- 7.[illegible]	[illegible]7	[illegible]	9.1
450	31	6,653	-1[illegible].	[illegible]	244	8.4
400	31	7,548	-1[illegible]	[illegible]	267	13.2
350	31	8,529	-[illegible]4.	[illegible]	266	21.[illegible]
300	31	[illegible]	-[illegible]	[illegible]4	259	30.7
250	31	[illegible]71	-44.[illegible]		[illegible]	39.2
200	31	1[illegible]	-[illegible]		[illegible]	50.9
175	31	[illegible]	-[illegible]		4[illegible]	5[illegible].5
150	31	14,117	-[illegible]		4[illegible]	42.[illegible]
125	31	1[illegible]	-[illegible]1.[illegible]		[illegible]	[illegible].7
100	[illegible]	16,505	-77.[illegible]		261	16.7
80	[illegible]	17,779	-77.4		[illegible]	7.[illegible]
70	[illegible]	1[illegible],549	-74.1		266	5.2
60	[illegible]	19,456	-69.6		272	[illegible]
50	[illegible]	20,559	-63.9		267	6.4
40	[illegible]	21,94[illegible]	-[illegible]		291	7.4
30	[illegible]	[illegible],771	-54.		[illegible]	4.1
25	[illegible]	24,946	-51.		[illegible]	[illegible]
20	[illegible]	26,407	-[illegible]		[illegible]	[illegible]
15	[illegible]7	28,314	-44.[illegible]		[illegible]	[illegible].7
10	14	31,059	-3[illegible]			
7						
5						

TAMPA, FLA.
1019 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	8	11.5	[illegible]	[illegible]	[illegible]
1000	31	164	1[illegible].4	7[illegible]	7[illegible]	[illegible].4
950	31	598	1[illegible]	67	162	3.[illegible]
900	31	1,051	11.4	[illegible]	[illegible]14	[illegible]
850	31	1,527	9.6	5[illegible]	226	7.
800	31	[illegible]	7.7	4	251	8.[illegible]
750	31	[illegible]	[illegible]	[illegible]	261	1[illegible].
700	31	[illegible]	[illegible].4	[illegible]7	254	16.[illegible]
650	31	[illegible],72[illegible]	.7	33	253	19.8
600	31	4,[illegible]	- 3.	[illegible]1	[illegible]7	[illegible]4.
550	31	[illegible]	- 7.5	[illegible]1	[illegible]	[illegible]7.[illegible]
500	31	5,780	-12.1	[illegible]	[illegible]	[illegible]
450	31	6,576	-17.9	[illegible]	[illegible]	[illegible]7.3
400	31	7,449	-24.4	26	[illegible]	4[illegible]
350	31	8,408	-[illegible]	[illegible]	[illegible]	4[illegible].7
300	31	9,482	-[illegible]	1	[illegible]	[illegible]
250	31	10,706	-48.		[illegible]63	[illegible]
200	31	12,15[illegible]	-[illegible]		[illegible]	7[illegible].6
175	[illegible]	12,995	-59.		258	75.[illegible]
150	[illegible]	1[illegible]	-62.6		261	7[illegible].3
125	[illegible]	15,070	-67.5		262	[illegible]
100	28	16,400	-71.		259	48.6
80	28	17,719	-[illegible]1.1		26[illegible]	33.6
70	28	18,512	-69.3		[illegible]	22.[illegible]
60	[illegible]	1[illegible],438	-66.1		263	17.3
50	[illegible]	[illegible],554	-[illegible]		[illegible]	13.2
40	[illegible]	[illegible]	-[illegible]		[illegible]	1[illegible]
30	[illegible]	[illegible]	-[illegible].4		[illegible]	1[illegible]
25	[illegible]	[illegible]	-[illegible]		279	[illegible].7
20	24	26,377	-4[illegible]		277	[illegible].1
15	24	28,283	-44.1		272	41.
10	[illegible]	[illegible]	-[illegible]			
7						
5						

TOPEKA, KANS.
987 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	269	- 4.5	75	[illegible]	1.4
1000	31	166				
950	31	572	- 1.	69	[illegible]	3.7
900	31	1,004	- .4	6[illegible]	[illegible]	5.1
850	31	1,462	- [illegible].1	5[illegible]	[illegible]	8.5
800	31	1,[illegible]47	- 1.1	[illegible]	[illegible]	12.2
750	31	[illegible],457	- [illegible]	[illegible]	[illegible]	15.[illegible]
700	31	[illegible],006	- 5.3	40	27[illegible]	17.1
650	31	[illegible],577	- [illegible].3	4[illegible]	[illegible]	[illegible].4
600	31	4,202	-11.[illegible]	44	27[illegible]	[illegible]5.4
550	31	4,857	-1[illegible].	4[illegible]	277	26.[illegible]
500	31	[illegible],575	-[illegible]1.1	41	278	[illegible]
450	31	[illegible],336	-[illegible]6.8	4[illegible]	[illegible]	[illegible]1.[illegible]
400	31	7,184	-[illegible]	[illegible]	[illegible]	34.4
350	31	[illegible]	-4[illegible]	[illegible]	[illegible]	[illegible]7.[illegible]
300	31	9,145	-47.[illegible]		[illegible]	44.[illegible]
250	31	1[illegible],332	-[illegible]4.		282	4[illegible]
200	31	11,750	-[illegible]7.		277	52.3
175	31	1[illegible],592	-[illegible]		275	[illegible]
150	31	1[illegible]	-[illegible]		274	46.
125	31	14,7[illegible]	-[illegible]		[illegible]	4[illegible].4
100	31	16,[illegible]94	-61.[illegible]		275	[illegible].7
80	[illegible]	17,47[illegible]	-[illegible]		[illegible]	[illegible]
70	31	1[illegible]	-[illegible]		27[illegible]	19.[illegible]
60	[illegible]	[illegible]	-[illegible]1.[illegible]		[illegible]	14.8
50	[illegible]	[illegible]	-[illegible]		[illegible]	1[illegible]
40	[illegible]9	[illegible]1,776	-[illegible]		[illegible]	7.
30	[illegible]8	23,573	-5[illegible].4		[illegible]14	7.[illegible]
25	[illegible]	[illegible],716	-5[illegible].7		[illegible]14	[illegible].5
20	27	[illegible]	-57.7		[illegible]	[illegible]
15	[illegible]	[illegible]	-[illegible]		[illegible]	14.[illegible]
10	1[illegible]	[illegible],54[illegible]	-[illegible]4.[illegible]			
7						
5						

TRUK, CAROLINE IS.
+ [illegible] MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	27.[illegible]	81	74	7.[illegible]
1000	31	82	27.1	79	75	[illegible]
950	31	527	[illegible]	70	7[illegible]	1[illegible]
900	31	1,007	[illegible]	74	[illegible]1	1[illegible].1
850	31	1,501	1[illegible]	7	[illegible]	15.[illegible]
800	31	[illegible]	[illegible]	68	[illegible]	16.1
750	31	[illegible],567	[illegible]	60	[illegible]	16.[illegible]
700	31	3,14[illegible]	[illegible].7	56	[illegible]	17.3
650	31	[illegible]	[illegible]	53	[illegible]	19.[illegible]
600	31	4,410	[illegible]	51	[illegible]	[illegible].1
550	31	5,1[illegible]	- [illegible]	4[illegible]	[illegible]7	[illegible].1
500	31	[illegible],866	- [illegible]	4	[illegible]	[illegible]
450	31	[illegible]	- [illegible]	[illegible]4	[illegible]7	[illegible]
400	31	7,591	-1[illegible].1	[illegible]	[illegible]	[illegible]
350	31	[illegible]	-[illegible]	[illegible]	[illegible]	1[illegible]
300	31	[illegible]	-[illegible]	[illegible]6	[illegible]	17.[illegible]
250	31	[illegible]	-[illegible]	[illegible]	[illegible]	[illegible]
200	31	1[illegible],46[illegible]	-52.3		[illegible]	[illegible]
175	31	1[illegible]	-59.5		[illegible]	1[illegible].7
150	[illegible]	14,[illegible]	-67.2		7[illegible]	[illegible]
125	[illegible]	1[illegible]	-7[illegible].4		7[illegible]	1[illegible]
100	[illegible]	16,6[illegible]	-[illegible]		[illegible]	[illegible]
80	[illegible]	17,[illegible]	-7[illegible]		7[illegible]	[illegible]
70	[illegible]	1[illegible],627	-[illegible]		[illegible]	[illegible]
60	[illegible]	1[illegible],544	-[illegible]7.		[illegible]	1[illegible].7
50	[illegible]	[illegible]	-[illegible]		[illegible]	[illegible]
40	[illegible]	22,045	-[illegible]		[illegible]	[illegible]
30	[illegible]	[illegible],869	-[illegible]		[illegible]74	1[illegible]
25	30	[illegible]	-[illegible]		[illegible]	14.1
20	29	[illegible],494	-49.		[illegible]44	7.4
15	[illegible]7	[illegible]	-47.[illegible]		1[illegible]	1[illegible]
10	[illegible]	[illegible]	-4[illegible].1		[illegible]7	[illegible]
7	20	[illegible],551	-35.[illegible]		96	[illegible]
5	[illegible]	[illegible]	-[illegible]			

See reference note at end of table

RAWINSONDE DATA

Average monthly values

DECEMBER 1966

* TUCSON, ARIZ.
926 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	6.1	[illegible]	148	6.0
1000	31	152				
950	31	574				
900	31	1,024	10.5	38	1[illegible]	7.4
850	31	1,499	9.	37	160	4.5
800	31	1,99[illegible]	6.2	39	226	5.4
750	31	[illegible]	3.4	[illegible]	262	[illegible]
700	31	3,082	.3	35	277	10.9
650	31	3,667	- 2.8	35	286	13.4
600	31	4,303	- 6.3	31	282	18.5
550	31	4,969	-1[illegible].7	32	289	21.6
500	31	5,7[illegible]	-15.[illegible]	34	286	25.6
450	31	6,485	-21.6	36	283	30.9
400	31	7,340	-27.9	36	[illegible]	35.7
350	31	[illegible]	-35.1	[illegible]	[illegible]	[illegible]
300	31	9,[illegible]	-43.3	34	[illegible]	43.5
250	31	10,554	-51.[illegible]		284	45.3
200	31	11,[illegible]	-58.2		280	50.[illegible]
175	31	12,815	-60.0		277	49.1
150	31	13,773	-61.6		27[illegible]	44.3
125	31	14,895	-64.5		274	39.4
100	31	16,248	-67.[illegible]		272	34.
80	29	17,5[illegible]	-66.9		27[illegible]	24.
70	29	18,398	-66.0		280	19.8
60	29	19,33[illegible]	-64.5		281	13.[illegible]
50	26	20,45[illegible]	-6[illegible].		[illegible]	9.7
40	25	21,835	-60.6		28[illegible]	[illegible]
30	25	23,64[illegible]	-57.5		284	[illegible]
25	25	24,796	-56.[illegible]		[illegible]	12.8
20	24	26,215	-55.2		272	18.5
15	23	28,[illegible]	-53.1		277	31.5
10	21	30,694	[illegible]		26[illegible]	44.4
7	15	33,064	-45.1		27[illegible]	76.[illegible]
5						

* VANDENBERG AFB, CALIF.
1[illegible]16 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	130	7.0	84	77	1.7
1000	31	149	9.7	73	[illegible]	3.3
950	31	579	11.7	55	340	5.4
900	31	1,030	1[illegible].7	45	324	5.[illegible]
850	31	1,5[illegible]	8.1	48	313	6.
800	31	2,002	6.1	34	[illegible]	8.4
750	31	2,526	3.8	32	296	10.7
700	31	3,086	1.1	31	291	13.6
650	31	3,669	- 2.3	33	295	13.5
600	31	4,309	- 6.2	36	296	21.6
550	31	4,973	-10.7	34	296	23.5
500	31	5,711	-15.8	36	297	25.1
450	31	6,489	-21.7	37	297	28.9
400	31	7,353	-28.2	38	297	30.7
350	31	8,297	-35.7	39	297	31.5
300	31	9,351	-44.0		294	34.
250	31	10,551	-52.7		296	39.6
200	31	11,965	-60.1		29[illegible]	44.1
175	31	12,7[illegible]	-61.8		290	44.7
150	31	13,747	-62.9		[illegible]	38.3
125	30	14,864	-64.3		283	36.5
100	[illegible]	16,223	-6[illegible].9		282	29.2
80	30	17,575	-6[illegible].1		[illegible]	19.4
70	30	18,386	-65.0		287	15.3
60	30	19,327	-63.8		[illegible]	9.9
50	29	20,449	-62.5		312	6.0
40	27	21,831	-60.5		327	5.1
30	23	23,622	-58.4		33[illegible]	[illegible].9
25	22	24,778	-57.4		301	4.9
20	21	26,191	-56.8		280	7.4
15	13	28,007	-55.[illegible]		37[illegible]	11.7
10						
7						
5						

VICTORIA, TEXAS
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	33	9.2	85	4	2.9
1000	[illegible]	155	1[illegible].5	[illegible]	[illegible]	[illegible].5
950	[illegible]	5[illegible]1	10.3	[illegible]	1[illegible]	5.8
900	30	1,033	9.[illegible]	62	217	7.4
850	30	1,505	7.4	5[illegible]	231	7.6
800	30	[illegible]	5.8	43	242	9.7
750	30	[illegible],524	3.7	35	25[illegible]	12.2
700	30	3,088	1.5	[illegible]	27[illegible]	16.7
650	30	3,676	- 1.6	30	264	19.6
600	3[illegible]	4,315	- 5.5	[illegible]	26[illegible]	24.5
550	30	[illegible]	- 9.7	31	26[illegible]	28.4
500	30	5,721	-14.9	[illegible]	[illegible]	32.1
450	[illegible]	6,502	[illegible]	[illegible]	[illegible]	35.5
400	30	7,373	[illegible]	[illegible]	[illegible]	37.5
350	30	8,324	[illegible]	49	[illegible]	47.
300	30	9,389	-41.1	41	263	54.6
250	30	10,606	-49.3		264	63.1
200	30	12,043	-57.		263	70.1
175	30	12,883	-5[illegible].7		26[illegible]	67.6
150	30	13,839	[illegible]		263	59.6
125	[illegible]	14,951	[illegible]		264	49.9
100	[illegible]	[illegible]	[illegible]		264	44.5
80	[illegible]	17,[illegible]	-70.1		263	32.2
70	27	18,405	-68.5		261	24.7
60	[illegible]	19,[illegible]	-6[illegible]		262	19.[illegible]
50	27	20,442	-63.9		260	15.2
40	26	21,[illegible]	[illegible]		256	15.7
30	[illegible]4	23,621	-5[illegible].		271	21.[illegible]
25	[illegible]4	24,773	-55.[illegible]		276	24.7
20	[illegible]	[illegible]	-5[illegible].7		276	36.3
15	21	28,066	-50.6		275	48.0
10	18	30,751	-45.6		271	59.2
7	[illegible]	33,1[illegible]	-4[illegible]			
5						

* WAKE IS., PACIFIC AREA
1015 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	5	25.[illegible]	79	7[illegible]	11.[illegible]
1000	31	133	24.2	[illegible]	[illegible]	13.[illegible]
950	31	575	20.3	[illegible]	[illegible]	13.8
900	31	1,[illegible]	16.9	85	[illegible]1	14.6
850	31	1,532	15.1	67	[illegible]7	13.4
800	31	2,047	1[illegible]	[illegible]	[illegible]	11.1
750	31	2,590	1[illegible].5	26	83	9.5
700	31	3,170	1[illegible].8	23	96	8.4
650	31	3,779	7.5	[illegible]	[illegible]	7.[illegible]
600	31	4,438	[illegible]	23	90	6.4
550	31	5,138	- .8	22	[illegible]	4.7
500	31	5,894	- [illegible].6	21	[illegible]	2.1
450	31	6,7[illegible]	-11.4	21	[illegible]	3.5
400	31	7,605	-17.7	[illegible]	344	6.8
350	31	8,590	-[illegible]4.7	[illegible]	322	8.9
300	31	9,693	-33.1	[illegible]	311	13.
250	31	10,950	-42.8		307	17.5
200	31	12,418	-54.3		302	19.6
175	31	13,261	-60.8		303	20.6
150	31	14,203	-67.7		[illegible]	21.6
125	31	[illegible]	-75.0		[illegible]	18.5
100	[illegible]	16,555	[illegible]		[illegible]	12.4
80	28	17,802	[illegible]		269	6.6
70	25	18,555	-77.1		259	4.7
60	23	19,455	-69.8		[illegible]	3.9
50	[illegible]	20,558	-63.0		268	6.
40	22	21,942	-58.9		289	[illegible].4
30	22	23,765	-54.0		285	5.4
25	22	24,940	-52.1		274	6.0
20	22	26,392	-4[illegible]		280	9.1
15	22	28,295	-45.6		[illegible]1	7.2
10	18	31,031	-40.3		8[illegible]	7.4
7	14	33,455	-37.7		215	6.
5	6	35,7[illegible]	-38.4			

* WALLOPS I., VA. NASA
1021 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	3	1.4	[illegible]	31[illegible]	3.[illegible]
1000	31	1[illegible]	[illegible]	71	[illegible]14	[illegible]
950	31	581	1.8	72	[illegible]	8.7
900	31	1,017	.9	69	[illegible]	13.6
850	31	1,476	- .1	63	27[illegible]	16.3
800	31	1,[illegible]	- .1	[illegible]	27[illegible]	19.[illegible]
750	31	2,478	1.[illegible]	[illegible]	[illegible]	23.5
700	31	3,024	- 4.3	[illegible]	26[illegible]	28.7
650	31	3,604	- 7.0	41	[illegible]	32.1
600	31	4,226	-10.8	41	[illegible]	33.[illegible]
550	31	[illegible]	-15.1	43	266	36.3
500	31	5,603	-19.9	41	268	37.7
450	31	6,372	-25.3	40	26[illegible]	43.1
400	31	7,221	-31.5	42	[illegible]	49.
350	31	8,153	-38.2	45	[illegible]	51.[illegible]
300	31	9,197	-45.6		265	5[illegible].1
250	31	10,393	-52.6		264	58.5
200	30	11,816	-56.9		268	61.0
175	29	12,662	-57.0		270	59.1
150	29	13,633	-59.		269	54.6
125	27	14,774	-61.0		268	47.4
100	27	16,153	-63.2		269	41.6
80	25	17,527	-63.4		265	30.7
70	23	18,345	-63.2		264	26.2
60	21	19,290	-62.8		265	22.1
50	21	20,424	-62.1		263	15.7
40	21	21,807	-61.0		268	16.3
30	21	23,599	-59.5		283	12.6
25	21	24,742	-58.3		[illegible]	11.7
20	19	26,150	-56.7		283	14.2
15	17	27,988	-54.0		279	20.8
10	14	30,644	-49.0		269	44.3
7	12	33,024	-44.5		[illegible]	70.9
5	5	35,314	-41.3			

WASHINGTON, D. C.
1[illegible]21 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	85	- 1.4	[illegible]1	309	3.1
1000	31	17[illegible]	[illegible]	73	31	4.5
950	31	59[illegible]	- .4	70	287	11.1
900	31	1,012	- 1.3	69	284	14.6
850	31	1,468	- 1.8	[illegible]	[illegible]	16.1
800	31	1,949	- 2.6	55	279	19.9
750	31	2,463	- 3.4	53	269	24.7
700	31	3,[illegible]4	- 5.8	56	267	27.6
650	31	3,582	- 8.0	50	262	33.6
600	31	4,201	-11.6	46	260	36.5
550	31	4,858	-15.9	4[illegible]	258	40.4
500	31	[illegible],574	-20.7	[illegible]1	262	45.6
450	31	6,341	[illegible]	42	262	49.6
400	31	7,186	-32.4	43	[illegible]	53.9
350	31	8,113	-39.1	42	264	61.[illegible]
300	31	9,153	-46.3		264	65.3
250	31	10,345	-52.9		267	72.7
200	31	11,771	-56.7		267	74.2
175	31	12,617	-56.9		267	69.[illegible]
150	31	1[illegible],591	-58.[illegible]		268	57.[illegible]
125	31	14,732	-60.2		265	5[illegible].3
100	31	16,118	-61.9		265	40.9
80	31	17,495	[illegible]		270	[illegible].1
70	31	18,318	-62.4		262	24.7
60	31	19,272	-61.5		[illegible]	[illegible]
50	31	20,402	-61.[illegible]		26[illegible]	14.6
40	31	21,788	-60.5		271	11.5
30	31	23,585	[illegible]		279	12.2
25	30	24,730	-58.3		282	13.
20	28	26,132	-57.4		281	17.[illegible]
15	15	27,[illegible]	-5[illegible].4		[illegible]	[illegible].6
10						
7						
5						

WINNEMUCCA, NEV.
871 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,310	- 3.4	83	142	1.4
1000	31	198				
950	31	611				
900	31	1,047				
850	31	1,500	- .2	72	[illegible]	3.7
800	31	1,986	- .5	62	221	9.9
750	31	2,496	- 2.6	62	250	12.6
700	31	3,045	- 5.5	[illegible]	[illegible]	17.7
650	31	3,617	- 8.6	52	263	2[illegible].7
600	31	4,[illegible]4	-12.3	48	269	22.7
550	31	4,894	-16.1	4[illegible]	[illegible]	27.2
500	31	5,613	-20.4	44	284	31.3
450	31	6,377	-25.4	49	269	[illegible]4.
400	31	7,230	-31.7	46	[illegible]	38.1
350	31	8,159	-38.9	46	292	41.4
300	[illegible]	[illegible],19[illegible]	[illegible]6.5		[illegible]	45.1
250	31	1[illegible]	-54.4		284	50.9
200	31	11,793	-59.7		284	49.7
175	[illegible]	12,630	-59.3		282	47.8
150	28	13,609	-59.3		281	41.8
125	28	14,736	-61.1		[illegible]	35.5
100	27	16,1[illegible]	-61.8		281	25.6
80	27	17,507	-61.8		283	17.3
70	27	18,334	-61.0		295	13.4
60	[illegible]	19,292	-60.4		311	7.4
50	26	20,429	-59.9		331	3.3
40	25	21,820	[illegible]		19	3.1
30	[illegible]	[illegible]	[illegible]			5.8
25	24	24,778	-57.7		53	7.2
20	[illegible]	26,179	-57.5		47	7.2
15	15	27,992	-5[illegible].4		[illegible]	2.7
10	6	30,599	-56.5			
7						
5						

WINSLOW, ARIZ.
852 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,492	- 4.5	[illegible]	203	3.3
1000	31	21[illegible]				
950	31	626				
900	31	1,059				
850	31	1,514			19[illegible]	1.7
800	31	1,998	.[illegible]	55	240	6.4
750	31	2,515	- .[illegible]	47	262	1[illegible].5
700	31	3,[illegible]	- 2.4	4[illegible]	[illegible]1	12.6
650	31	[illegible],645	- 5.0	[illegible]	281	16.3
600	31	4,277	- 8.4	[illegible]	284	18.6
550	31	4,942	-12.9	41	[illegible]87	22.0
500	31	5,667	-17.4	39	295	26.4
450	[illegible]	6,44[illegible]	[illegible]	42	[illegible]	29.3
400	31	7,299	-30.0	41	[illegible]	30.5
350	31	8,238	-36.8	40	291	32.4
300	[illegible]	9,288	[illegible]		294	37.7
250	31	10,487	[illegible].4		294	[illegible]
200	31	11,909	[illegible].7		287	41.6
175	[illegible]	[illegible],745	[illegible]		265	42.9
150	31	13,707	-60.7		[illegible]	39.4
125	[illegible]	[illegible]	[illegible]		[illegible]	33.2
100	31	16,[illegible]	[illegible].1		279	28.2
80	30	17,557	[illegible].1		[illegible]	21.9
70	29	18,371	[illegible]		287	17.1
60	29	19,314	-63.6		292	12.0
50	28	20,439	-6[illegible]		[illegible]	7.8
40	[illegible]	21,821	-60.5		310	5.4
30	27	23,621	[illegible]		[illegible]	6.4
25	26	[illegible]	-57.1		[illegible]	7.4
20	21	26,199	-5[illegible].1		277	13.2
15	16	28,035	-5[illegible]		273	17.9
10						
7						
5						

YAKUTAT, ALASKA
1000 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	- 3.7	[illegible]4	[illegible]	6.2
1000	31	11			94	9.7
950	31	4[illegible]1	- 1.4	74	1[illegible]	11.8
900	31	85[illegible]	- 3.8	75	120	1[illegible].
850	31	1,299	- 6.5	[illegible]	130	12.4
800	31	1,772	- 9.4	75	138	10.5
750	31	2,269	-12.1	7[illegible]	145	7.4
700	31	2,793	-14.5	6[illegible]	17[illegible]	7.0
650	31	3,350	-17.9	62	[illegible]	7.6
600	31	3,945	-21.3	61	[illegible]6	9.3
550	31	4,579	-25.4	62	210	11.7
500	31	5,267	-30.1	[illegible]	223	13.6
450	31	6,006	-35.4	61	229	16.3
400	31	6,821	-40.6	49	242	20.2
350	31	7,719	-46.3		[illegible]	24.1
300	31	8,732	-5[illegible]		257	28.2
250	31	9,913	-52.9		264	26.2
200	31	11,[illegible]	-51.8		267	22.1
175	31	12,223	-50.7		263	21.6
150	31	13,229	-50.3		261	22.
125	31	14,419	-50.6		262	18.6
100	31	15,872	-51.3		257	15.9
80	31	17,319	-51.7		261	15.0
70	30	18,182	-51.7		256	12.4
60	30	19,181	-52.1		251	11.3
50	29	20,358	-52.7		[illegible]	11.8
40	[illegible]	21,796	-53.4		268	10.3
30	[illegible]	[illegible]	-54.1		275	9.9
25	22	24,824	-54.8		[illegible]	10.1
20	[illegible]	[illegible]	-55.9		290	11.1
15	12	28,103	-56.4			
10						
7						
5						

YAP, CAROLINE IS.
+ 1007 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	17	27.6	82	63	8.5
1000	31	81	26.9	81	[illegible]	11.1
950	31	529	[illegible].1	[illegible]	7[illegible]	19.[illegible]
900	31	1,[illegible]	20.5	75	82	[illegible]
850	31	1,499	19.2	[illegible]	85	20.[illegible]
800	31	2,017	15.9	60	[illegible]	19.6
750	31	2,559	1[illegible]	55	[illegible]	18.8
700	31	3,142	10.1	51	[illegible]	2[illegible].4
650	31	3,751	6.7	48	92	22.5
600	31	4,409	2.8	50	94	23.1
550	31	5,103	- 1.1	47	95	23.7
500	31	5,865	- 5.2	41	[illegible]	21.8
450	31	6,680	- 9.9	36	95	22.7
400	31	7,587	-15.3	34	94	20.4
350	31	[illegible]	-22.1	[illegible]	[illegible]	18.1
300	31	9,698	-30.4	28	92	18.6
250	31	10,968	-40.5	26	[illegible]	16.1
200	31	1[illegible],447	-53.1		94	15.[illegible]
175	31	13,293	-60.3		91	14.0
150	31	14,237	-67.9		85	16.9
125	31	15,310	-76.2		89	21.0
100	31	16,570	-83.3		[illegible]	28.4
80	31	17,917	-79.5		91	10.5
70	31	[illegible]	-73.3		263	4.5
60	31	19,497	-68.2		274	13.2
50	30	20,603	-63.8		276	15.0
40	[illegible]	21,987	-59.0		271	14.2
30	30	23,805	-55.7		266	13.6
25	29	[illegible]	-52.3		269	11.5
20	28	26,428	-48.9		249	[illegible]
15	27	28,329	-45.9		107	13.[illegible]
10	26	31,040	-41.6		95	27.8
7	19	33,490	-37.1		87	38.5
5	11	35,834	-33.9			

YUCCA FLAT, NEV.
[illegible]02 MB

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,196	- 1.3	[illegible]	[illegible]	1.7
1000	31	188				
950	31	[illegible]				
900	31	1,042				
850	31	1,502	4.	47	[illegible]	4.7
800	31	1,[illegible]	[illegible]	[illegible]	35[illegible]	[illegible]
750	31	2,511	.4	39	[illegible]	3.7
700	31	3,[illegible]	- 1.9	35	[illegible]	[illegible]
650	31	3,[illegible]	- 5.0	36	292	13.
600	31	4,275	- 9.0	[illegible]	[illegible]	17.9
550	31	[illegible]	-13.4	[illegible]	29[illegible]	[illegible]
500	31	[illegible],662	-18.4	[illegible]	[illegible]	22.[illegible]
450	31	6,4[illegible]	-23.[illegible]	[illegible]	[illegible]	24.1
400	31	7,2[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
350	31	[illegible],224	-36.[illegible]	40	299	[illegible]
300	31	9,275	-44.7		295	35.4
250	31	1[illegible],47[illegible]	-52.6		298	4[illegible].
200	31	11,[illegible]	[illegible]		[illegible]	47.4
175	31	12,729	-60.1		[illegible]	49.[illegible]
150	[illegible]	[illegible]	-60.2		284	44.[illegible]
125	[illegible]	14,[illegible]	-62.2		[illegible]	36.1
100	[illegible]	16,191	-6[illegible]		[illegible]	[illegible]
80	[illegible]	17,[illegible]	[illegible]			[illegible]
70	28	1[illegible],379	-63.1		[illegible]	14.[illegible]
60	27	19,328	-61.5		[illegible]	[illegible]
50	[illegible]	[illegible]	-61.1		[illegible]	[illegible]
40	26	21,[illegible]	-59.9		341	2.[illegible]
30	22	[illegible]	-58.[illegible]		14	3.[illegible]
25	22	24,212	-57.4		[illegible]	4.1
20	19	26,231	-56.4		4	[illegible]
15	[illegible]	28,[illegible]	[illegible]			
10	[illegible]	[illegible],606	-54.1			
7						
5						

YUMA, ARIZ.
[illegible]

Standard pressure surface (mb)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	131	[illegible]	44	73	.9
1000	[illegible]	[illegible]				.[illegible]
950	[illegible]	575	14.3	31	358	6.6
900	[illegible]	1,030	12.0	30	5	4.5
850	[illegible]	1,506	9.2	31	337	4.5
800	[illegible]	[illegible]	6.8	31	294	7.[illegible]
750	20	2,528	4.5	30	292	[illegible]
700	20	3,091	[illegible]	29	[illegible]	12.8
650	20	3,677	- 1.7	28	284	14.0
600	[illegible]	4,317	- 5.6	[illegible]		[illegible]
550	[illegible]	[illegible]	-10.5	31	295	19.6
500	20	5,719	-15.7	[illegible]	287	22.5
450	[illegible]	[illegible]	-21.6	[illegible]	29[illegible]	25.6
400	20	7,361	[illegible]	[illegible]		31.1
350	[illegible]	[illegible]	[illegible]	32	2[illegible]	35.2
300	[illegible]	[illegible]	-42.3	34		[illegible]
250	[illegible]	1[illegible]	-51.0		291	41.8
200	20	[illegible]	[illegible]		28[illegible]	45.6
175	[illegible]	[illegible]	[illegible]		287	[illegible]
150	19	13,779	-62.1		292	47.9
125	17	[illegible]	[illegible]		283	38.[illegible]
100	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
80	14	17,588	-66.4		277	[illegible]
70	11	18,388	-65.4		287	15.[illegible]
60	[illegible]	19,329	-64.4			
50	[illegible]	[illegible]	-62.0			
40	[illegible]	21,336	-6[illegible].4			
30	[illegible]	[illegible]	[illegible]			
25	9	[illegible]	-56.2			
20	6	[illegible]	-56.6			
15	5	28,054	-54.0			
10						
7						
5						

Note: [illegible] 1200 G. C. T. Pressures shown under station [illegible] are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used [illegible] rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Relative humidity averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° [illegible]

The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 [illegible]. Relative humidity data are not published for standard pressure surfaces for which less than 5 observations are available. Relative humidity data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygristors.

These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature in degrees Celsius, relative humidity in percent, and resultant winds in degrees and knots.

* Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.

+ Observations for these stations are scheduled at 0000 G. C. T.

R [illegible] Equipped with lithium chloride hygristor

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

DECEMBER 1966

Sun's zenith distance

ALBUQUERQUE, N. MEX.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19
Dec.									
1-----	0.98	1.08	1.20	1.36	1.42	1.38	1.18	1.03	0.92
2-----	----	----	----	----	1.40	----	----	----	----
7-----	----	----	----	----	----	----	----	1.16	1.07
8-----	1.04	1.12	1.25	----	----	----	----	----	----
9-----	1.09	1.19	1.32	1.46	1.49	1.48	1.32	1.23	1.12
10----	1.15	1.25	1.33	----	----	----	----	----	----
11----	----	1.16	1.29	1.44	1.43	1.43	----	1.16	----
12----	----	1.11	----	1.39	1.39	1.39	1.18	1.01	.96
13----	----	----	1.25	1.40	1.42	1.40	1.24	1.07	.96
14----	1.08	1.18	1.26	----	----	----	1.25	1.08	.96
15----	.97	1.09	1.23	1.38	1.38	1.35	1.24	1.15	.99
16----	1.08	1.19	1.28	1.45	1.46	1.43	1.30	1.18	1.07
17----	1.07	1.23	1.34	1.49	1.50	----	----	----	----
18----	1.08	1.19	1.31	1.45	1.47	1.40	1.27	1.12	1.01
19----	1.07	1.17	1.30	1.44	1.47	1.42	1.24	1.10	1.00
20----	1.09	1.20	1.30	1.42	1.47	1.43	1.30	1.15	1.08
21----	----	1.20	----	----	----	----	----	----	----
22----	1.10	----	----	----	----	----	----	----	1.03
23----	1.00	1.10	1.24	1.38	1.37	1.37	1.22	1.09	1.00
25----	----	1.08	1.19	1.41	1.42	1.39	1.24	1.09	.99
28----	.96	1.08	1.24	1.42	1.42	1.40	1.26	1.18	1.08
29----	1.02	1.13	1.25	1.41	1.41	1.39	1.16	----	----
30----	.96	1.09	1.22	----	----	----	----	----	----
31----	.94	1.06	1.18	1.38	1.39	----	----	----	----
Averages	1.04	1.15	1.26	1.42	1.43	1.40	1.24	1.12	1.02

TUCSON, ARIZ.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56
Dec.									
1-----	----	1.00	1.14	----	1.35	1.28	----	----	----
2-----	0.96	1.06	1.17	----	----	----	----	----	----
4-----	.83	.96	----	----	----	----	----	----	----
6-----	.90	1.00	1.11	1.26	1.32	1.29	----	----	----
7-----	----	----	----	----	1.34	----	1.11	----	----
8-----	.80	.91	1.05	1.24	1.28	1.28	1.10	0.98	0.86
9-----	.74	.87	.94	1.27	----	----	----	----	----
10----				Pryheliometer inoperative					
11----	.80	.89	1.03	1.27	1.27	1.25	.98	----	----
12-14-				Pryheliometer inoperative					
15----	.85	.96	.97	1.24	1.31	1.25	----	----	----
16----	----	.98	1.20	1.35	1.39	1.33	1.19	1.06	.97
18----	.47	.81	1.07	1.16	1.36	1.32	1.19	1.11	1.02
19----	----	----	----	1.29	1.38	1.32	1.15	1.02	.91
21----	.86	.95	1.08	1.21	----	----	----	----	----
22----	.79	.88	1.02	1.17	1.22	1.18	1.04	.90	.78
27----	----	----	----	1.26	1.33	1.29	1.12	.99	.90
28----	----	.99	1.09	1.28	1.37	1.34	1.16	1.04	.94
31----	.92	1.00	1.13	1.26	1.29	1.23	1.06	.89	.75
Averages	0.81	0.95	1.08	1.25	1.32	1.28	1.11	1.00	0.89

OMAHA, NEBR.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78
Dec.									
11----	----	----	----	----	HM1.20	----	----	----	----
12----	HS0.80	HS0.94	HS1.04	----	HM1.18	----	1.04	†	H 0.82
13----	HS .92	HS1.02	HS1.18	----	----	----	----	----	----
16----	----	HS1.03	----	----	----	----	----	----	----
17----	----	HS1.06	HS1.17	----	HS1.26	----	----	----	----
23----	----	----	----	----	HS1.24	----	HS1.16	HS1.03	HS .92
24----	HM .92	HM1.02	HM1.15	----	----	----	----	----	----
29----	HS .92	HS1.01	HS1.14	----	HS1.23	----	----	----	----
30----	HM .74	HM .82	HM .98	----	HS1.08	----	----	----	----
31----	----	----	----	----	HS1.14	----	----	----	----
Averages	0.86	1.56	1.11	----	1.19	----	1.10	1.03	0.87

MADISON, WIS.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69
Dec.									
11----	M 0.76	M 0.89	S 1.04	----	----	----	S 0.97	S 0.90	S 0.83
12----	----	----	----	----	----	----	M .88	M .63	S .46
13----	----	----	----	----	----	----	----	HI .71	I .65
23----	----	M .96	M 1.13	----	M 1.20	----	----	----	----
25----	S 1.11	S 1.17	S 1.23	----	S 1.24	----	----	----	----
Averages	0.94	1.01	1.13	----	1.22	----	0.93	0.75	0.65

BLUE HILL OBS., MASS.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.89	3.92	2.94	1.96	*	1.96	2.94	3.92	4.89
Dec.									
1-----	0.75	0.94	1.11	----	1.22	----	----	----	----
3-----	----	.96	1.11	----	1.29	----	----	----	----
4-----	.89	1.00	1.13	----	1.24	----	1.10	0.96	0.88
12----	1.03	1.11	1.23	----	1.32	----	1.21	1.07	.98
15----	----	----	----	----	1.22	----	1.04	.89	.82
18----	.77	.84	1.03	----	1.06	----	.88	.75	.62
19----	----	----	----	----	1.27	----	1.17	1.06	.94
22----	.72	.82	.99	----	----	----	----	----	----
23----	.71	.84	.96	----	1.15	----	1.08	.96	.86
26----	----	----	----	----	1.18	----	1.07	.95	.84
27----	----	----	----	----	1.20	----	1.11	.96	.87
28----	.79	.90	1.10	----	1.25	----	----	----	----
31----	1.01	1.11	1.23	----	1.28	----	1.11	.94	----
Averages	0.83	0.95	1.10	----	1.22	----	1.09	0.95	0.85

MAUNA LOA OBS., HAWAII

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Dec.									
1-----	1.09	1.18	1.29	1.42	----	----	----	----	----
2-----	1.12	1.20	1.31	1.43	----	----	----	----	----
3-----	1.15	1.23	1.34	1.47	1.56	----	----	----	----
4-----	1.16	1.26	1.37	1.49	1.57	----	----	----	----
5-----	1.19	1.28	1.38	1.50	1.59	----	----	----	----
9-----	1.20	1.29	1.39	1.49	----	----	----	1.29	1.19
10----	1.25	1.33	1.42	1.54	1.62	1.51	1.39	1.29	1.21
11----	1.20	1.29	1.39	1.51	1.60	1.48	1.36	1.25	1.16
12----	1.18	1.25	1.35	1.47	1.56	1.47	1.35	1.25	1.16
13----	1.18	1.26	1.36	1.48	1.58	1.45	1.31	1.20	1.10
14----	----	----	----	----	1.59	1.49	1.37	1.28	1.20
15----	1.13	1.23	1.34	1.46	1.58	1.45	1.30	1.20	1.11
16----	1.13	1.23	1.33	1.46	1.56	1.45	1.31	1.21	1.12
17----	1.18	1.26	1.35	1.47	1.55	1.43	1.28	1.16	1.06
Averages	1.17	1.25	1.35	1.48	1.58	1.47	1.33	1.24	1.15

GUAM, M. I.

Date	A.M.				*	P.M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°
Air mass	4.92	3.93	2.95	1.97	*	1.97	2.95	3.93	4.92
Dec.									
11----	----	----	----	----	----	I 1.18	I 1.02	I 0.85	I 0.70
28----	----	----	S 0.95	----	----	----	----	----	----
Averages	----	----	0.95	----	----	1.18	1.02	0.85	0.70

H	Haze	HS	Slight haze
S	Slight haze - indeterminable	HM	Moderate haze
M	Moderate haze - indeterminable	HI	Intense haze
I	Intense haze - indeterminable	†	Wind mast
*	Values corresponding to true solar noon		

Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station listed above appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

DECEMBER 1966

Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
ALBUQUERQUE N.M.	352	355	154	282	76	184	135	215	314	214	286	320	324	318	319	355	333	330	339	336	308	333	320	292	318	---	---	331	---	299	---	287
ANNETTE ALASKA	27	22	63	79	18	20	42	33	11	10	14	32	24	7	12	18	13	19	13	26	29	21	9	49	61	16	10	5	16	32	30	25
APALACHICOLA FLORIDA	358	353	312	322	181	225	266	274	211	152	143	139	276	354	324	308	91	215	269	311	313	194	50	352	259	204	285	223	295	167	62	242
ARGONNE NAT. LAB.	117	235	222	34	46	6	19	37	32	36	50	89	72	170	125	35	69	132	50	34	42	185	188	240	224	206	126	39	216	179	38	106
ATLANTA GEORGIA	314	279	238	310	212	138	97	174	117	83	270	61	74	271	302	293	126	192	293	263	277	214	36	306	332	275	238	12	317	127	53	203
ASTORIA OREGON	70	33	59	43	105	14	61	129	26	53	18	15	53	54	25	39	25	14	18	107	74	64	48	32	123	74	43	34	68	46	40	52
BARROW ALASKA †	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
BETHEL ALASKA	30	25	2	11	16	45	23	57	38	23	19	19	4	13	32	2	27	6	20	5	19	30	8	8	---	7	17	2	4	1	6	17
BISMARCK N.DAK.	187	173	78	157	72	165	66	68	124	174	161	138	137	108	152	121	148	64	146	71	93	149	118	51	154	141	120*	80	61	51	46	115*
BLUE HILL MASS.	189	45	198	216	186	179	45	133	179	64	77	215	108	24	186	141	160	167	192	98	24	164	198	55	185	167	201	204	44	187	200	143
BOISE IDAHO	19	136	131	135	142	60	74	151	120	109	84	112	28	152	192	182	189	145	125	79	199	168	130	165	63	173	207	161	86	128	153	129
BOSTON MASSACHUSETTS	182	---	---	---	---	---	35	118	161	57	87	209	104	21	175	140	143	158	195	41	25	167	180	48	185	169	199	179	53	187	196	131
BROWNSVILLE TEXAS	321	368	---	279	379	320	325	287	204	430	344	436	423	343	156	260	406	323	384	401	339	379	63	202	131	144	293	274	216	63	195	290
CANTON ISLAND P.I.	672	659	639	644	656	658	671	653	682	678	631	657	626*	576	623	647	590	589	554	572	645	659*	386	642	646	638	628	679	662	655	637	631*
CAPE HATTERAS N.C.	285	278	104	145	224	161	262	258	254	244	24	58	90	29	250	265	267	43	219	233	255	194	94	52	282	281	279	85	203	263	28	184
CARIBOU MAINE	57	86	198	170	136	66	39	18	24	23	42	149	147	61	156	98	59	17	156	120	151	53	117	164	37	95	62	128	20	112	164	94
CHARLESTON S.C.	336	335	81	359	227	279	191	277	229	179	130	40	43	210	326	319	229	72	300	312	322	231	42	68	340*	316	318	92	295	216	26	217*
CLEVELAND OHIO	77	223	143	180	27	45	32	117	17	16	26	42	129	43	170	117	168	94	133	12	109	65	114	115	90	39	140	38	73	122	85	90
COLUMBIA MISSOURI	58	98	235	28	46	35	117	30	50	68	286	63	266	246	237	56	224	246	243	190	254	65	212	269	286	209	44	69	---	250	42	151
DAVIS CALIFORNIA	34	33	241	41	33	166	180	231	96	161	71	47	75	226	95	77	91	42	53	48	239	53	59	232	32	256	236	199	101	258	200	126
DODGE CITY KANSAS	209	157	80	---	188	205	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
E. LANSING MICHIGAN	164	177	244	121	33	18	11	56	20	47	74	225	120	81	181	19	88	72	68	91	93	138	151	179	197	54	128	56	111	111	112	105
EL CENTRO CALIF. NPF	247	182	166	384	---	232	254	---	---	---	234	237	235	230	238	238	207	237	237	233	185	235	216	232	236	215	245	---	247	65	312	230
EL PASO TEXAS	372	349	299	304	264	357	282	313	376	366	369	335	359	362	340	363	364	359	366	268	364	365	351	304	353	338	323	377	373	270	307	338
ELY NEVADA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	206	293	275	---
EPPLEY NEWPORT R.I.	---	49	206	224	105	161	62	128	180	69	101	212	79	33	181	128	178	156	190	145	39	170	198	47	184	131	194	184	63	203	201	140
FAIRBANKS ALASKA	3	5	5	6	3	7	4	4	3	4	4	6	5	2	1	1	2	1	1	3	4	1	1	3	7	6	5	3	5	5	7	4
FORT WORTH TEXAS	322	115	69	63	148	217	289	291	193	268	297	---	---	---	---	---	---	---	---	---	---	143	168	369	176	108	50	346	352	44	205	---
FRESNO CALIFORNIA	41	16	204	47	29	51	210	234	143	219	80	51	52	39	81	52	36	37	47	50	33	57	38	46	69	153	207	221	155	166	218	99
GLASGOW MONTANA	182	136	87	159	61	159	138	64	164	134	158	133	118	79	124	88	147	142	111	125	29	36	144	19	40	41	61	97	96	65	51	103
GRAND JUNCTION COLO.	219	140	38	207	57	58	226	170	279	172	253	254	269	215	270	263	250	250	255	273	135	261	269	247	247	110	184	280	270	274	221	213
GREAT FALLS MONTANA	68	148	71	114	39	165	127	86	134	85	123	102	88	132	93	120	113	50	42	39	55	142	97	102	64	51	149	97	33	52	128	94
GREENSBORO N.C.	277	191	276	284	147	202	81	137	139	79	246	170	23	246	265	243	186	95	245	220	250	204	34	148	264	253	268	24	246	198	99	185
INDIANAPOLIS INDIANA	66	179	256	160	17	20	16	34	16	55	63	47	55	192	230	221	205	---	102	42	110	121	74	215	255	245	154	35	178	276	52	123
INYOKERN CALIFORNIA	277	153	307	138	189	84	303	282	271	283	261	231	182	255	279	280	272	291	293	275	267	274	275	271	233	270	284	276	268	234	274	253
ITHACA NEW YORK	31	133	84	202	83	77	7	62	30	102	8	105	62	19	17	76	99	35	172	8	49	147	128	49	89	49	94	101	96	69	66	76
LAKE CHARLES LA.	317	258	184	173	187	315	279	202	123	72	115	179	230	357	319	101	55	265	287	309	170	235	82	365	78	115	115	80	255	23	56	190
LAKELAND FLORIDA	339	387	406	148	292	355	339	366	253	213	170	166	272	389	392	271	214	282	315	383	377	321	317	266	406	300	369	330	198	352	195	303
LANDER WYOMING	129	224	157	219	53	158	208	214	233	91	229	146	166	142	224	184	152	177	194	203	212	123	231	194	209	102	138	245	227	252	224	183
LARAMIE WYOMING	85	75	152	217	118	123	191	164	219	200	141	191	201	133	224	205	151	116	167	193	195	132	231	151	104	116	159	239	196	205	169	167
LAS VEGAS NEVADA	271	162	133	78	9	115	199	295	197	290	270	229	250	257	284	285	260	284	286	285	219	291	289	281	282	143	193	185	190	177	288	225
LITTLE ROCK ARKANSAS	277	64	87	412	40	63	88	61	52	51	146	147	280	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
LOS ANGELES, CALIF.	186	36	110	115	24	30	336	340	301	338	305*	281	198	217	275	270	221	290	270	231	190	257	275	258	202	300	543	292	280	271	289	234*
LOS ANGELES CALIF.J	131	42	102	---	22	31	306	305	292	299	275	292	204	228	299	295	295	259	301	249	200	290	341	300	305	364	330	349	291	330	347	255
MADISON WISCONSIN	226	221	218	17	31	9	37	16	43	40	210	163	145	164	126	139	174	53	29	41	97	227	222	216	212	214	192	46	225	181	78	130
MANHATTAN KANSAS	134	128	176	27	16	165	92	245	22	246	256	231	236	283	208	175	218	226	207	197	235	52	245	259	246	80	56	237	281	230	239	182
MATANUSKA ALASKA	29	30	27	28	28	26	32	25	37	40	38	33	11	9	5	5	6	8	11	12	8	28	11	30	5	21	10	13	8	12	23	20
MEDFORD OREGON	197	26	128	31	117	133	148	134	62	124	69	115	59	52	133	40	28	37	41	60	157	188	146	47	111	115	187	140	46	53	29	97
MIAMI FLORIDA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MIDLAND TEXAS	---	334	119	180	258	263	---	328	248	352	328	344	333	341	284	336	339	336	337	342	317	235	349	313	274	317	216	---	334	312	310	299
NASHVILLE TENNESSEE	283	133	286	230	77	69	93	71	55	29	18	38	32	196	261	254	48	250	241	213	255	177	35	250	288	172	159	86	271	141	33	153
NEW YORK N.Y.	171	59	196	214	61	144	22	130	159	71	169	211	23	26	175	145	186	181	210	33	123	186	201	16	140	110	141	87	174	115	152	130
NORTH OMAHA NEBRASKA	---	206	149	36	42	117	30	50	54	259	258	234	233	217	108	226	230	211	213	201	64	110	255	249	250	---	54	174	249	---	233	169
OAK RIDGE TENNESSEE	268	185	295	267	99	67	29	74	117	69	109	44	35	75	198	198	105	145	239	251	254	150	36	217	273	206	213	8	240	177	33	151
OKLAHOMA CITY OKLA.	259	81	83	[illegible]	110	215	246	246	54	255	237	211	260	258	218	239	250	244	246	247	230	20	---	273	72	---	---	---	267	74	---	189
PAGE ARIZONA	---	---	103	137	101	174	240	247	230	103	252	237	244	228	222	243	218	237	236	223	179	226	228	184	223	116	216	232	233	170	---	203

Note. --Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

NOTE: Barrow, Alaska - values on all days are zero.

† Sun continuously below horizon.

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
PHOENIX ARIZONA	260	237	191	192	79	199	244	267	273	271	270	270	267	258	261	268	239	264	263	220	150	251	242	205	262	77	266	271	263	87	267	230
PORTLAND MAINE	184	53	192	210	180	109	24	81	92	41	102	191	131	64	199	104	138	92	193	138	46	156	173	93	149	199	185	180	19	165	196	132
PROSSER WASHINGTON	89	31	81	35	165	133	71	176	59	85	61	69	29	96	42	105	66	92	51	74	152	168	89	---	66	133	65	54	131	97	---	88
RAPID CITY S.DAK.	107	156	127	172	101	151	130	172	176	202	121	149	144	132	157	94	155	76	142	135	21	156	208	89	105	89	105	179	160	160	133	136
RENO NEVADA	136	59	208	85	32	68	169	234	107	211	131	194	110	194	213	199	184	131	94	137	106	165	177	70	59	124	203	201	54	218	224	145
RICHLAND 25 NW WASH.	46	47	79	47	132	143	82	151	50	85	85	65	32	93	47	106	40	65	34	92	143	125	85	47	45	106	29	38	112	92	98	79
RIVERSIDE CALIFORNIA	228	66	30	96	5	32	221	292	278	275	240	265	230	258	277	277	208	284	280	263	202	277	285	202	138	278	287	283	275	273	270	222
SAINT CLOUD MINN.	206	154	198	53	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
SALT LAKE CITY	135	125	49	181	41	53	190	63	252	59	157	142	132	140	229	250	57	60	58	49	126	196	192	131	141	127	196	210	99	254	102	135
SAN ANTONIO TEXAS	352	328	143	---	---	---	---	313	317	396	377	408	423	387	276	491	234	199	233	236	178	175	244	212	137	86	59	206	222	33	127	251
SANTA MARIA CALIF.	179	39	262	52	32	44	267	266	241	255	221	250	164	245	251	245	210	250	253	218	226	246	233	253	221	256	260	248	229	243	258	213
SAULT STE MARIE MICH	184	156	140	93	65	15	54	17	31	113	85	177	143	21	39	36	28	195	99	143	---	176	134	111	128	101	183	40	137	197	73	104
SEATTLE TACOMA WASH.	76	51	68	47	87	33	22	57	59	24	22	29	30	76	38	52	16	22	20	65	90	112	35	33	33	49	57	22	71	23	42	47
SEATTLE WASH. UNIV.	70	40	48	43	78	26	18	75	32	23	13	34	25	65	23	42	5	12	16	66	86	97	26	32	26	86	44	18	67	18	21	41
SPOKANE WASHINGTON	15	82	129	20	---	---	153	---	---	53	64	44	15	77	45	103	95	76	27	24	---	136	72	51	83	69	49	34	58	60	62	65
STATE COLLEGE PENN.	87	230	228	257	131	35	33	112	116	64	42	195	51	82	108	143	204	153	154	37	115	141	156	84	155	115	166	76	142	216	165	129
STERLING VIRGINIA	177	99	269	277	80	---	113	182	234	104	190	254	23	109	234	199	253	222	237	34	178	195	148	37	271	281	252	52	192	233	147	176
STILLWATER OKLAHOMA	281	89	76	24	120	221	260	275	50	276	279	228	272	267	233	254	254	257	253	258	230	18	253	306	113	182	44	262	301	140	178	202
SWAN ISLAND W.I.	300	331	---	293	416	240	454	432	429	458	401	302	462	365	232	443	434	314	387	346	467	463	458	406	406	388	450	461	374	439	236	386
TAMPA FLORIDA	482	379	368	253	247	346	349	366	---	162	68	197	260	357	368	265	210	327	656	365	307	330	311	203	387	289	343	362	197	332	322	302
TUCSON ARIZONA	320	307	255	282	117	309	266	323	327	323	331	327	---	313	309	327	289	320	326	253	258	305	262	113	245	207	321	341	232	79	321	277
WAKE ISLAND,PACIFIC	309	326	296	262	293	311	311	360	342	294	319	301	337	286	304	334	347	330	340	283	337	352	330	314	339	345	316	320	361	326	338	321

Note.--Langley is the unit used to denote one gram calorie per square centimeter.

Values with an asterisk are interpolated.

NET RADIATION

Net radiation in langleys per day (midnight to midnight) at Huntley, Mont.

DECEMBER 1966

Date.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langleys. . .	55	49	28	28	19	-2	-5	24	20	10	-14	29	36	22	-25	-9	25	71	51	50	31	54	45	34	44	60	38	-48	-27	-28	-45	20

The measurement is made with a Beckman and Whitley net exchange radiometer over a plot of sod. **The value represents the total incoming minus the total outgoing radiation of all wave lengths.**

These data are of an experimental nature and are published as received from the Huntley Exp. Station. **The instrument with which they were measured has not been checked by the Weather Bureau.**

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λs Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units Milli-atmo-cms.

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
															Data will be delayed																	

The spectrophotometer measures the total amount of ozone in the atmosphere, i.e. the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmo-cm. ozone implies an ozone layer 0.350 centimeter thick. The code λs designates the type of measurement made.

CONDENSED CLIMATOLOGICAL SUMMARY

DELAYED DATA

Section	Temperature						Precipitation			
	Monthly extremes						Monthly extremes			
	Station	Highest	Date	Station	Lowest	Date	Station	Greatest	Station	Least
		°F			°F			In		In.
June 1966										
Alaska	Venetie	91	23	Barter Island WBAP	20	1	Kodiak NAS	8.59	Hughes	0.08
Hawaii	Mana 1026, Kauai	92	15	3 Stations	38	30+	East Honokane, Hawaii 183B	17.72	24 Stations	.00
July 1966										
Alaska	Linger Longer	94	24	The Gracious House	20	1	Cape Newenham	6.89	Creekside Park School	.15
Hawaii	Kahului WBAP, Maui	93	25	Mauna Loa Slope Obs.	34	22	Papaikou Mauka 140A, Hawaii	28.65	Pohakea Bridge 307.2, Maui	.06
August 1966										
Alaska	2 Stations	85	8+	Paxson	13	20	Whittier	31.74	Central No. 2	.22
Hawaii	Waialua 847, Oahu	94	30	Haleakala Summit 338.4,Maui	34	23+	Honomu Mauka 138, Hawaii	21.27	7 Stations	.00
September 1966										
Alaska	Tonsina Lodge	77	3+	Wainwright	10	16	Whittier	32.79	Venetie	.10
Hawaii	2 Stations	94	29+	2 Stations	35	29+	Honomu Mauka 138, Hawaii	17.97	2 Stations	.00
October 1966										
Alaska	Elmendorf AFB	63	1	Northway FAA AP	-25	25	Little Port Walter	42.30	Anaktuvuk Pass	.09
Hawaii	Kilauea Point 1133, Kauai	94	4	2 Stations	34	31+	Puohokamoa 2 343, Maui	33.40	Middle Pen 147.1, Hawaii	.00
November 1966										
Alaska	Ketchikan	58	3	Coleen River	-44	15+	Cape Spencer	D26.29	Wainwright	.11
Hawaii	2 Stations	89	19+	Mauna Loa Slope Obs.	28	12	Kahana 883, Oahu	35.57	Puu Laau 102.1, Hawaii	1.02

See reference notes with current data

CORRECTIONS

		Month	Annual 1965
page 53:	Texas, Table 1.		For April there should be 1 death and 3 injuries
		Month:	February 1966
page 62:	Huron, S. Dakota		Average temperature should be 15.1°F, departure -1.5°F
page 69:	Huron, S. Dakota		Temperature departure should be -0.8°C
page 71:	Huron, S. Dakota		Current heating degree days should be 1394, total 6263 July through this period
		Month	July 1966
page 362:	Great Falls, Montana		Average langleys should be 565
page 363:	Swan Island		Average langleys should be 641
		Month	August 1966
page 412:	North Omaha, Nebr.		Average langleys should be 559
		Month	October 1966
page 513:	Sterling, Va.		Average langleys should be 345
	Stillwater, Okla		Average langleys should be blank
		Month	November 1966
page 561:	Cape Hatteras, N. C.		Daily langleys on the 21st should be 321
	Lake Charles, La.		Daily langleys on the 1st should be 58, on the 16th 284
	Barrow, Alaska		The values should be zero on all days where dashed; average should be 3
	North Omaha, Nebr.		Average langleys should be 221
		Month	September 1966
page 459:	Tucson, Ariz.		Values for the 29th and 30th should be deleted
		Month:	Annual 1965
pages 22-41:	Climatological Data		All relative humidity values are in local standard time; from left to right, 1st through 4th synoptic observation of day.

RAWINSONDE DATA

Average monthly values

DELAYED DATA

CHIHUAHUA, MEXICO 1/
855 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	28	1,428	[illegible]	45	[illegible]	1.9
1000	29	134				
950	28	[illegible]				
900	28	1,006				
850	28	1,479			330	1.0
800	28	1,975	4.9	37	257	6.6
750	28	2,492	1.8	41	[illegible]	10.7
700	28	3,052	- 1.0	41	264	15.5
650	28	3,633	- 4.2	40	[illegible]	17.5
600	28	4,267	- 8.2	33	[illegible]	21.4
550	28	4,928	-12.6	[illegible]	267	24.1
500	28	5,658	-17.4	[illegible]	266	26.
450	28	6,4[illegible]	-22.9	[illegible]	[illegible]	28.4
400	29	7,293	-29.4	[illegible]	271	31.5
350	28	8,231	-36.8	[illegible]	274	33.0
300	28	9,281	-44.[illegible]		[illegible]	36.1
250	28	[illegible],494	-51.2		269	39.[illegible]
200	26	11,915	-55.		265	49.0
175	26	12,763	-57.[illegible]		265	47.8
150	26	13,733	-59.6		263	47.2
125	26	14,863	-63.4		266	43.3
100	26	16,224	-66.5		273	30.7
80	25	17,565	-67.5		271	27.
70	23	18,369	-66.[illegible]		269	18.3
60	20	19,309	-63.6		266	13.0
50	20	20,437	-61.1		278	10.3
40	[illegible]	21,935	-58.4		274	[illegible]
30	18	23,649	-57.4		269	10.7
25	14	24,807	-55.8		270	13.4
20	10	26,222	-53.9			
15	5	28,079	-52.6			

CHIHUAHUA, MEXICO 6/
859 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	1,428	10.	24	330	1.0
1000	31	[illegible]				
950	[illegible]	[illegible]				
900	[illegible]	1,032				
850	31	1,515	12.	[illegible]	[illegible]	[illegible]
800	31	2,026	13.5	[illegible]	[illegible]	[illegible]
750	[illegible]	2,564	11.	[illegible]	[illegible]	[illegible]
700	31	3,140	7.7	[illegible]	208	[illegible]
650	31	3,742	[illegible]	41	[illegible]	[illegible]
600	31	4,395	[illegible]	37	[illegible]	7.8
550	31	[illegible]	[illegible]	[illegible]	238	[illegible]
500	[illegible]	[illegible]	[illegible]	[illegible]	243	11.[illegible]
450	31	6,637	-1[illegible].5	[illegible]	[illegible]	13.4
400	[illegible]	7,531	[illegible]	[illegible]	254	[illegible]
350	31	[illegible]	[illegible]	[illegible]	253	24.3
300	31	[illegible]	-35.3	[illegible]	259	[illegible]
250	[illegible]	[illegible]	[illegible]		256	31.7
200	[illegible]	[illegible]	-54.2		257	40.2
175	31	13,150	[illegible]		[illegible]	40.6
150	[illegible]	[illegible]	-65.[illegible]		254	41.0
125	29	[illegible]	-69.9		256	34.
100	[illegible]	[illegible]	-73.7		265	23.7
80	[illegible]	[illegible]	-70.1		293	[illegible]
70	24	18,629	-66.4		[illegible]	4.1
60	[illegible]	19,571	-62.8		65	1.9
50	23	[illegible]	-60.3		104	[illegible]
40	22	22,102	-56.7		98	[illegible]
30	22	[illegible]	[illegible]			[illegible]
25	20	25,109	[illegible]		77	7.4
20	18	26,563	[illegible]		71	[illegible]
15	[illegible]	28,469	[illegible]			

[illegible], MEXICO 2/
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	12	16.9	[illegible]	335	6.2
1000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.2
950	[illegible]	569	[illegible]	[illegible]	[illegible]	6.8
900	30	1,035	[illegible]	[illegible]	[illegible]	[illegible]
850	[illegible]	1,52[illegible]	15.[illegible]	[illegible]	[illegible]	5.1
800	30	2,036	13.8	[illegible]	242	6.8
750	30	2,574	[illegible]	[illegible]	[illegible]	8.4
700	30	3,146	[illegible]	[illegible]	255	10.9
650	[illegible]	3,746	[illegible]	[illegible]	[illegible]	[illegible]
600	30	4,392	- 1.	[illegible]	[illegible]	16.9
550	30	5,074	- 5.5	[illegible]	250	19.6
500	30	5,821	-10.6	[illegible]	250	23.1
450	[illegible]	6,619	[illegible]	[illegible]	251	29.1
400	[illegible]	7,50[illegible]	[illegible]	[illegible]	250	32.8
350	30	[illegible],466	[illegible]	[illegible]	249	40.2
300	[illegible]	9,547	-38.[illegible]	41	252	[illegible]
250	30	10,776	-47.6		255	49.3
200	30	12,214	-57.8		261	55.8
175	30	13,047	-62.5		261	56.1
150	[illegible]	13,986	-66.0		260	51.5
125	28	15,080	-69.4		261	[illegible]
100	[illegible]	16,407	-70.4		[illegible]	[illegible]
80	25	[illegible]	-68.6		[illegible]	26.2
70	22	18,535	[illegible]		275	20.4
60	[illegible]	19,469	-64.4		281	17.5
50	[illegible]	20,588	-62.9		286	20.4
40	[illegible]	[illegible]	[illegible]		[illegible]	20.4
30	18	23,771	-56.6		278	26.2
25	16	24,936	-54.4		265	29.7
20	13	[illegible]	[illegible]		[illegible]	[illegible]
15	6	[illegible]	-51.3			

[illegible], MEXICO 5/
1010 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	[illegible]	26.7	[illegible]	103	3.1
1000	[illegible]	[illegible]	26.8	78	114	[illegible]
950	[illegible]	550	25.5	61	144	5.6
900	[illegible]	1,029	23.9	55	[illegible]	5.8
850	[illegible]	1,528	[illegible]	[illegible]	138	3.7
800	31	2,051	[illegible]	[illegible]	[illegible]	2.9
750	31	2,597	14.7	61	[illegible]	4.9
700	31	3,182	[illegible]		92	5.6
650	31	3,791	7.1	62	[illegible]	5.6
600	31	4,451	2.3	73	[illegible]	[illegible]
550	[illegible]	5,142	- 2.3	76	[illegible]	8.7
500	31	5,901	- 6.6	66	[illegible]	8.5
450	[illegible]	6,714	[illegible]	[illegible]	113	7.2
400	31	7,614	-16.5	48	118	7.2
350	31	8,605	-23.4	40	125	6.8
300	31	9,714	[illegible]	[illegible]	135	[illegible]
250	31	10,976	-41.8		[illegible]	9.7
200	[illegible]	12,451	-53.5		123	10.9
175	[illegible]	13,295	-60.3		[illegible]	12.4
150	27	14,241	-66.7		129	16.9
125	[illegible]	15,330	-72.[illegible]		127	17.7
100	23	16,637	-73.1		112	15.0
80	14	[illegible]	[illegible]		[illegible]	[illegible]
70	12	18,785	-64.9		[illegible]	25.4
60	11	19,734	-60.5			
50	9	[illegible]	-58.6			
40	6	22,288	-55.[illegible]			
30	5	24,130	-51.0			

[illegible], MEXICO 7/
1014 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	[illegible]	[illegible]	15.8	63	343	4.3
1000	[illegible]	[illegible]	20.3	49	339	5.6
950	[illegible]	574	[illegible]	[illegible]	341	5.1
900	[illegible]	1,045	[illegible]	33	278	4.5
850	29	1,533	[illegible]			7.2
800	29	2,046	[illegible]		222	9.5
750	29	2,587	[illegible]	32	225	12.2
700	[illegible]	3,155	[illegible]	31	235	13.6
650	29	3,756	2.[illegible]	26	237	14.
600	[illegible]	4,402	- 1.3	26	241	16.1
550	29	[illegible]	- 5.4	28	244	16.3
500	[illegible]	[illegible]	-10.5	[illegible]	244	19.2
450	29	6,631	-15.8	33	253	[illegible]
400	29	7,513	[illegible]	33	255	24.1
350	29	8,481	-29.3	33	254	28.0
300	[illegible]	[illegible]	-37.8	[illegible]	256	33.2
250	29	10,793	-47.3		[illegible]	45.3
200	29	12,232	-57.9		[illegible]	50.9
175	29	13,063	[illegible]		263	46.
150	29	14,002	-67.1		258	42.2
125	[illegible]	15,093	-69.9		259	35.5
100	25	16,414	-72.0		262	27.8
80	22	[illegible]	-72.2		276	19.4
70	18	18,509	-70.1		278	15.9
60	16	19,439	-66.9			11.5
50	13	20,551	-63.8		286	5.2
40	[illegible]	[illegible]	-59.7			
30	[illegible]	23,738	-55.9			
25	5	24,936	-51.3			

MERIDA, MEXICO 6/
1013 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	31	11	21.1	98	65	2.1
1000	31	123	23.7	[illegible]	71	6.2
950	31	571	21.8	84	[illegible]	8.5
900	31	1,042	19.7	73	82	8.2
850	31	1,533	16.[illegible]	68	[illegible]	5.4
800	30	2,047	14.3	63	101	3.5
750	30	2,589	12.7	[illegible]	[illegible]	[illegible]
700	[illegible]	3,166	[illegible]	53	114	2.9
650	30	3,772	5.7	42	59	2.1
600	30	4,429	2.1	41	30	3.3
550	30	5,113	- 1.8	42	[illegible]	3.3
500	[illegible]	[illegible]	- 6.1	38	23	4.1
450	30	[illegible]	-10.[illegible]	[illegible]	24	2.7
400	[illegible]	[illegible]	-16.7	24	336	[illegible]
350	[illegible]	8,584	-23.5	23	311	4.7
300	[illegible]	9,691	-32.[illegible]	[illegible]	307	[illegible]
250	[illegible]	10,952	-41.8		314	8.2
200	[illegible]	12,425	[illegible]		[illegible]	9.7
175	30	13,270	[illegible]		[illegible]	8.4
150	30	14,217	[illegible]		307	7.6
125	29	[illegible]	-72.3		[illegible]	[illegible]
100	29	[illegible]	-77.3		32	6.8
80	29	17,889	-73.2		82	10.7
70	29	18,679	[illegible]		[illegible]	12.4
60	29	19,612	-63.8		92	13.8
50	27	20,742	-60.1		100	14.8
40	[illegible]	22,147	-55.9		92	[illegible]
30	23	23,994	-51.8		[illegible]	[illegible]
25	[illegible]	25,196	[illegible]		87	12.2
20	11	26,648	-46.[illegible]			
15						
10						
7						
5						

[illegible], CALIF. 3/
995 MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	174	[illegible]	73	315	[illegible]
1000	[illegible]	129	10.9	66	12	2.1
950	[illegible]	557	11.7	[illegible]		7.8
900	[illegible]	1,009	[illegible]	[illegible]		5.6
850	[illegible]	1,482	7.7	41	290	4.3
800		1,979	[illegible]	39	261	4.7
750	30	[illegible]	2.6	[illegible]		6.0
700	30	[illegible]	[illegible]	32	269	[illegible]
650	[illegible]	3,644	[illegible]	[illegible]	[illegible]	10.9
600	[illegible]	4,274	- 8.[illegible]	29	281	15.0
550	30	4,938	-12.9	29	276	17.3
500	[illegible]	5,664	[illegible]	[illegible]	276	[illegible]
450	30	[illegible]	-23.6	32	272	23.5
400	30	7,294	-30.1	35	270	25.3
350		[illegible],231	[illegible]	[illegible]	267	[illegible]
300	30	9,28[illegible]	-44.4	[illegible]	267	37.5
250	[illegible]	[illegible]	-51.4		[illegible]	46.2
200	[illegible]	[illegible]	[illegible]		260	51.5
175	[illegible]	12,763	-57.4		[illegible]	51.9
150	30	[illegible]	[illegible]		[illegible]	42.9
125		14,872	-61.2		[illegible]	42.2
100	30	16,249	[illegible]		[illegible]	36.1
80		17,615	-64.5		264	25.1
70	[illegible]	18,430	-64.4		[illegible]	[illegible]
60	30	19,375	[illegible]		[illegible]	[illegible]
50	[illegible]	[illegible]	-62.1		[illegible]	6.8
40	28	21,971	-61.8		[illegible]	4.7
30	26	[illegible]	-60.8		[illegible]	3.3
25	25	[illegible]	-60.[illegible]		329	1.7
20	24	26,189	-59.4		308	3.7
15	[illegible]	[illegible]	-57.[illegible]		[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]		297	21.6
7	[illegible]	[illegible]	[illegible]		287	40.6
5						

[illegible], CALIF. 4/
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	29	174	12.1	[illegible]	315	6.2
1000	29	120				
950	29	[illegible]	13.7	63	[illegible]	[illegible]
900	29	[illegible]	[illegible]	[illegible]	323	5.2
850	29	[illegible]	[illegible]	28	318	5.4
800	29	1,996	10.5	[illegible]	318	[illegible]
750	29	[illegible]	7.3	19	311	7.2
700	29	[illegible]	3.8	19	320	7.2
650	29	3,691	- .1	21	[illegible]	9.7
600	29	4,326	- 4.8	17	305	11.3
550	29	5,003	- 9.9	17	[illegible]	12.8
500	29	5,731	-15.3	21	305	15.3
450	29	6,517	-20.7	26	301	16.9
400	29	7,378	-27.6	26	[illegible]	18.5
350	29	8,322	-35.6	31	[illegible]	23.3
300	29	9,375	-44.1	26	297	24.9
250	29	10,574	-52.6	26	290	28.2
200	29	11,991	-58.9	22	[illegible]	39.[illegible]
175	29	12,928	[illegible]	19	279	41.8
150	29	13,796	-59.1	16	279	40.0
125	29	14,932	-61.5		275	34.8
100	29	[illegible]	-64.7		275	31.3
80	29	17,663	-65.7		272	25.6
70	[illegible]	18,475	-64.9		277	[illegible]
60	29	19,418	[illegible]		[illegible]	16.1
50	27	20,545	[illegible]		270	12.2
40	27	21,944	-57.4		[illegible]	12.4
30	[illegible]	23,779	-53.3		265	[illegible]
25	26	24,962	-50.1		261	11.1
20	25	26,430	[illegible]		256	14.8
15	25	28,340	[illegible]		[illegible]	21.0
10	23	[illegible]	-40.0		251	14.2
7	16	33,545	-35.1		267	31.7
5	7	[illegible]	[illegible]			

[illegible], CALIF. 7/
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	30	174	13.2	[illegible]	293	4.9
1000	30	146				
950	[illegible]	581	13.7	64	280	4.9
900	30	1,035	12.5	[illegible]	274	4.1
850	30	1,513	10.5	43	265	5.6
800	30	2,015	8.0	40	269	[illegible]
750	30	2,545	5.2	36	267	10.3
700	30	3,105	2.1	35	263	10.5
650	30	3,699	- 1.2	[illegible]	256	11.8
600	30	4,333	- 5.1	41	257	15.5
550	30	5,011	- 9.4	36	257	19.2
500	[illegible]	5,741	-14.0	31	258	22.0
450	30	6,532	-19.6	28	[illegible]	26.4
400	[illegible]	7,397	-25.4	[illegible]	252	30.[illegible]
350	30	8,352	-32.6	38	250	31.3
300	30	9,420	-40.7	31	[illegible]	34.4
250	30	10,638	-49.2	[illegible]	257	40.0
200	30	12,074	-57.1	28	260	48.2
175	30	12,911	-60.6	[illegible]		48.4
150	30	13,864	-63.8	27	255	44.9
125	[illegible]	14,972	-67.2		255	38.9
100	29	16,312	-68.5		255	[illegible].1
80	28	17,649	-67.[illegible]		263	[illegible]
70	28	18,458	[illegible]		260	13.2
60	27	19,399	-64.6		267	11.7
50	25	20,520	-62.8		[illegible]	7.
40	25	21,904	-60.0		[illegible]	3.9
30	25	23,713	-56.5		267	4.9
25	25	[illegible]	[illegible]		273	7.8
20	25	26,317	-51.6		265	16.5
15	22	28,195	-48.9		271	22.3
10	15	30,873	-45.8		[illegible]	15.7
7	[illegible]	33,264	-41.9			
5	6	35,532	-40.1			

YUMA, ARIZ. 5/
[illegible] MB

Standard pressure surface (mb.)	Number of observations	Dynamic height	Temperature	Relative humidity	Wind Direction	Wind Speed
SURFACE	20	131	28.6	38	157	1.0
1000	20	68				
950	20	524	30.7	35	224	5.1
900	20	1,009	28.2	35	215	8.4
850	20	1,513	25.0	36	214	8.7
800	20	[illegible]	21.2	[illegible]	209	9.5
750	20	2,589	16.7	44	193	[illegible]
700	20	3,180	12.1	50	188	[illegible]
650	20	3,787	7.5	[illegible]	[illegible]	12.0
600	20	4,450	2.9	57	[illegible]	13.0
550	20	[illegible]	- 1.3	53	205	12.4
500	20	5,902	- 6.1	54	201	11.1
450	[illegible]	6,711	-11.1	46	199	11.1
400	20	7,613	-17.1	38	203	14.2
350	20	8,601	-23.8	34	206	18.5
300	[illegible]	9,707	-32.1	34	203	25.3
250	20	10,967	-41.7		197	30.5
200	18	12,441	-53.3		197	33.4
175	[illegible]	13,288	-59.7		[illegible]	[illegible]
150	15	14,239	-66.1		201	35.5
125	10	15,306	-70.1		[illegible]	35.4
100	6	16,626	-69.0			

1/ February 1965
2/ November 1965
3/ December 1965
4/ April 1966
5/ July 19
6/ October 1966
7/ November 1966

Also see reference notes with current data

STORM SUMMARY

CORRECTED DATA

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				‡ HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				∅ ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	†DAMAGE	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS	DEATHS	INJURIES	†DAMAGE PROPERTY	†DAMAGE CROPS
June 1964																													
Oklahoma	3	3	0	1	4																								
May 1966																													
Oklahoma	11	4	0	3	5	0	0	5	5	0	0	4	C	0	1	4	0												
June 1966																													
Oklahoma	13	5	0	7	6																								
Texas	15	8	0	0	5																								
July 1966																													
Maine	1	1	0	0	4																								

See reference notes with current data

SOLAR RADIATION DATA

Solar radiation intensities, tabulated in langleys per minute on a surface normal to the direction of the sun.

DELAYED DATA

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

MAUNA LOA OBS., HAWAII

	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
May 1966									
2-----	1.13	1.21	1.30	1.42	----	----	----	----	----
3-----	1.06	1.17	1.27	1.39	----	----	----	----	----
4-----	1.14	1.22	1.32	1.43	1.56	----	----	----	----
6-----	1.12	1.23	----	----	----	----	----	----	----
7-----	----	----	----	----	1.55	----	----	----	----
9-----	1.09	1.18	1.28	1.40	1.53	----	----	----	----
11----	1.06	1.14	1.24	1.35	----	----	----	----	----
17----	1.05	1.15	1.25	1.39	1.58	1.42	1.30	1.22	1.13
18----	----	----	----	1.40	1.56	1.31	1.18	1.06	.95
19----	1.10	----	----	----	1.58	1.39	1.26	1.15	1.06
20----	1.12	1.19	1.28	----	----	----	----	----	----
24----	1.05	1.14	1.24	1.37	----	----	----	----	----
29----	1.04	1.13	1.23	1.35	----	----	----	----	----
30----	1.06	1.15	1.24	1.37	1.52	----	----	----	----
31----	1.07	1.16	1.25	1.38	1.53	----	----	----	----
Averages	1.08	1.17	1.26	1.39	1.55	1.37	1.25	1.14	1.05

MAUNA LOA OBS., HAWAII

	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jul. 1966									
1-----	1.14	1.22	1.31	1.42	1.52	1.35	1.25	1.16	1.01
2-----	1.15	1.23	1.31	1.42	1.52	----	----	----	----
4-----	1.12	1.20	1.29	1.40	----	1.34	1.24	1.14	1.05
5-----	1.11	1.20	1.28	1.40	1.54	1.32	1.19	1.10	1.03
6-----	1.10	1.19	1.27	1.38	1.50	----	----	----	----
7-----	----	----	----	----	1.52	----	----	----	----
8-----	----	----	----	----	1.56	1.38	1.25	1.17	1.09
9-----	1.12	1.20	1.29	1.41	1.54	1.34	1.24	1.17	1.10
10----	1.11	1.19	1.27	1.39	1.54	1.39	1.27	1.19	1.11
11----	1.10	1.18	1.28	1.40	1.55	1.36	1.25	1.16	1.28
12----	1.11	1.19	1.29	1.40	----	----	----	----	----
13----	1.11	1.19	1.29	1.40	----	----	----	----	----
16----	1.16	1.24	1.32	1.42	1.57	1.42	1.31	1.22	1.14
17----	1.13	1.21	1.30	1.41	1.56	1.40	1.29	1.21	1.14
18----	1.13	1.21	1.30	1.42	1.56	1.38	1.29	1.20	1.12
19----	1.15	1.23	1.32	1.42	----	----	----	----	----
20----	1.19	1.26	1.34	1.43	----	1.34	1.22	1.15	1.06
21----	1.15	1.23	1.32	1.42	----	----	----	----	----
26----	----	1.15	1.25	1.35	----	----	----	----	----
27----	1.08	1.16	1.25	1.36	----	----	----	----	----
Averages	1.13	1.20	1.29	1.40	1.54	1.37	1.26	1.17	1.10

MAUNA LOA OBS., HAWAII

	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Sep. 1966									
1-----	1.10	1.18	1.28	1.38	----	----	----	----	----
2-----	1.12	1.20	1.28	1.39	----	----	----	----	----
4-----	.96	----	----	----	----	----	----	----	----
5-----	.94	1.04	1.16	1.31	----	----	----	----	----
6-----	1.07	1.15	1.25	1.36	----	----	----	----	----
8-----	.95	1.05	1.18	1.32	----	----	----	----	----
9-----	1.05	1.14	1.25	1.38	----	----	----	1.12	1.04
11----	1.09	1.20	1.30	1.40	----	----	----	----	----
13----	1.14	1.22	1.31	1.43	1.56	1.39	----	----	----
14----	1.12	1.21	1.31	1.43	1.54	----	----	----	----
16----	----	----	----	----	1.56	----	----	1.22	1.34
17----	1.16	1.24	1.33	1.45	----	----	----	----	----
18----	1.19	1.26	1.34	1.43	1.55	----	----	----	----
19----	1.18	1.24	1.31	1.42	----	1.40	1.28	1.19	1.11
20----	1.13	1.21	1.31	1.43	1.57	----	----	----	1.12
21----	1.13	1.22	1.31	1.42	1.55	----	----	----	----
Averages	1.09	1.18	1.28	1.40	1.56	1.40	1.28	1.18	1.15

Date	Sun's zenith distance								
	A. M.				*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°

MAUNA LOA OBS., HAWAII

	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Jun. 1966									
1-----	(1.00)	(1.12)	(1.23)	1.37	1.53	----	----	----	----
2-----	1.12	1.20	1.30	1.42	1.54	(1.37)	(1.26)	1.19	1.10
3-----	1.06	1.16	1.26	1.39	1.54	1.36	1.23	1.14	1.06
4-----	1.09	1.17	1.28	1.40	1.55	1.37	1.24	1.15	1.07
5-----	1.10	1.18	1.28	1.40	1.56	----	----	----	----
8-----	1.07	1.15	1.24	1.36	----	----	1.22	1.12	1.04
9-----	1.10	1.18	1.27	1.39	----	----	----	----	----
12----	----	----	----	----	1.54	1.32	1.18	1.08	1.01
13----	1.12	1.20	1.30	1.40	1.54	1.37	1.27	1.18	1.12
14----	1.13	1.21	1.31	1.42	1.57	1.38	1.27	1.18	1.09
15----	1.15	1.23	1.32	1.44	1.58	1.40	1.28	1.18	1.10
16----	1.14	1.22	1.32	1.44	1.59	1.43	1.32	1.22	1.14
17----	1.13	1.21	1.30	1.43	----	----	----	----	----
19----	1.12	1.20	1.29	1.42	1.56	1.40	1.25	1.19	1.12
20----	1.08	1.17	1.29	1.41	1.57	1.42	1.32	1.24	1.17
21----	1.02	1.12	1.25	1.39	1.57	----	----	----	----
23----	1.11	----	----	----	----	1.37	1.27	1.18	1.11
24----	1.14	1.23	1.32	1.43	1.54	1.41	1.29	1.19	1.12
25----	1.10	1.18	1.27	1.39	1.54	----	----	----	----
26----	1.10	1.18	1.27	1.38	----	----	----	----	----
27----	1.13	1.21	1.30	1.41	1.53	1.39	1.30	1.20	1.12
28----	1.15	1.22	1.32	1.43	1.58	1.42	1.30	1.21	1.13
Averages	1.11	1.19	1.29	1.41	1.55	1.39	1.27	1.18	1.10

MAUNA LOA OBS., HAWAII

	Air mass								
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36
Aug. 1966									
4-----	1.10	1.17	1.27	1.39	1.52	1.38	1.29	1.21	1.13
5-----	1.12	1.20	1.29	1.41	1.55	1.38	1.27	1.18	1.03
7-----	1.12	1.25	1.29	1.39	1.32	1.35	1.25	1.16	1.08
8-----	1.14	1.24	1.27	1.42	----	----	----	----	----
9-----	1.14	1.24	1.31	1.43	----	----	----	----	----
10----	1.16	1.23	1.31	1.43	1.53	----	----	----	----
11----	1.16	1.24	1.32	----	----	----	----	----	----
12----	1.14	1.26	1.30	1.41	1.55	1.36	1.24	1.16	1.07
13----	1.12	1.19	1.28	1.39	1.52	----	----	----	----
14----	1.11	1.20	1.28	1.40	----	----	----	----	----
16----	1.12	1.19	1.29	1.39	----	----	----	----	----
18----	----	----	1.33	1.44	1.58	1.41	1.33	1.25	1.17
19----	1.20	1.27	1.36	1.47	1.60	1.46	1.35	1.26	1.19
20----	1.18	1.26	1.35	1.49	1.56	1.43	1.31	1.22	1.15
21----	1.18	1.26	1.34	1.45	1.56	1.44	1.34	1.24	1.18
22----	1.21	1.27	1.35	----	----	----	----	----	----
23----	1.13	1.22	1.31	1.42	----	----	----	----	----
24----	1.15	1.23	1.30	1.40	----	----	----	----	----
28----	----	----	1.21	1.33	1.51	1.36	1.24	1.14	1.06
30----	1.06	1.14	1.24	1.17	1.52	----	----	----	----
31----	----	----	----	1.37	----	----	----	----	----
Averages	1.14	1.23	1.30	1.40	1.53	1.40	1.29	1.20	1.12

( ) Clouds present
Also see reference notes with current data

SOLAR RADIATION DATA

Daily totals and monthly averages of solar radiation (direct and diffuse) received on a horizontal surface, tabulated in langleys.

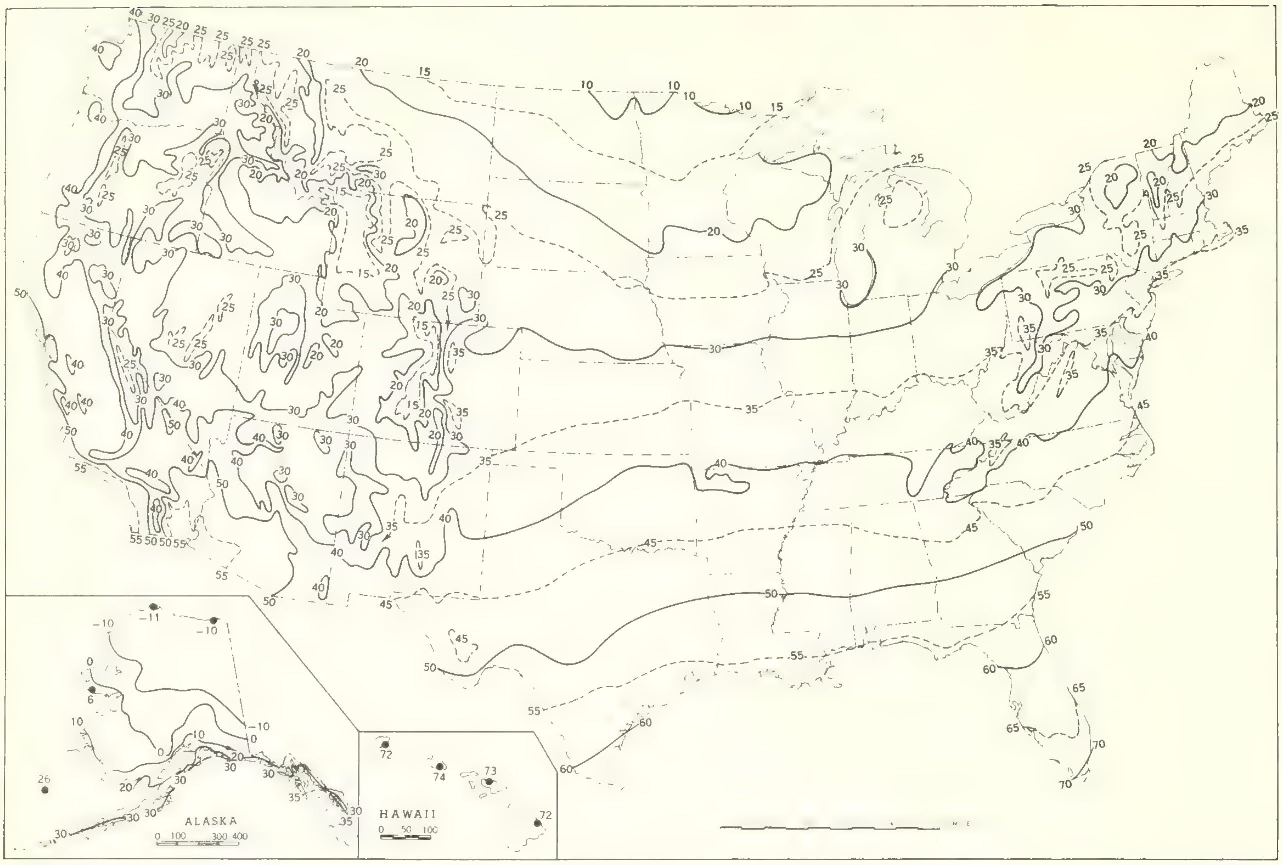
DELAYED DATA

Station	Day of month																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
JANUARY 1966																																
LOS ANGELES CALIF.U	---	318	302	276	250	310	302	273	213	136	180	296	320	299	271	215	285	303	76	303	368	368	325	288	313	303	323	329	289	167	347	278
FEBRUARY 1966																																
LOS ANGELES CALIF.U	160	381	355	234	199	46	331	402	353	303	436	336	443	399	408	429	357	192	260	273	294	276	204	276	211	349	283	273				302
MARCH 1966																																
LOS ANGELES CALIF.U	101	319	340	337	194	332	323	216	302	227	264	185	256	230	212	338	363	385	312	365	395	367	251	374	392	194	126	357	296	426		293
APRIL 1966																																
LOS ANGELES CALIF.U	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	447	550		---
PULLMAN WASHINGTON	375	484	498	541	535	516	477	469	272	385	368	271	575	233	380	603	420	617	621	122	449	313	581	533	486	429	501	487	582	561		456
MAY 1966																																
LOS ANGELES CALIF.U	578	647	579	475	684	679	609	82	60	161	281	539	529	473	519	650	685	546	667	518	402	347	489	609	268	194	269	518	568	625	679	482
JUNE 1966																																
INYOKERN CALIFORNIA	922	934	930	898	860	705	913	425	749	890	883	889	884	855	681	817	892	883	866	857	915	926	925	910	914	888	890	889	906	899		860
LOS ANGELES CALIF.U	689	655	715	706	684	660	723	157	242	651	633	725	715	687	617	450	754	754	367	657	674	669	698	650	579	531	693	700	697	707		628
PULLMAN WASHINGTON	710	411	244	317	742	669	678	536	245	201*	443	689	363	569	702	673	672	685	414	611	343	699	411	492	739	689	670	489	691	685		549*
STILLWATER OKLAHOMA	383	631	563	509	612	572	351	615	616	508	596	501	627	648	500	554	369	560	617	677	649	652	591	593	660	475	648	636	646	637		573
JULY 1966																																
INYOKERN CALIFORNIA	925	926	931	946	925	887	938	---	812	922	920	934	879	920	939	913	986	906	905	882	888	826	825	842	803	856	841	730	574	520	818	864
LOS ANGELES CALIF.U	702	714	629	755	728	682	711	691	765	653	750	745	748	745	785	778	688	696	680	638	653	679	665	687	638	641	610	511	641	340	276	665
PULLMAN WASHINGTON	405	191	388	667	697	599	737	673	595	571	714	619	643	601	668	693	642	675	702	715	699	670	684	650	698	690	676	672	657	611	656	631
AUGUST 1966																																
AMES IOWA	303	589	524	479	545	564	582	426	529	478	566	555	169	517	455	590	546	589	567	229	98	275	567	370	597	588	580	531	498	497	520	481
FLAMING GORGE UTAH	---	---	---	---	---	---	---	---	---	---	414	582	622	608	601	542	594	367	274	344	619	467	569	563	574	494	570	570	431	511	312	509
INYOKERN CALIFORNIA	818	439	816	818	820	841	852	847	844	823	843	825	815	810	823	792	789	758	803	804	820	785	783	---	621	643	632	572	615	629	612	757
LOS ANGELES CALIF.U	657	420	664	664				644	629	621	626	713	622	658	634	640	595	598	614	548	590	597	624	613	598	627	577	571	560	609	361	602
MATANUSKA ALASKA	289	388	275	396	412	201	221	367	374	368	41	101	99	104	230	229	236	90	108	106	314	309	313	133	283	151	108	103	197	231	---	226
PAGE ARIZONA	484	380	506	506	475	477	498	492	470	314	333	494	492	465	496	485	481	416	342	433	446	436	381	---	---	391	260	438	432	---	---	438
PULLMAN WASHINGTON	657	648	470	630	657	631	620	573	617	606	640	587	367	613	619	586	610	593	596	594	575	474	523	556	283	336	288	525	220	508	---	540
SEPTEMBER 1966																																
LOS ANGELES CALIF.U	364	492	591	537	505	509	525	600	574	498	418	539	576	594	566	522	586	242	277	525	553	513	515	500	426	424	480	412	44	401		477
PULLMAN WASHINGTON	---	---	---	---	---	---	433	475	469	461	446	206	402	421	448	383	443	310	429	433	414	420	422	223	258	190	378	401	394	400		386
SEATTLE WASH. UNIV.	494	234	506	506	498	256	355	469	445	168	121	454	308	64	233	174	120	354	430	423	402	342	327	157	216	245	352	347	192	374		319
STILLWATER OKLAHOMA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	490	488	424	306	178	---	483	179		---
OCTOBER 1966																																
ASTORIA OREGON	121	397	387	377	174	92	207	371	346	337	240	204	317	147	307	88	287	290	56	69	88	65	116	182	86	128	177	232	50	171	251	205
INDIANAPOLIS INDIANA	334	487	441	428	472	425	467	203	205	465	456	404	222	143	175	157	395	40	114	411	378	198	403	386	381	357	368	357	282	351	217	326
INYOKERN CALIFORNIA	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	395	389	363	338	349	347	380	363	---
LOS ANGELES CALIF.U	490	385	138	450	386	328	295	427	402	167	330	199	433	466	463	463	472	465	437	348	382	409	415	414	422	390	327	327	371	414	391	381
OKLAHOMA CITY OKLA.	451	424	398	174	269	306	341	---	---	---	---	299	363	337	420	377	42	240	410	387	362	324	261	363	361	347	346	339	321	314	307	329
SEATTLE WASH. UNIV.	96	336	344	352	336	82	104	354	325	163	96	42	231	187	114	117	248	251	25	121	84	139	126	244	180	147	200	218	---	---	175	187
NOVEMBER 1966																																
LOS ANGELES CALIF.U	405	337	262	173	271	104	40	74	343	323	251	337	326	246	254	130	217	332	312	116	320	252	306	277	335	284	182	104	280	244		248
SEATTLE WASH. UNIV.	156	218	207	69	7	66	81	136	24	137	65	146	23	22	90	62	78	146	29	55	101	56	37	39	24	56	80	17	39	21		76

Note.--Langley is the unit used to denote one gram calorie per square centimeter.
Values with an asterisk are interpolated.

Also see reference notes with current data

Chart 1. A. Normal Daily Average Temperature (°F. 1931-60), December 1966.



B. Temperature Departure from 30 - Year Mean (°F 1931-60), December 1966.

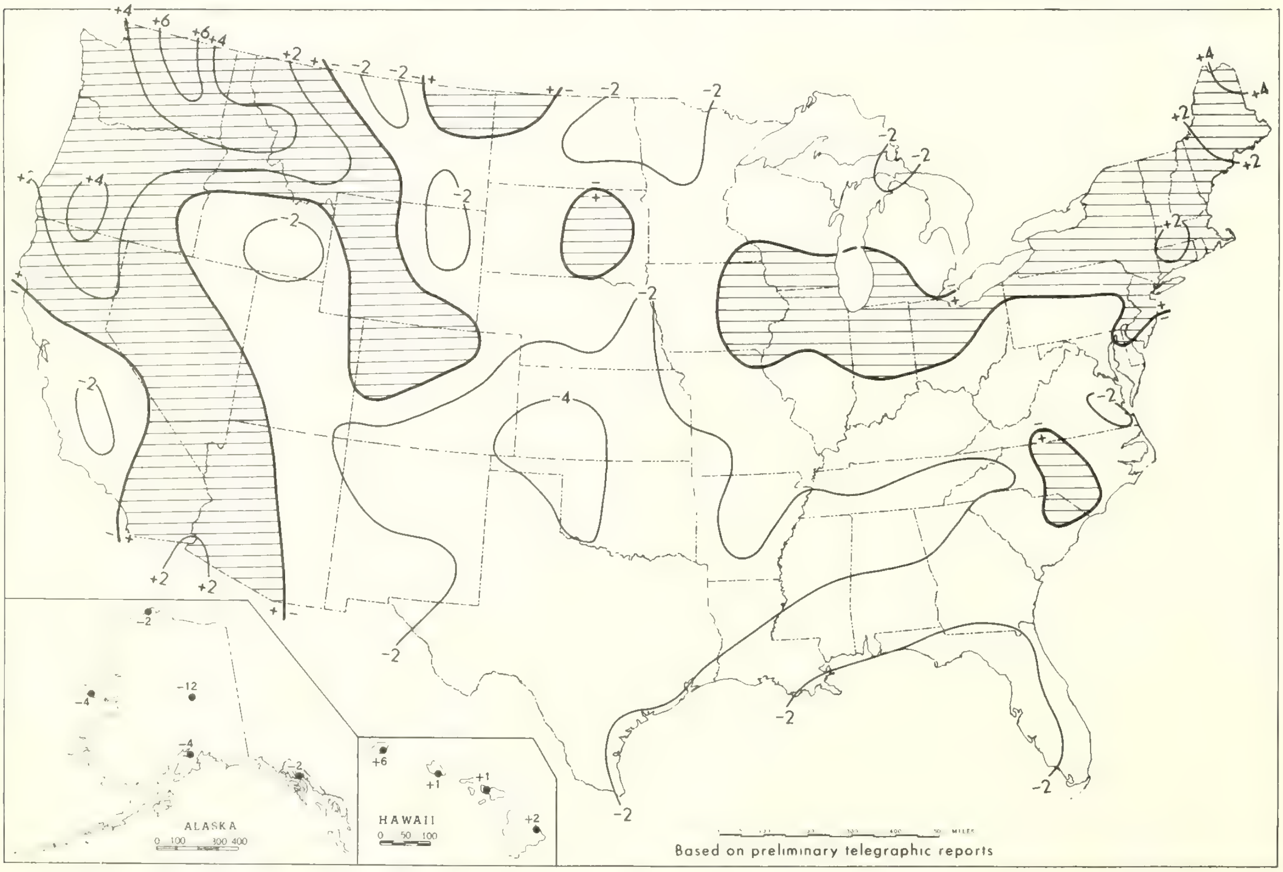
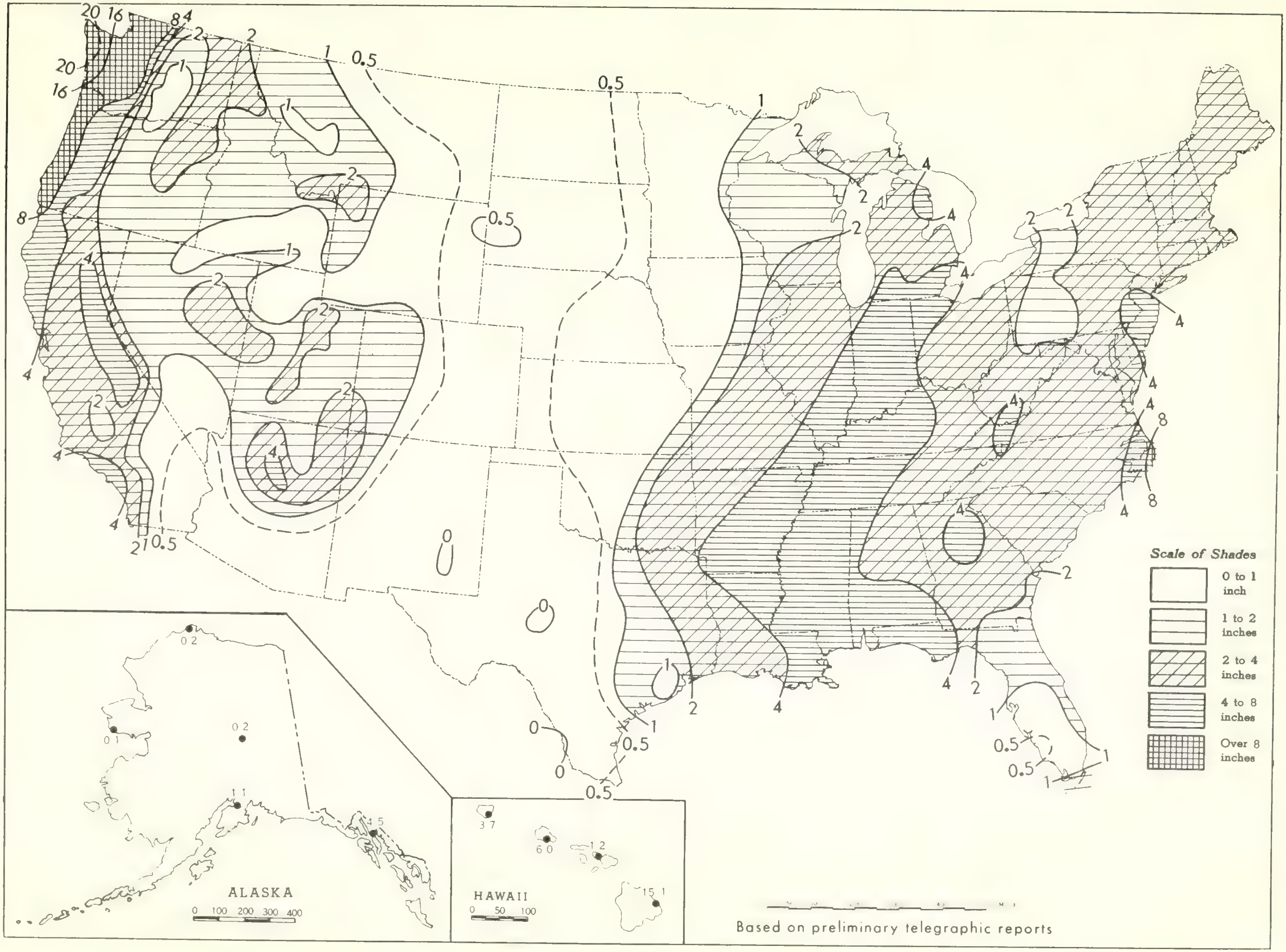
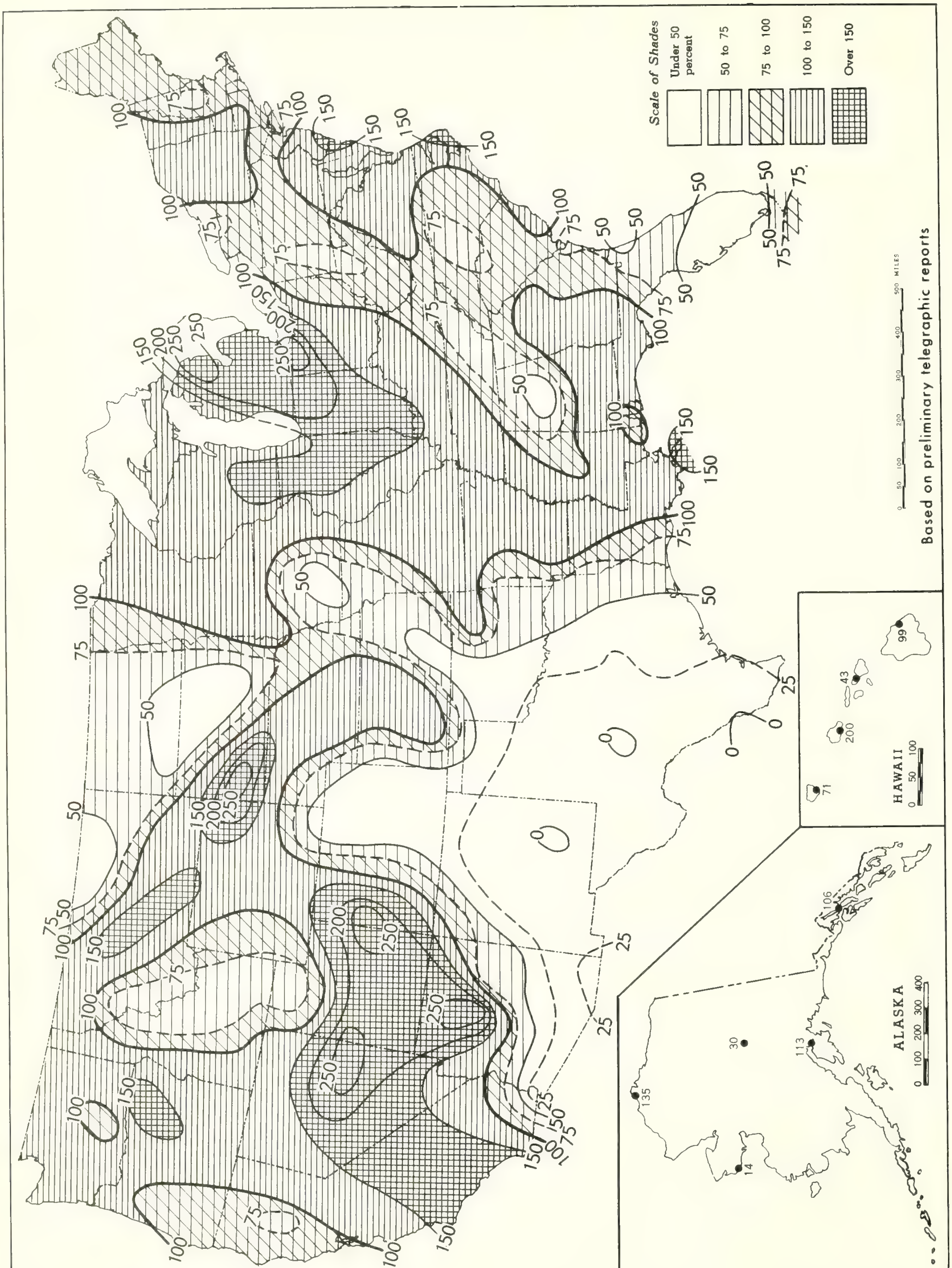


Chart II. Total Precipitation (Inches), December 1966.



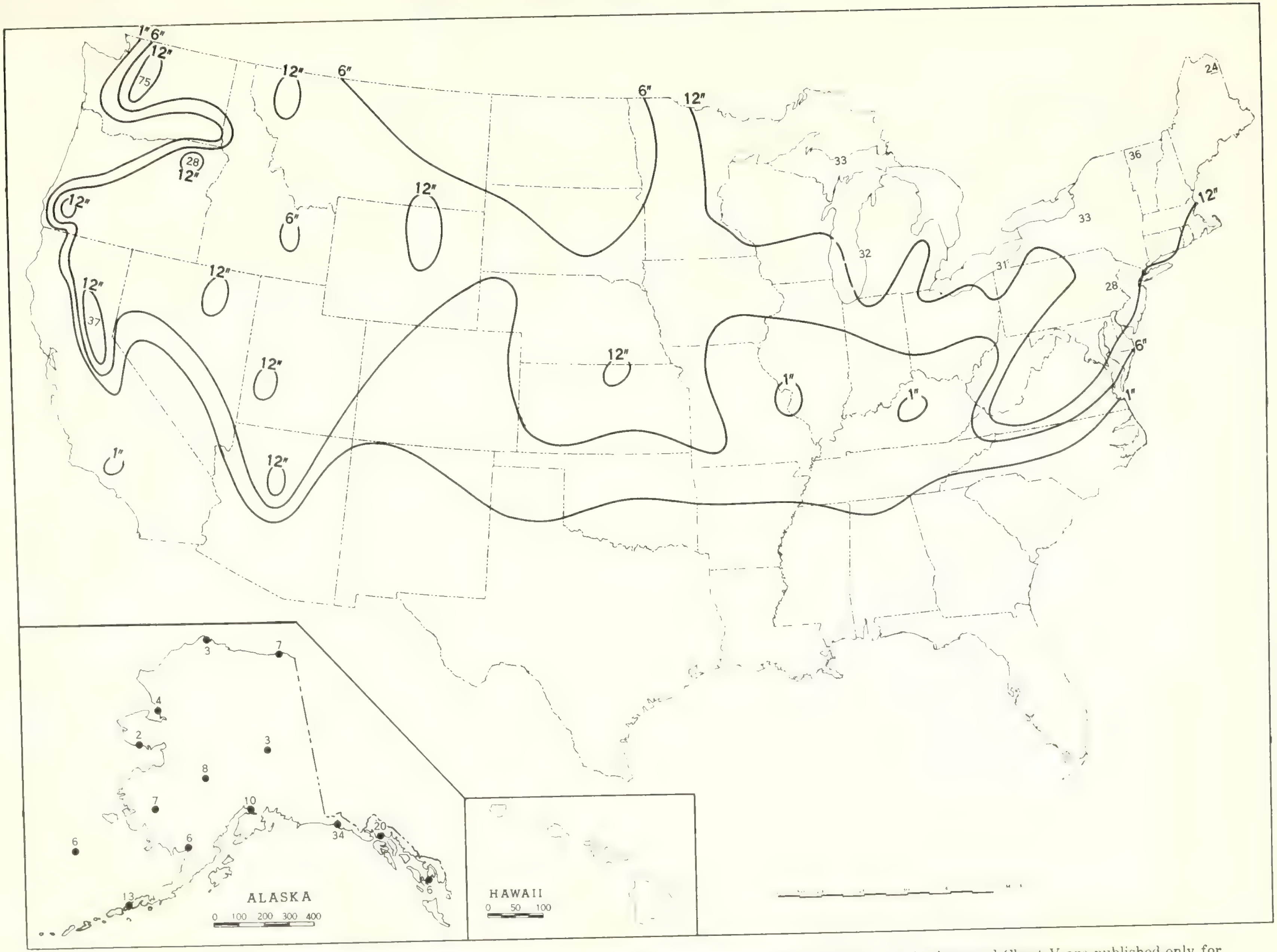
Based on preliminary telegraphic reports

Chart III. Percentage of Normal Precipitation, December 1966.



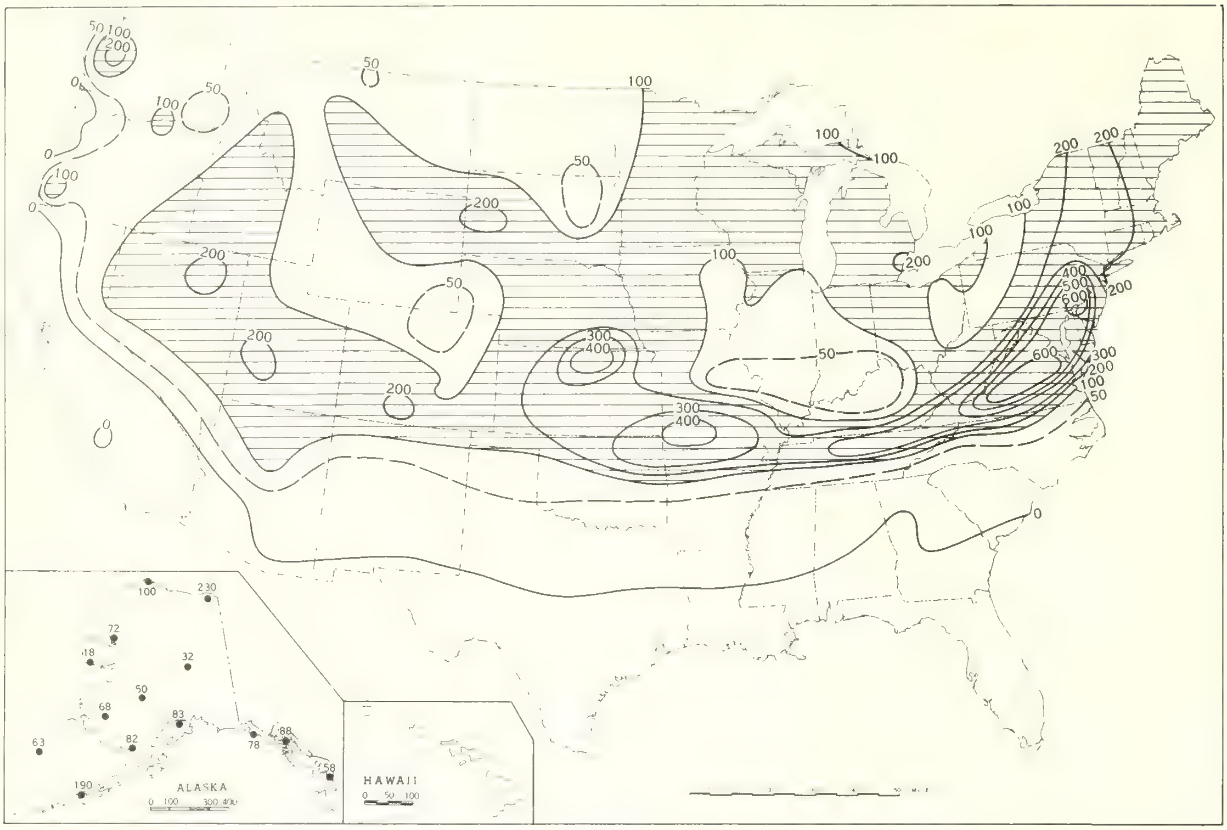
Based on preliminary telegraphic reports

Chart IV. Total Snowfall (Inches), December 1966.

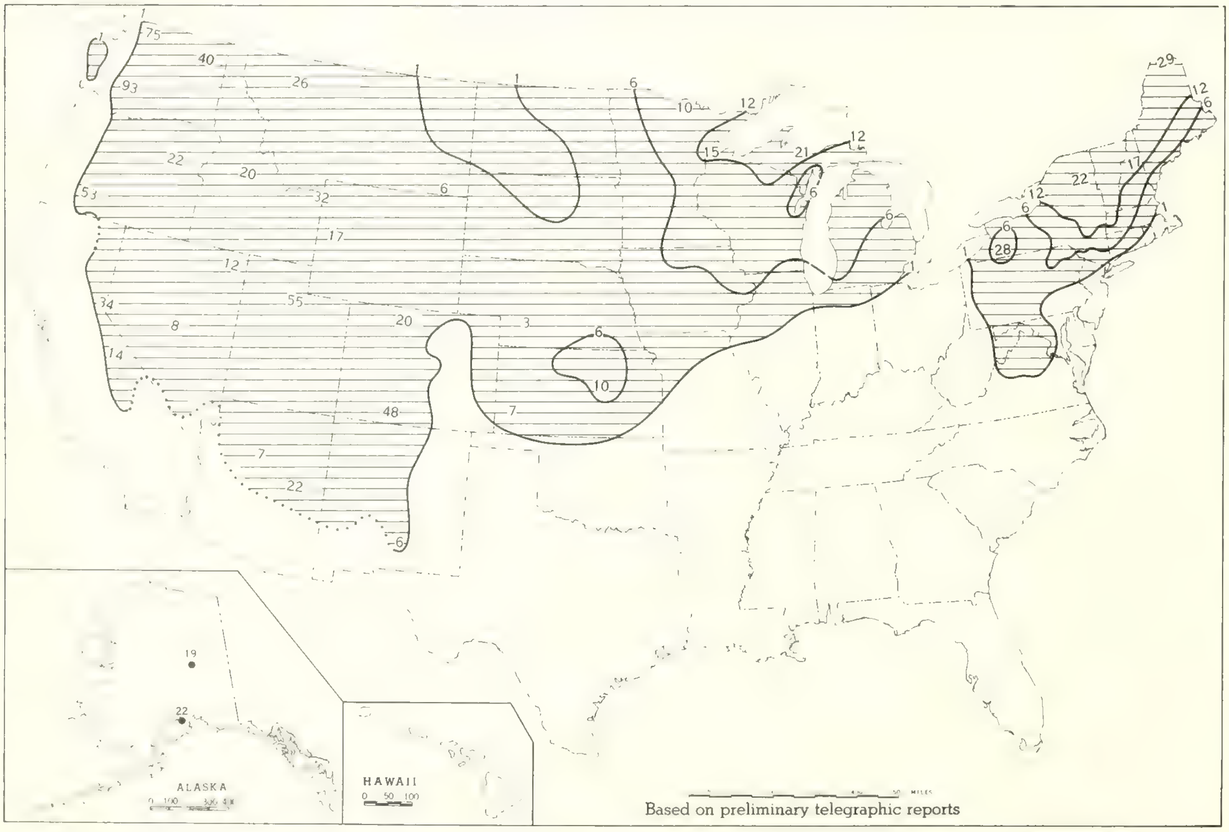


This is the total of unmelted snowfall recorded during the month at Weather Bureau and cooperative stations. This chart and Chart V are published only for the months of November through April although of course there is some snow at higher elevations, particularly in the far West, earlier and later in the year.

Chart V. A. Percentage of Mean Monthly Snowfall, December 1966.



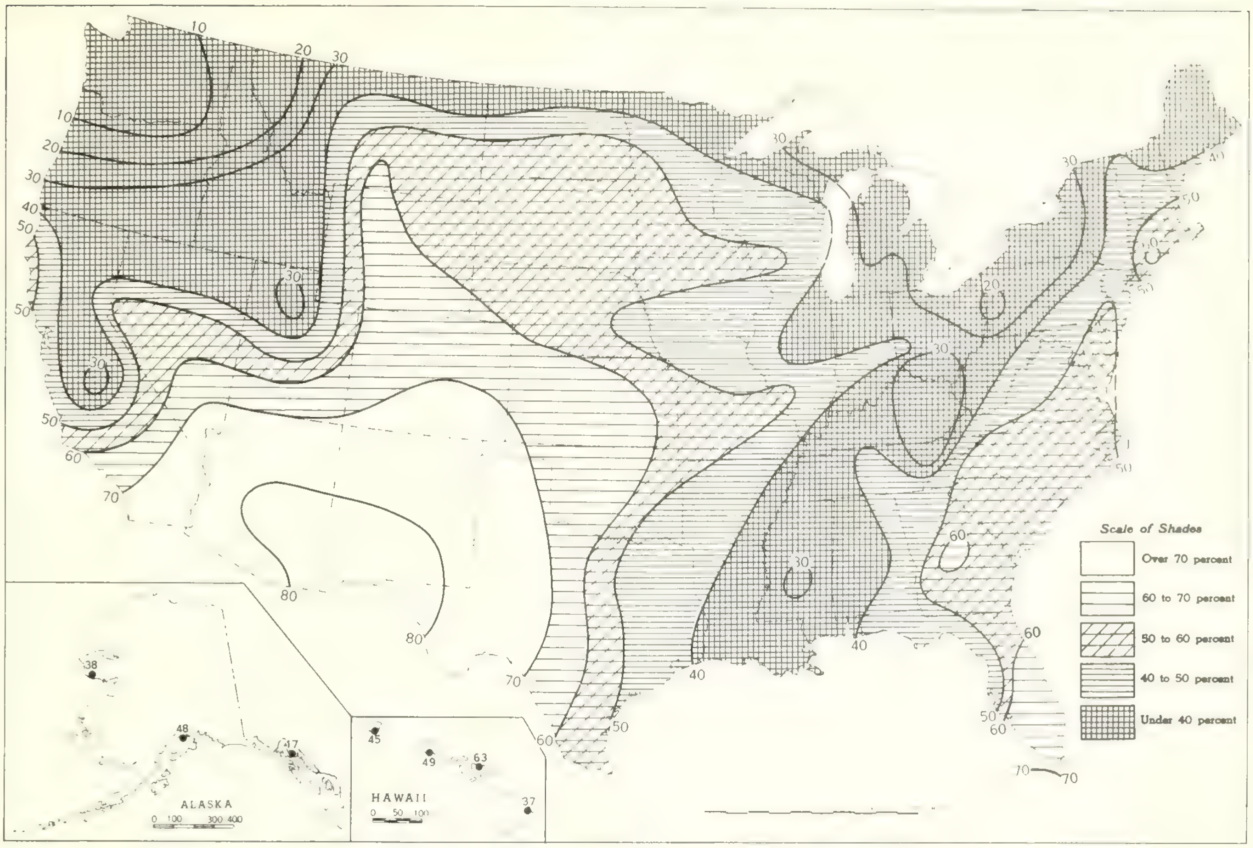
B. Depth of Snow on Ground (Inches), 7:00 a. m. E. S. T., January 2, 1967.



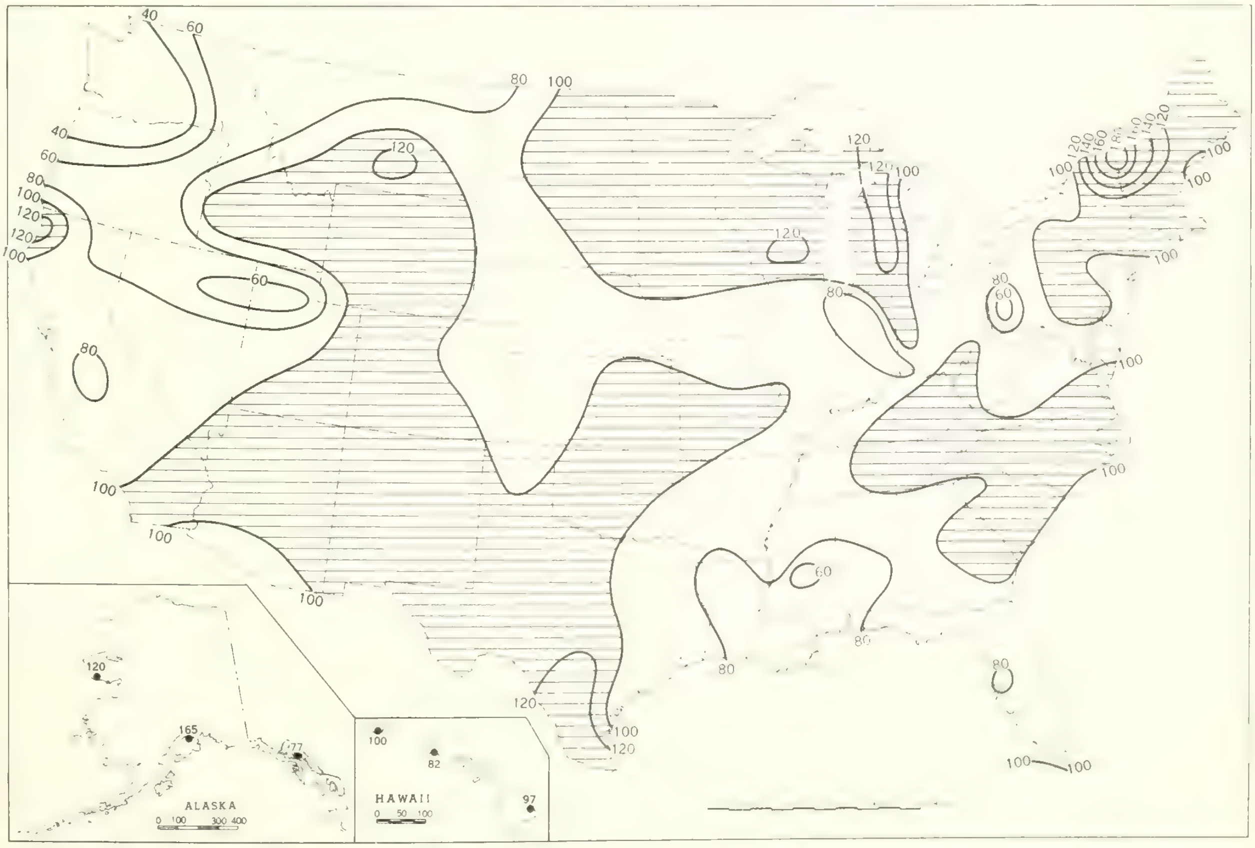
Based on preliminary telegraphic reports

A. Amount of mean monthly snowfall is computed for Weather Bureau stations having at least 10 years of record.
B. Shows depth currently on ground at 7:00 a.m. E.S.T., of the Monday nearest the end of the month.
It is based on reports from Weather Bureau and cooperative stations.

Chart VI. A. Percentage of Possible Sunshine, December 1966.

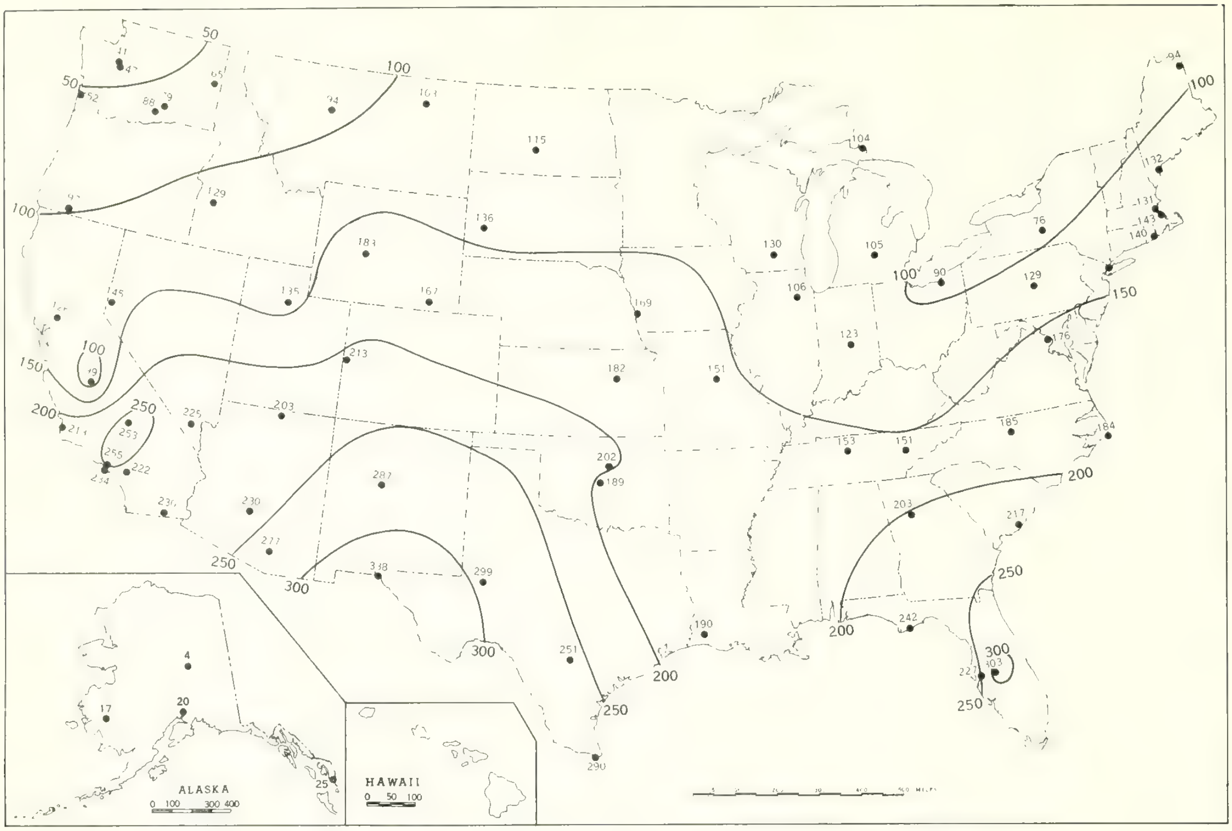


B. Percentage of Mean Monthly Sunshine, December 1966.

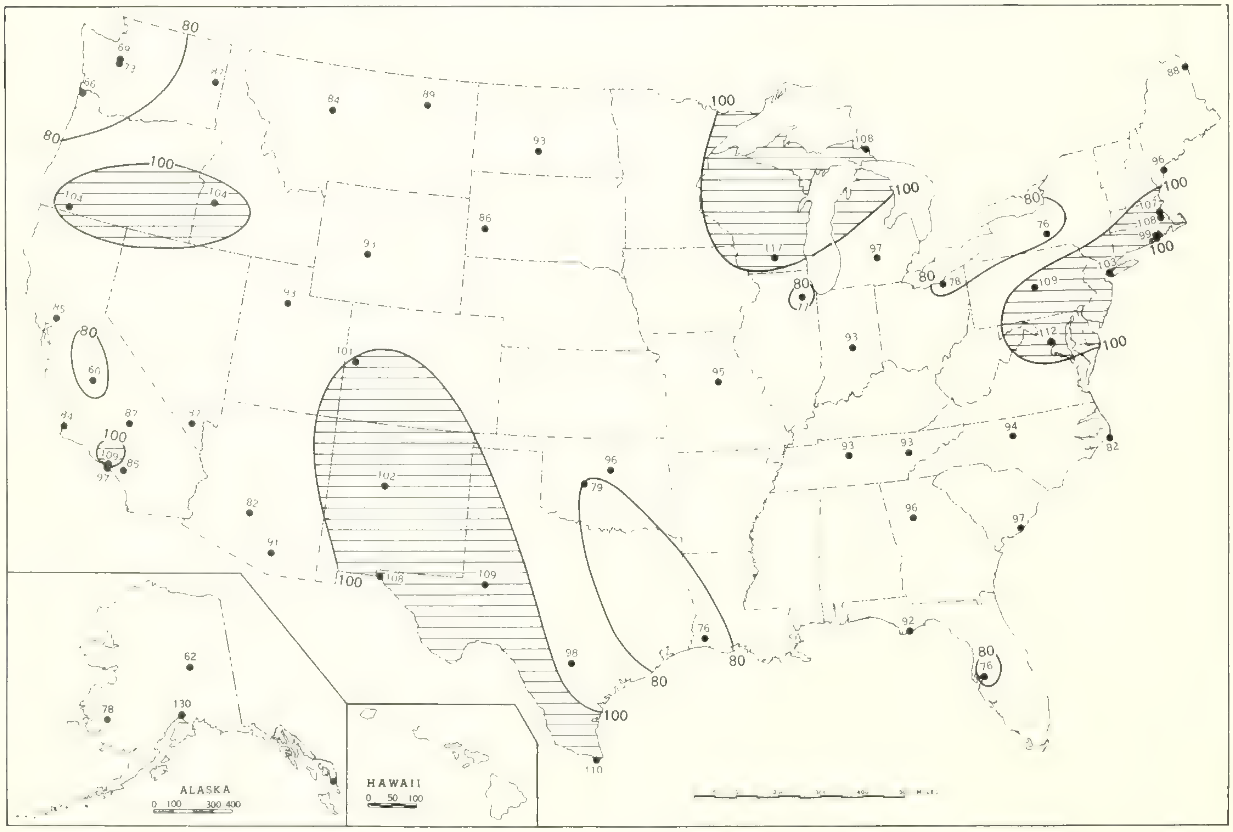


A. Computed from total number of hours of observed sunshine in relation to total number of possible hours of sunshine during month. B. Means are computed for stations having at least 10 years of record.

Chart VII. A. Average Daily Values of Solar Radiation, Langleys, December 1966.

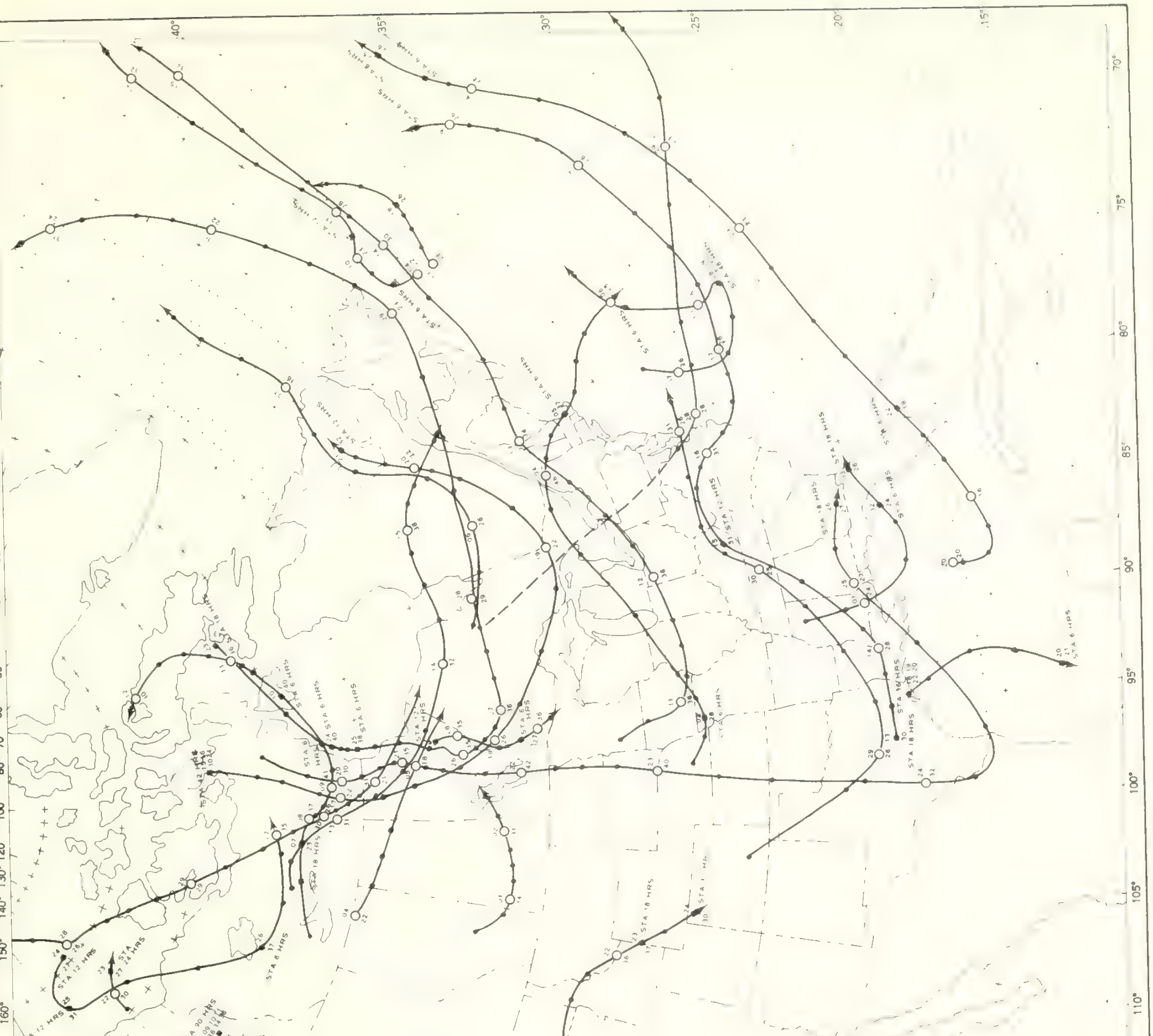


B. Percentage of Mean Daily Solar Radiation, December 1966.



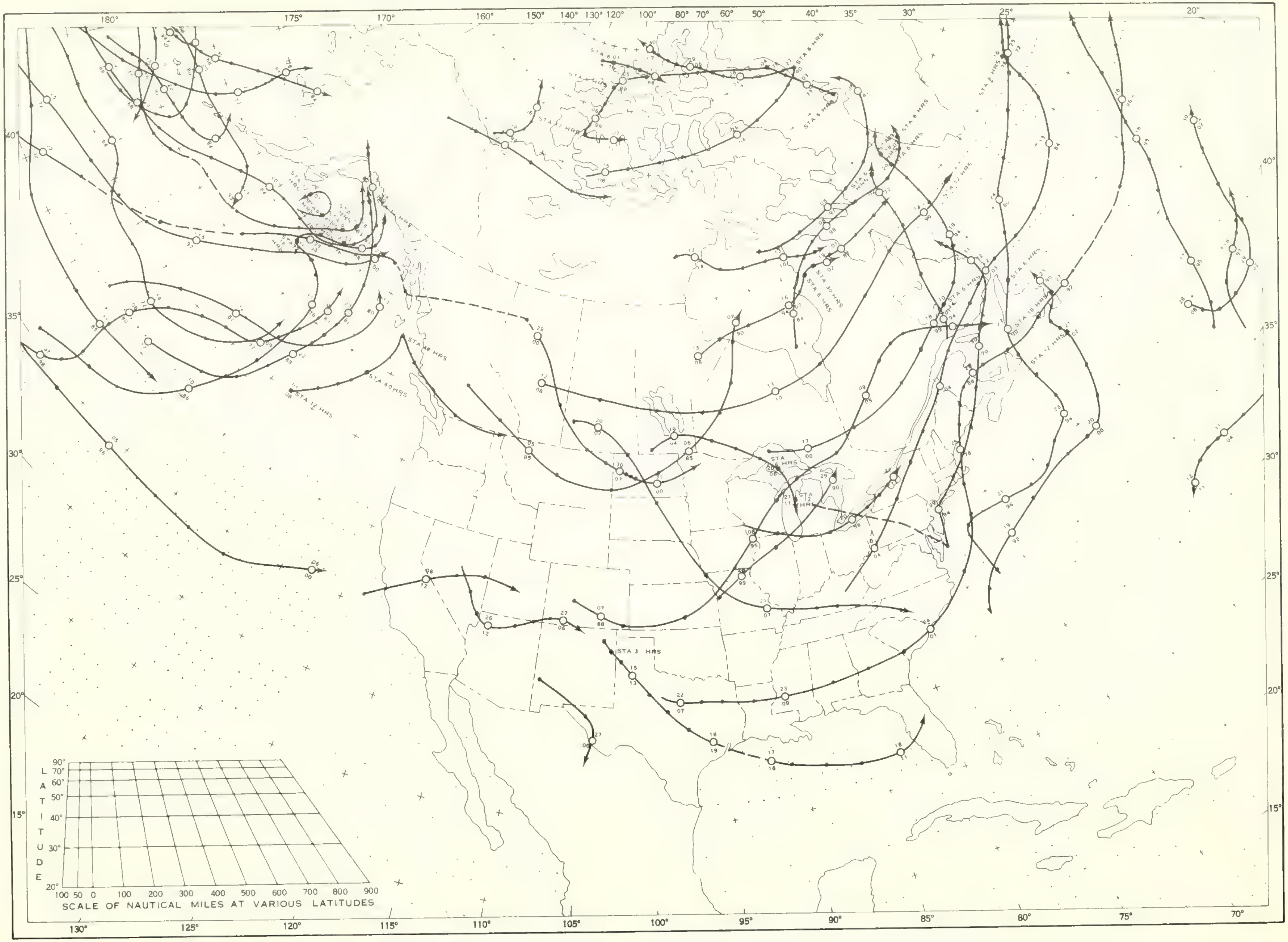
A. Mean daily solar radiation, direct + diffuse, received on a horizontal surface in langleys (1 langley = 1 gm. cal. cm. $^{-2}$) and recorded in International Pyrheliometer Scale of 1956. B. Percentage of the mean based on at least 5 years of record during the period 1950-60, and corrected to the International Pyrheliometer Scale of 1956.

Chart VIII. Tracks of Centers of Anticyclones at Sea Level, December 1966.



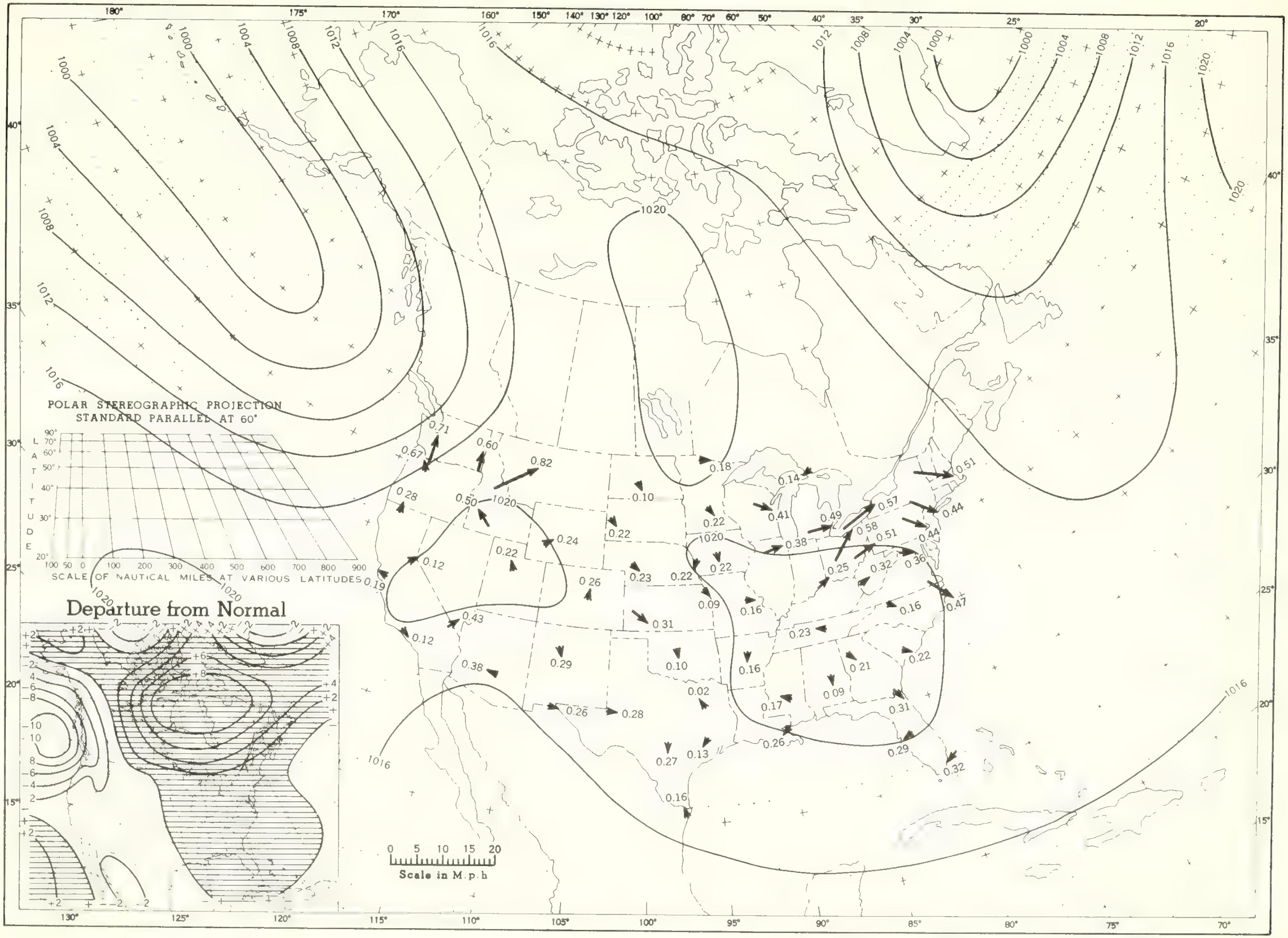
Circle indicates position of center at 7:00 a. m. E. S. T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IX. Tracks of Centers of Cyclones at Sea Level, December 1966.



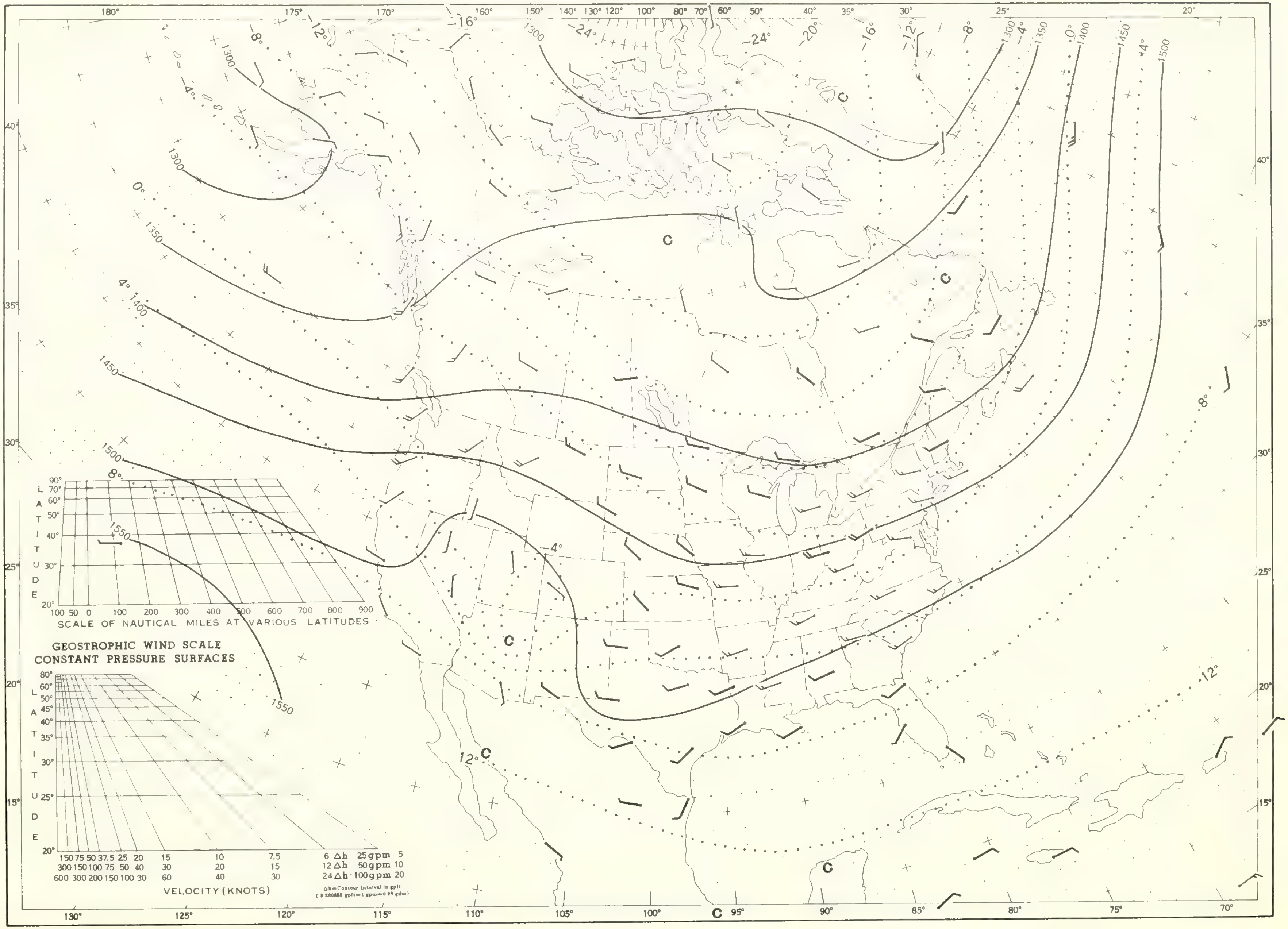
Circle indicates position of center at 7:00 a. m. E. S. T. See Chart VIII for explanation of symbols.

Chart X. Average Sea Level Pressure (mb) and Resultant Surface Wind, December 1966. Inset: Departure of Average Pressure (mb) from Normal, December 1966.



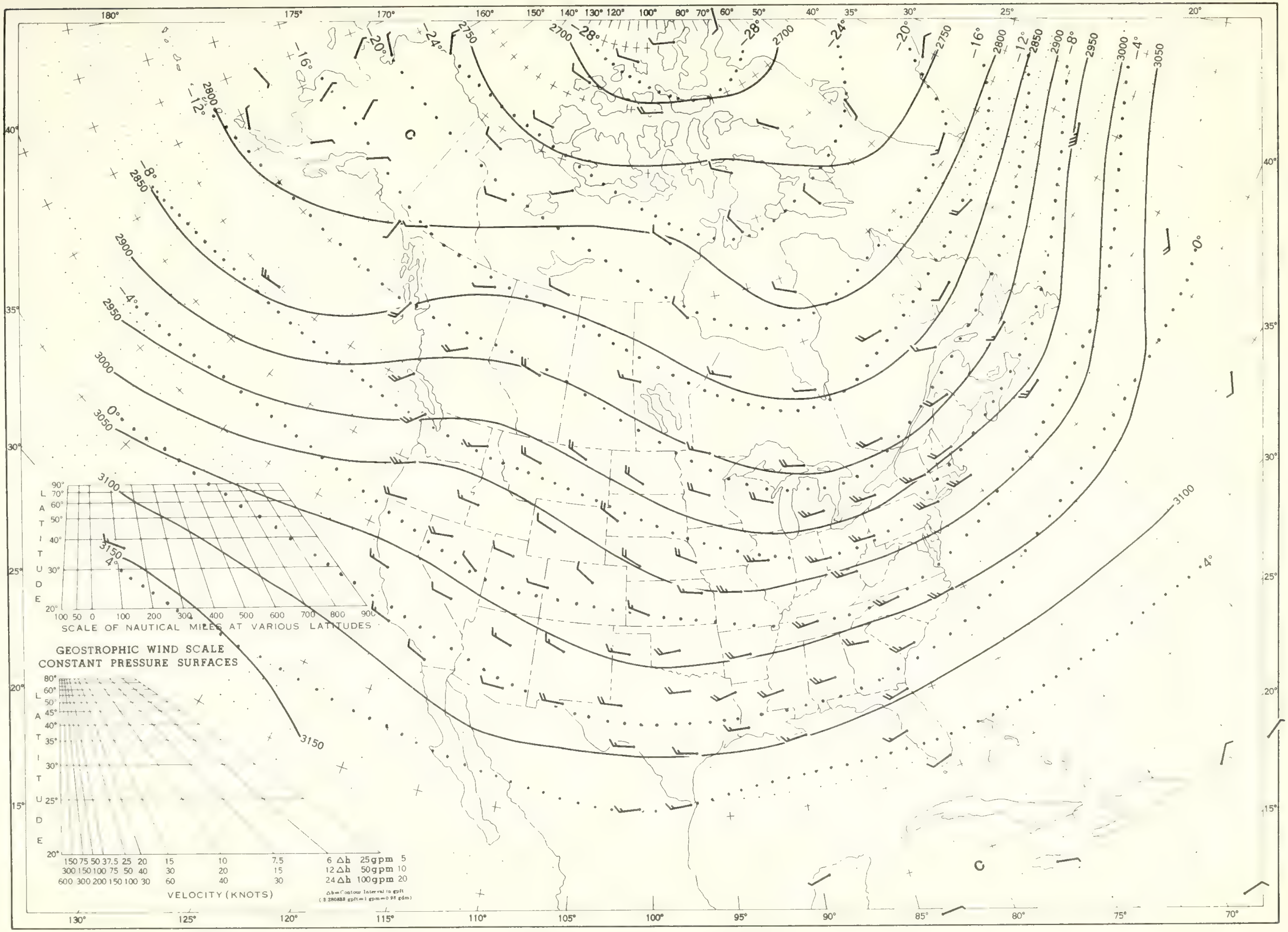
Average sea level pressures are obtained from eight daily 3-hourly observations. Resultant wind directions and speeds are shown by arrows. Constancy ratios (resultant speed÷average speed) are shown to two decimal places. Pressure normals are computed for stations having at least 10 years of record and for 10° intersections in a diamond grid over the oceans.

Chart XI. 850-mb. Surface, 1200 GMT, December 1966. Average Height and Temperature, and Resultant Winds.



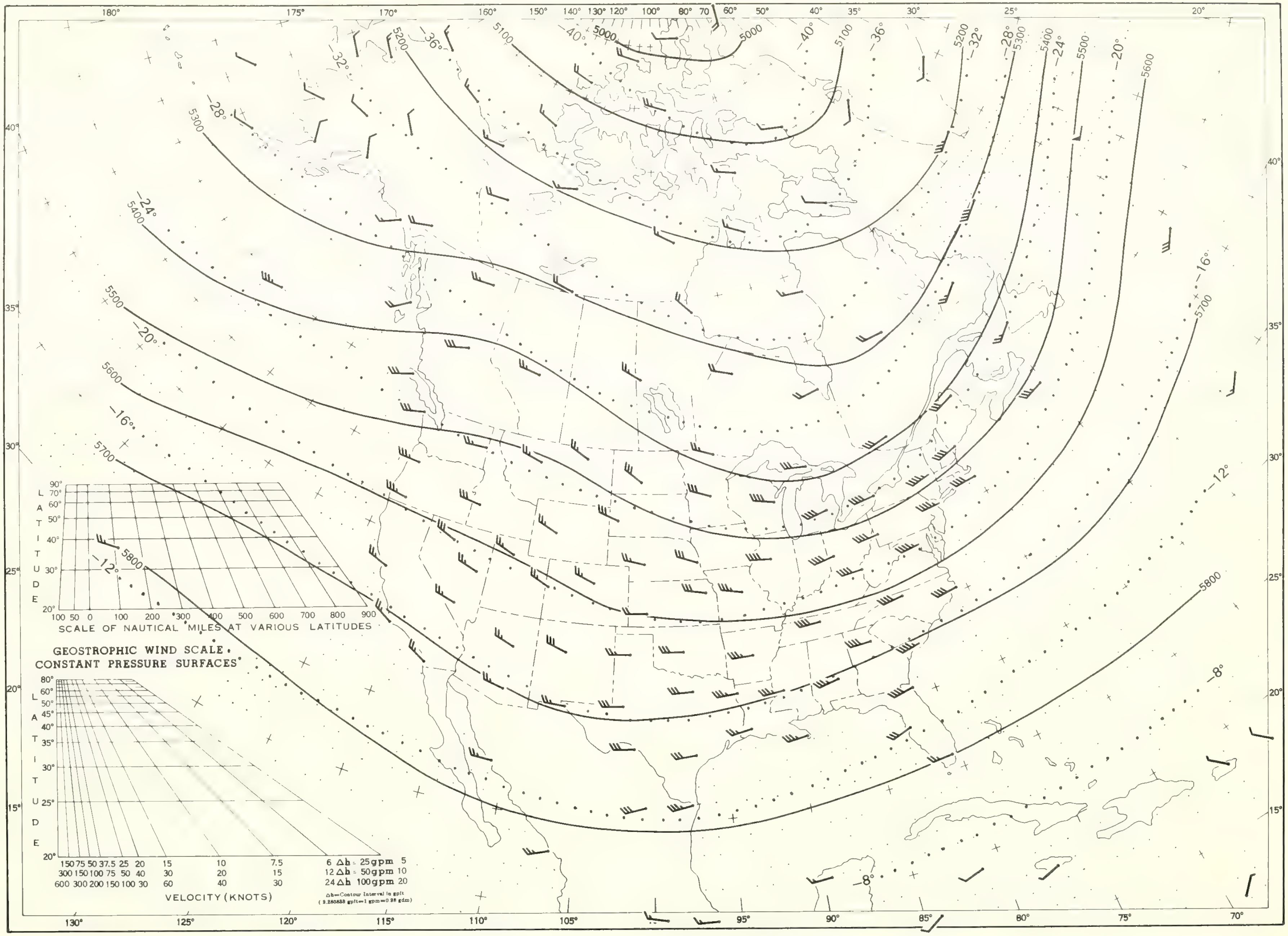
Height in geopotential meters (1 g.p.m. = 0.98 dynamic meters). Temperature in °C. Wind speed in knots; flag represents 50 knots, full feather 10 knots, and half feather 5 knots. All wind data are based on rawin observations.

Chart XII. 700-mb. Surface, 1200 GMT, December 1966. Average Height and Temperature, and Resultant Winds.



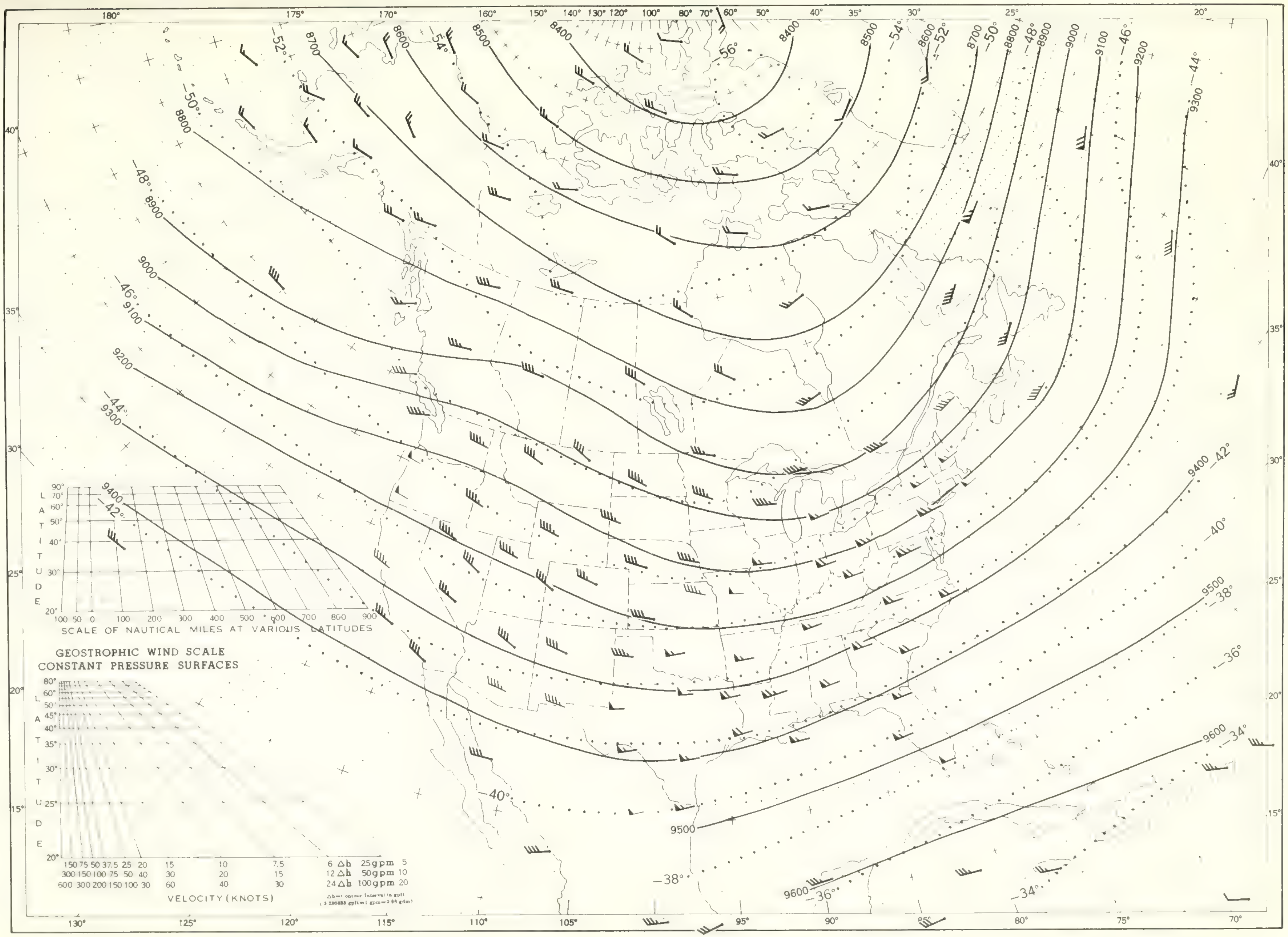
See Chart XI for explanation of map.

Chart XIII. 500-mb. Surface, 1200 GMT, December 1966. Average Height and Temperature, and Resultant Winds.



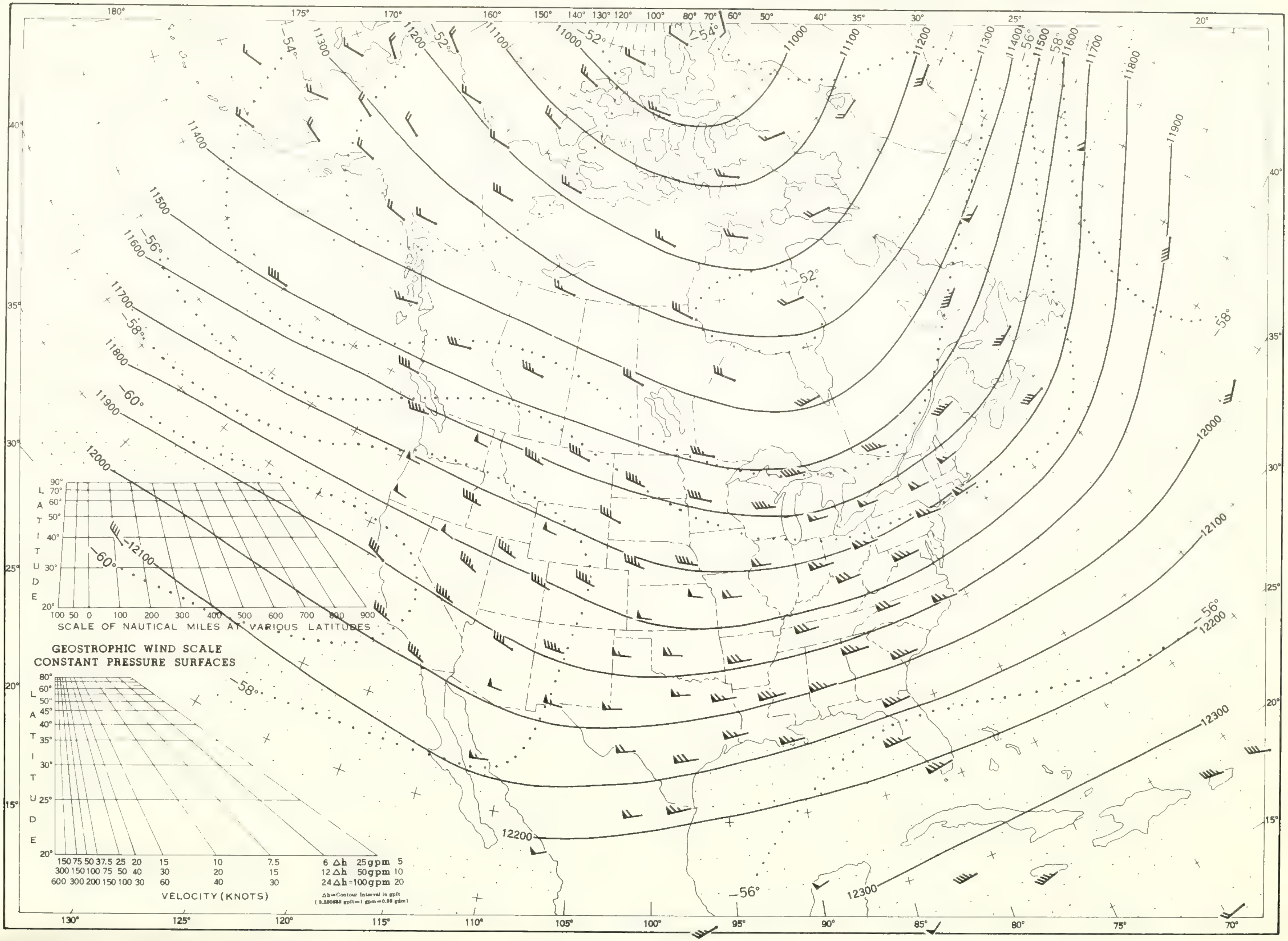
See Chart XI for explanation of map.

Chart XIV. 300-mb. Surface, 1200 GMT, December 1966. Average Height and Temperature, and Resultant Winds.



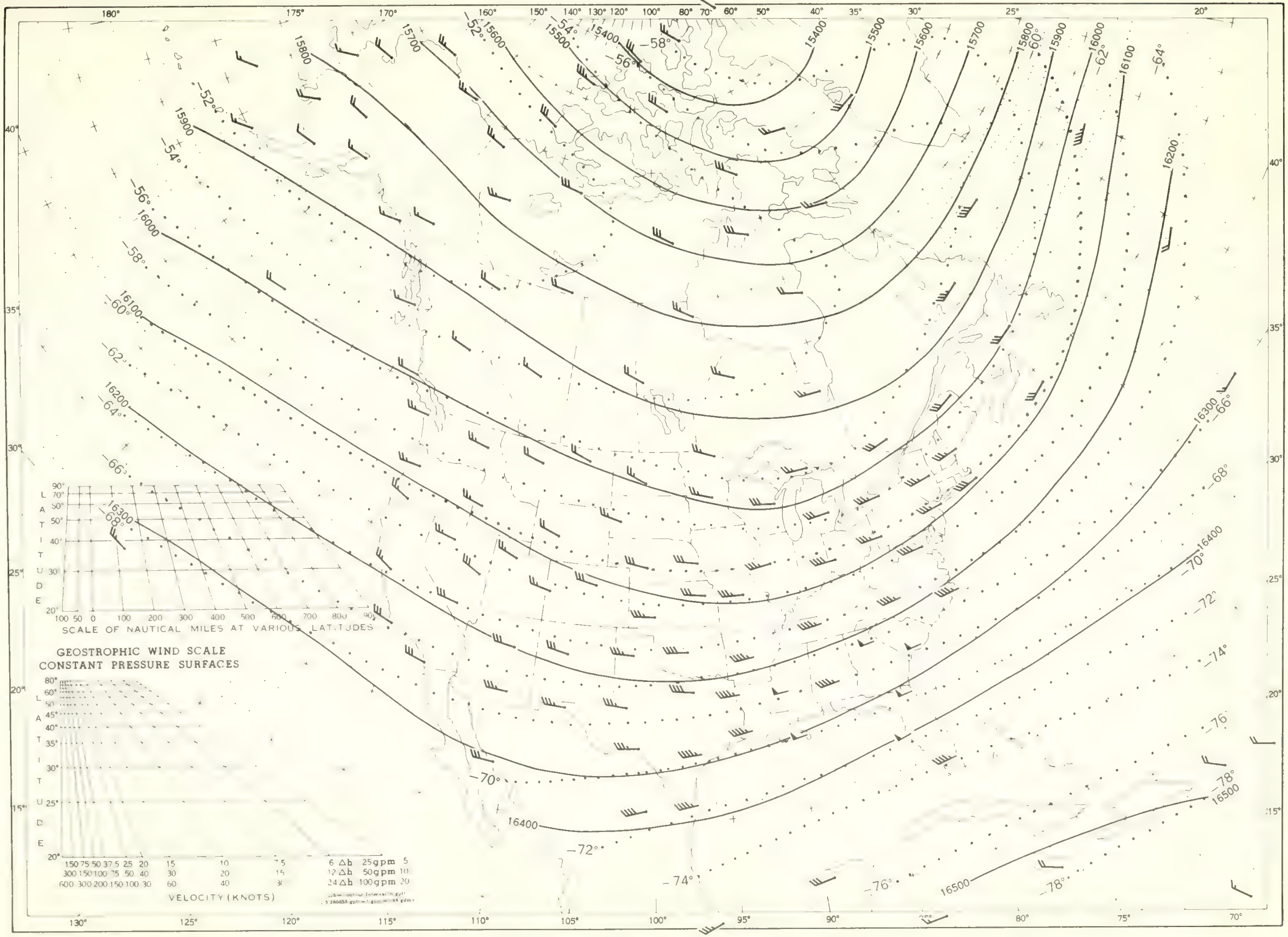
See Chart XI for explanation of map.

Chart XV. 200-mb. Surface, 1200 GMT, December 1966. Average Height and Temperature, and Resultant Winds.



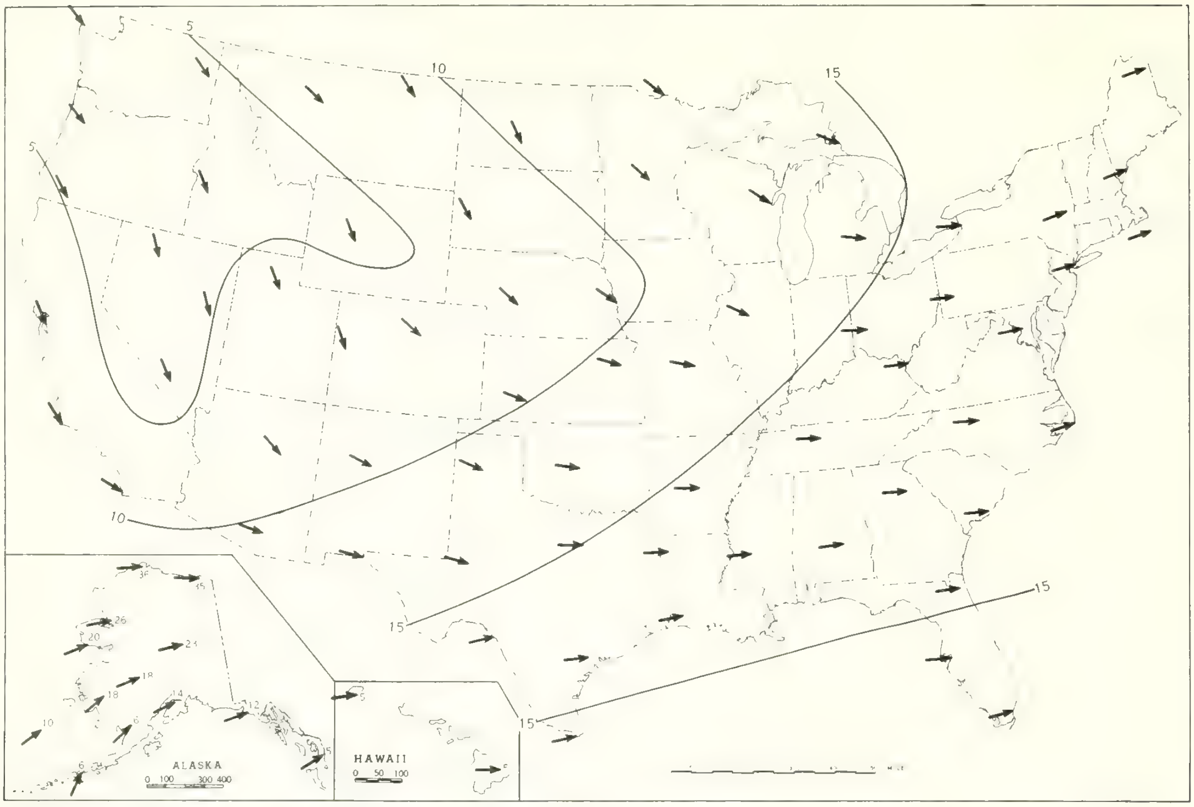
See Chart XI for explanation of map.

Chart XVI. 100-mb. Surface, 1200 GMT, December 1966. Average Height and Temperature, and Resultant Winds.

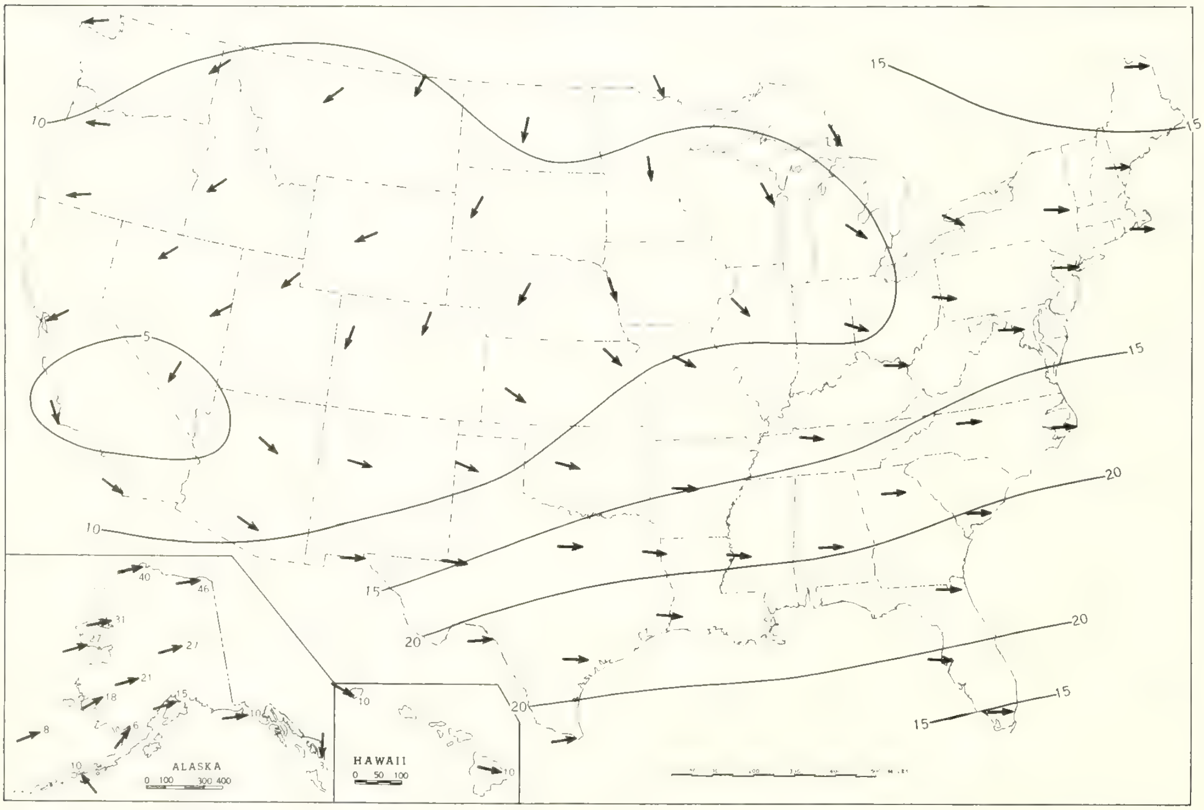


See Chart XI for explanation of map.

Chart XVII. A. 50-mb. Surface, 1200 GMT, **December 1966**. Resultant Winds.



B. 30-mb. Surface, 1200 GMT, **December 1966**. Resultant Winds.



Wind speed (isotachs) in knots. Arrows show resultant wind direction. All wind data are based on rawin observations.

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

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ANNUAL 1966
Volume 17 No. 13

ASHEVILLE: 1967

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CLIMATOLOGICAL DATA

NATIONAL SUMMARY

Volume 17 No. 13 ANNUAL 1966

GENERAL SUMMARY OF WEATHER CONDITIONS

L. H. Seamon
Environmental Data Service, ESSA
Washington, D. C.

HIGHLIGHTS:

1. Heavy snowfall in East.
2. Spring flood in Red River of North Valley.
3. The great blizzard in the northern Great Plains.
4. The May freeze.
5. Four major tornadoes.
6. Two hurricanes.
7. Weather favored bumper crops most areas.

TEMPERATURE.--Temperatures for 1966 averaged below normal east of the Continental Divide. The year was coldest, relative to normal, in the Red River Basin of the North and in a southeastern area including much of the Virginias, the Carolinas, Tennessee, Kentucky, Georgia, Alabama, and Mississippi. In these areas the year was 2° or more colder than normal and monthly averages were all below normal except March, July, and November. Degree Days east of the Rockies were above normal indicating heavier than usual fuel consumption. The year was warmer than normal in the Far West. Temperatures for each of the four seasons averaged near normal. Extreme temperatures in the 48 States ranged from -52° near Baudette, Minn., on February 19 to 121° at Death Valley, Calif., on August 5, 6, and 7.

The year's temperature highlights are as follows: January was among the 10 coldest on record in the Midcontinent and Southeast where extreme cold prevailed during the last 2 weeks of the month and continued through the first week of February. Subzero minima reached all states except Florida and Louisiana and only the southern tips of Florida and Texas in the Gulf region escaped freezing. On January 28 the temperature dropped to -50° near Baudette, Minn., and did not rise above -26° at International Falls, Minn. On January 30, Russellville, Ala., reported -24°, the lowest temperature ever recorded in Alabama, and on the same morning 1/2 inch of ice was reported in Corpus Christi, Tex.

March was unusually warm in the 48 States, but among the coldest on record in Alaska.

On April 4-5 a freeze caused extensive damage to fruit in the Grand Junction area of Colorado, and another freeze on the 19th and 20th caused statewide damage. Fruit was in an advanced stage due to a warm March.

An unusually late spring freeze May 9-11, with record-breaking low temperatures for May, damaged fruit and vegetables from North Carolina and Tennessee northward, with heaviest losses in Ohio and Michigan.

During a brief cold snap at the beginning of June, record low temperatures for June were recorded for scattered stations south of the Great Lakes and frost occurred in the Appalachians as far south as North Carolina.

Temperatures rose to 100° or higher from the Dakotas and Wyoming eastward over the Mississippi and Ohio Valleys to the middle Atlantic coast the last part of June. The heat wave became widespread the first half of July. In the Northeast temperatures reached 100° or higher on 5 days at many stations. Harrisburg, Pa., and New York, N. Y., reported 107° on July 3, alltime records. In July temperatures reached 100° or higher on 24 days at Wichita Falls, Tex., and on 6 days at Huron, S. Dak. The heat wave was blamed for about 70 deaths in the St. Louis area where the maximum was over 100° each of the 6 days, July 9-14. The heat contributed to hundreds of other deaths elsewhere east of the Rockies.

In mid-September, record low temperatures for so early in the season occurred at many stations from the Great Lakes to New England. Another early freeze for so far south extended to central Florida and almost to the tip of southern Texas the beginning of November with 28° on the 3d at New Orleans for the lowest in November since 1871.

Santa Ana winds caused record high November temperatures in southern California on November 1, with 101° at Los Angeles (82-year record) and 97° at San Diego (95-year record).

On December 12 to 14 freezing temperatures extended to the extreme southern tip of Texas, along the Gulf coast and to central Florida. Temperatures as low as the middle 20's in the McAllen-Weslaco-Harlington area and 30° at Brownsville caused moderate to locally severe damage to most vegetables in southern Texas.

PRECIPITATION.--Above normal precipitation in the 48 States for 1966 was limited to four main sections. These were (1) the Dakotas, eastern Montana and northern Minnesota (2) from central and southern Arizona eastward to Florida and Georgia except central Texas (3) from the lower Appalachian region northward through the central Ohio Valley (4) and a belt extending from Detroit, Mich., and Toledo, Ohio, westward into Iowa. Some of the year's heaviest precipitation, relative to normal, fell in the South. Miami, Fla., recorded 82.06 inches or 137 percent of normal and Port Arthur, Tex., 70.67 inches, 133 percent of normal.

The warm season precipitation (April-September) was near normal in most areas east of the Rockies and below in much of the Far West. In fact, the warm season precipitation pattern was much like that for the year, with above normal amounts limited mostly to the South and northern Great Plains. It was extremely dry in a relatively small area of western Maryland and adjacent portions of Virginia, West Virginia, and Pennsylvania. Driest area in the Far West at the end of September extended from southwestern Idaho through Nevada and California where many sections reported less than 25 percent of normal precipitation since January 1, 1966.

FLOODS.--Severe flooding occurred in the Red River of the North Valley in March and flooding continued into April. Total damage was estimated at nearly $8 million.

In April severe flash flooding occurred in northeastern Texas. The American Red Cross reported 27 deaths due to drowning.

During August, record to near record flooding in east-central Nebraska caused damage, based on early estimates, of over $2.2 million. (See special flood articles in this publication)

DROUGHTS.--At the beginning of the year record to near record low reservoir and ground water supplies prevailed from northern West Virginia and northern and eastern Virginia to southeastern New York and central New England. Moderate precipitation during January and February only temporarily eased this Northeast Drought. Precipitation was much below normal during spring and summer and the drought intensified. By the end of August this meteorological drought was rated as extreme by the Palmer Index in northeastern West Virginia, northern and central Virginia, middle and northwestern Maryland, northern Delaware, south-central and eastern Pennsylvania, New Jersey, southeastern New York, and southern New England. The Potomac River was at its lowest level in history. The area of severe drought gradually diminished with generous rains in September and October and by the end of the latter month was limited to a small area in south-central Pennsylvania.

Moderate to severe drought developed in east-central Indiana and parts of Ohio in July and moderate drought continued into September. A severe drought prevailed in the Nevada area until November. Deficient precipitation in the middle and southern Great Plains after September was detrimental to small grains.

In Hawaii a period of unusually dry weather began over most of the Island in March and heavy irrigation was widespread by month's end. The dry weather continued through June. Since the dry spell was preceded by several months of cool wet winter weather, the drought was not felt much until May even though April was the driest on record at many stations with records dating back 50 years or more. By the end of May, the third month of dry weather, pastures and fruits needed rain, irrigation was heavy, and brush fires on Oahu were described as the worst in 15 years. Rains brought relief to parts of the State in July, and Hilo reported its worst flood in history on the 25th when up to 17 inches of rain fell in that area during a thunderstorm; damage was $250,000. Not until November did widespread above normal precipitation occur.

SNOWFALL.--For the year 1966 snowfall was above average in the northern Great Plains, in eastern areas from Tennessee and the Carolinas northward, and from Arkansas and Oklahoma southwestward through Texas. Annual amounts were below average from the Rocky mountains westward, and in Kansas, Missouri, Illinois, Wisconsin, and eastern Nebraska.

Snowfall for the first four months of 1966 was heavy from northern Texas eastward and northeastward, but was below normal in most of the Far West. Heavy January falls east of the Rockies occurred January 8, 23-24, and 28-31, the last week of February, and March 2-4.

SEVERE STORMS.--Although neither as numerous nor as destructive as in 1965, tornadoes in 1966 nevertheless took a heavy toll of life and property. In 1966, these storms, totaling 570, were responsible for at least 105 deaths, hundreds of injuries, and property losses totaling many millions of dollars. Four of the year's tornadoes were outstanding. The first of these storms on March 3 killed 58 persons, injured over 500, and caused about $18 million property damage in Mississippi, with most of the destruction in the city of Jackson, the State's Capital. The second, traveling at 60 m.p.h., crossed Florida from Tampa Bay to Merritt's Island on April 4, leaving in its path 11 persons killed, over 400 injured, and property losses in the millions of dollars. One of the most destructive tornadoes on record, property-wise, swept through Topeka, Kans., on June 8, killing 16 persons, injuring 406 and causing over $100 million property losses. The fourth outstanding tornado of the month, occurring on October 10, destroyed Belmond, Iowa, with a loss of 6 lives, 172 injuries, and property losses estimated from $7.5 to $11 million.

Two hurricanes occurred. Alma moved inland just 20 miles east of Apalachicola, Fla., on June 9, the earliest hurricane of record to cross the U. S. Coastline. Alma was blamed for 6 deaths in Florida. Scattered damage, mostly in Florida, totaled about $10 million. Hurricane Inez on October 4, crossed extreme southern Florida with wind speeds up to 130 m.p.h. The hurricane was blamed for 3 deaths, 11 injuries, and property losses estimated at about $5 million in Florida.

WINTER TYPE STORMS.--A coastal storm January 23-24 brought snowfall ranging from 1/2 to 1 1/2 feet in Maryland to over 2 feet in much of New York and New England. Only 2 to 3 days later another coastal storm covered northern Georgia with 4 inches of snow and ice, produced the most damaging ice storm in 50 years in coastal areas of the Carolinas, and left 1/2 to over 1 foot of snow from Virginia to eastern Canada. This stormy situation was climaxed in the closing days of January by the worst blizzard in the east since February 1958. From the lower Appalachians and Virginia to New York and New England, snowfall was 1 to 3 feet, winds 30 to over 60 m.p.h., snow drifts to over 20 feet, and low temperatures from the midteens to subzero. Transportation was at a standstill, marooning thousands of persons and closing schools for several days to over a week. Most Federal offices and business were closed at least 1 day. There were over 50 deaths.

One of the most severe blizzards of record swept across the northern Great Plains into Minnesota on March 2-5. It continued unabated for 4 days in some areas. Snowfall was 1 to 3 feet, winds averaged 30 to 50 m.p.h. several days with gusts to over 100 m.p.h., snowfall drifted to over 30 feet, visibility was reduced to zero the 3d and 4th, and temperatures dropped to 10°. At least 15 persons died, traffic was paralyzed, and over 100,000 head of livestock were lost. Another severe March storm moved northeastward from Kansas and Nebraska to Minnesota and Upper Michigan on the 22d to 24th, with blizzard to near blizzard conditions. The rain, glaze, sleet, hail, and snow with high winds caused heavy damage in the central Great Plains.

Record-breaking snowstorms for so early in the season occurred in the central Rockies and north-central areas about mid-October and in the lower Ohio Valley and northern portions of the Gulf States November 2-3. A snowfall of 13 inches in 24 hours set a new November record at Louisville, Ky. On December 23 to 25, heavy snowfall of 1/2 to 2 feet fell from the Arkansas-Tennessee-North Carolina area to eastern Canada, disrupting Christmas holiday traffic.

CROP PRODUCTION IN 1966 EXCEEDED ONLY BY LAST YEAR.--The crop reporting Board of the U.S.D.A. reported that crop production in 1966 tied 1963 as the second highest of record, despite some damage from subfreezing temperatures, lack of moisture at times, and unusually high early summer temperatures. Several major fall maturing crops registered record or near record yeilds per acre as shower activity picked up early in August and temperatures turned cooler. Most northern States enjoyed long growing seasons as freezing temperatures held off until late crops matured. West of the Mississippi, harvesting conditions were generally favorable except parts of Kansas and Nebraska, but in portions of the eastern Corn Belt, the South Atlantic and eastern South Central States conditions were less favorable.

EXCESSIVE PRECIPITATION

(Excessive Short Duration Rainfall)

YEAR 1966

This table contains statistics of maximum amounts of rainfall during the calendar year 1966. Data presented in this table are generally from stations equipped with recording gages. Stations are at Airport locations unless otherwise shown.

Excessive precipitation data for the years 1896-1935 inclusive, generally present the accumulated amounts of precipitation for each 5, 10, or 20 minute intervals during storms in which the rate of fall equaled or exceeded .25 inch in any 5 minute period, or .30 in any 10 minute period, or .35 in any 15 minute period, etc., the tabulation beginning with the 5 minute period where the rate of .05 inch in 5 minutes began and continuing by 10 or 20 minute intervals up to 120 minutes. A detailed explanation of the method used may be found in the publications listed in the last paragraph of this explanation.

The present method, adopted with data for the calendar year 1936, gives the maximum fall of precipitation for the periods 5 to 180 minutes, the maximum amounts being taken for the periods in which the fall is greatest for the given time, and is tabulated to show maximum amounts for 5, 10, 15, 20, 30, 45, 60, 80, 100, 120, 150 and 180 minutes, even if the fall does not equal the excessive rate for some of the periods. (The 15 minute amount was not computed for 1936-43 and the 150 minute amount was not computed for 1944 through 1948).

The following Table A shows limits at which precipitation was considered excessive in this publication:

TABLE A

Duration (minutes)	Depth of precipitation (inches)	Duration (minutes)	Depth of precipitation (inches)
5	.25	60	.80
10	.30	80	1.00
15	.35	100	1.20
20	.40	120	1.40
30	.50	150	1.70
45	.65	180	2.00

This table is made up from the formula, $A = t + 20$ where A is the accumulated depth in hundredths of inches and t is the time in minutes.

For the years 1936 through 1948 stations in North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Tennessee, Arkansas, Louisiana, Texas, Oklahoma, and San Juan, P. R. used the limits shown in the following Table B:

TABLE B

Duration (minutes)	Depth of precipitation (inches)	Duration (minutes)	Depth of precipitation (inches)
5	.40	60	1.50
10	.50	80	1.90
15	.60	100	2.30
20	.70	120	2.70
30	.90	150	3.30
45	1.20	180	3.90

This table is made up from the formula $A = 2t + 30$. Its use, however, was discontinued at the end of 1948 and Table A is used by all sections for 1949 and the following years.

Publication of Data. A summary of maximum precipitation data for the years prior to 1896 is published in the annual report of the Chief of the Weather Bureau for 1895-1896. Excessive precipitation data for the period 1881-1896 are published in the annual report of the Chief of the Weather Bureau 1896-1897. Data for the years 1897 through 1934 have been published in the appropriate annual reports of the Chief of the Weather Bureau. For the years 1935 through 1949 these data are published in the appropriate issue of the United States Meteorological Yearbook. For 1950 and succeeding years excessive precipitation are presented in the annual issues of the Climatological Data, National Summary.

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
ALABAMA												
BIRMINGHAM												
FEB 10	.25	.27	.29	.33	.36	.42	.47	.58	.76	.90	1.11	1.29
MAR 3	.25	.33	.33	.34	.39	.48	.49	.49	.49	.55	.59	.61
APR 26	.16	.32	.35	.38	.51	.69	.72	.75	.76	.77	.77	.78
APR 26	.26	.36	.40	.40	.42	.43	.43	.44	.45	.46	.47	.47
APR 27	.24	.39	.45	.65	.79	1.06	1.21	1.55	2.08	2.38	2.84	3.11
JUN 7	.34	.67	.71	.80	.85	.89	.91	.96	1.00	1.04	1.07	1.10
JUN 16	.41	.76	.77	.79	.80	.82	.85	.89	.91	.97	1.00	1.00
JUL 16	.17	.29	.38	.47	.58	.69	.74	.80	1.08	1.25	1.41	1.49
JUL 27	.25	.43	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
JUL 30	.30	.51	.66	.66	.66	.66	.66	.66	.70	.77	.82	.83
AUG 3	.30	.36	.44	.58	.62	.63	.63	.63	.63	.74	.80	.80
AUG 3	.27	.53	.72	.78	.87	.92	.98	1.02	1.03	1.05	1.05	1.06
AUG [illegible]	.28	.32	.34	.37	.37	.37	.37	.37	.37	.37	.37	.37
AUG 10	.35	.60	.75	.77	.78	.78	.84	.84	.84	.84	.84	.84
AUG 11	.40	.51	.51	.51	.52	.52	.52	.52	.52	.52	.52	.52
AUG 12	.29	.34	.38	.40	.42	.43	.46	.53	.57	.60	.63	.63
SEP 12	.25	.37	.46	.65	.86	.92	1.03	1.14	1.16	1.16	1.16	1.16
SEP 12	.32	.57	.70	.85	1.07	1.25	1.48	1.58	1.68	1.72	1.83	1.95
OCT 15	.30	.38	.40	.54	.67	.69	.69	1.03	1.08	1.08	1.08	1.08
NOV 10	.30	.52	.59	.69	.76	.82	.90	1.01	1.04	1.07	1.10	1.16
HUNTSVILLE												
MAR 3	.27	.37	.43	.49	.64	.71	.98	1.09	1.12	1.13	1.17	1.18
APR 29	.18	.30	.35	.38	.50	.55	.57	.58	.59	.59	.59	.59
MAY 1	.25	.38	.46	.55	.74	.78	.84	.92	.95	.95	.97	1.20
MAY 16	.27	.42	.43	.47	.53	.63	.70	.76	.85	.88	.89	.89
JUN 6	.28	.52	.60	.71	.90	.93	.93	.95	.97	.97	1.00	1.03
JUN 30	.24	.30	.30	.31	.31	.32	.32	.32	.32	.32	.32	.32
JUL 19	.27	.54	.60	.65	.89	1.07	1.09	1.09	1.09	1.09	1.09	1.09
JUL 29	.32	.61	.69	.75	.82	.83	.84	.85	.85	.85	.85	.85
AUG 2	.25	.31	.35	.40	.44	.45	.45	.58	.70	.70	.70	.70
AUG 2	.14	.25	.35	.40	.58	.74	.95	1.07	1.08	1.09	1.11	1.11
AUG 17	.25	.50	.75	.90	1.13	1.44	1.65	1.75	1.86	2.21	2.34	2.37
SEP 28	.30	.57	.74	.88	1.05	1.08	1.11	1.15	1.20	1.21	1.22	1.22
MONTGOMERY												
FEB 10	.27	.40	.48	.52	.55	.60	.64	.71	.78	.82	.87	.90
MAR 4	.23	.30	.36	.51	.57	.62	.62	.63	.63	.63	.63	.63
MAY 26	.17	.26	.34	.41	.44	.45	.45	.46	.47	.48	.48	.48
JUN 16	.33	.35	.44	.47	.51	.54	.55	.55	.55	.55	.55	.57
JUN 30	.36	.65	.72	.81	.92	.96	.96	.96	.96	.97	.97	.97
JUL 15	.25	.50	.69	.88	1.05	1.16	1.21	1.22	1.22	1.22	1.23	1.23
SEP 12	.20	.34	.45	.57	.82	1.22	1.49	1.61	1.97	2.28	2.75	2.92
SEP 17	.48	.78	.94	1.02	1.22	1.46	1.47	1.47	1.48	1.51	1.53	1.53
SEP 27	.16	.21	.31	.42	.52	.64	.64	.66	.68	.68	.68	.68
OCT 9	.42	.66	.74	.81	.90	1.29	1.32	1.39	1.54	1.93	2.16	2.19
NOV 9	.18	.34	.51	.64	.78	.87	.90	.90	.93	.93	1.26	1.56
NOV 10	.19	.33	.41	.42	.42	.42	.44	.44	.50	.58	.67	.68
NOV 11	.43	.51	.53	.54	.57	.59	.61	.63	.63	.67	.70	.72
ALASKA												
ANCHORAGE						NONE						
ANNETTE						NONE						
COLD BAY						NONE						
FAIRBANKS						NONE						
JUNEAU						NONE						
KING SALMON						NONE						
MC GRATH						NONE						
ST. PAUL ISLAND						NONE						
YAKUTAT						NONE						
ARIZONA												
FLAGSTAFF												
AUG 6	.23	.36	.57	.64	.64	.80	.80	.80	.85	.85	.85	.92
AUG 14	.30	.60	.65	.69	.69	.69	.70	.71	.71	.71	.71	.71
SEP 19	.25	.30	.30	.31	.34	.45	.47	.48	.48	.48	.48	.49
PHOENIX												
AUG 18	.26	.46	.58	.72	1.12	1.48	1.72	1.73	1.73	1.73	1.73	1.73
TUCSON												
JUL 24	.30	.51	.57	.59	.61	.62	.62	.65	.83	.91	.94	.96
AUG 10	.19	.34	.43	.49	.61	.67	.68	.68	.68	.68	.69	.70
AUG 12	.27	.48	.61	.69	.78	.85	.86	1.07	1.27	1.36	1.38	1.38
SEP 11	.27	.47	.61	.65	.69	.74	.87	1.00	1.01	1.02	1.02	1.02
SEP 12	.21	.34	.49	.57	.87	1.03	1.11	1.15	1.17	1.18	1.19	1.19
WINSLOW						NONE						
YJMA						NONE						
ARKANSAS												
FORT SMITH												
APR 11	.43	.72	.80	.95	1.11	1.28	1.29	1.30	1.32	1.32	1.32	1.32
APR 20	.55	1.00	1.10	1.21	1.23	1.35	1.35	1.40	1.40	1.40	1.41	1.44
APR 30	.25	.45	.55	.72	.95	1.17	1.24	1.34	1.46	1.50	1.51	1.51
MAY 16	.60	.75	.82	.95	1.00	1.09	1.14	1.20	1.27	1.34	1.35	1.35
AUG 21	.27	.38	.40	.42	.45	.46	.47	.49	.51	.52	.54	.56
NOV 9	.20	.36	.46	.55	.60	.70	.74	.77	.84	.88	.95	1.02
NOV 26	.18	.31	.43	.55	.60	.71	.79	.85	.92	.98	1.05	1.12

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
ARKANSAS												
LITTLE ROCK												
FEB 9	.30	.37	.44	.49	.58	.68	.75	.85	.89	.92	1.03	1.12
APR 12	.20	.30	.31	.31	.31	.32	.32	.32	.32	.32	.32	.32
APR 23	.22	.35	.37	.42	.60	.66	.69	.72	.76	.80	.82	.84
APR 23	.25	.36	.42	.49	.58	.66	.77	.88	1.01	1.26	1.35	1.44
JUL 4	.30	.50	.62	.75	.79	.80	.80	.80	.80	.80	.80	.80
AUG 2	.25	.38	.51	.68	.83	1.09	1.11	1.11	1.11	1.11	1.11	1.11
AUG 12	.22	.34	.36	.38	.49	.55	.59	.59	.59	.59	.80	.88
AUG 13	.47	.70	.81	.86	1.13	1.38	1.87	2.18	2.32	2.62	2.76	3.36
AUG 18	.20	.35	.47	.51	.54	.55	.55	.56	.58	.59	.61	.62
AUG 21	.23	.40	.44	.52	.62	.82	.87	.89	.89	.90	.91	.92
SEP 30	.22	.43	.50	.50	.60	.64	.65	.66	.67	.68	.75	.76
OCT 14	.27	.31	.39	.42	.45	.49	.50	.55	.59	.60	.61	.61
NOV 10	.25	.30	.45	.55	.80	1.05	1.40	1.56	1.66	1.72	1.78	1.85
NOV 26	.35	.45	.50	.53	.55	.60	.64	.66	.68	.69	.71	.75
TEXARKANA												
JAN 2	.17	.33	.45	.60	.74	.85	.91	.93	.95	.99	1.03	1.04
APR 20	.33	.54	.70	.99	1.15	1.26	1.44	1.45	1.45	1.51	1.56	1.57
APR 24	.21	.34	.36	.47	.69	.85	1.05	1.25	1.53	1.62	1.73	2.00
APR 25	.25	.38	.45	.45	.52	.55	.80	.86	1.12	1.44	1.55	1.88
APR 28	.18	.30	.47	.50	.54	.59	.61	.62	.63	.63	.63	.63
APR 29	.15	.25	.27	.32	.41	.56	.82	.98	1.10	1.24	1.32	1.47
APR 30	.20	.40	.49	.50	.62	.80	.82	.83	.88	.91	.96	1.02
JUN 13	.27	.30	.35	.39	.43	.45	.46	.53	.53	.54	.55	.56
JUL 1	.37	.58	.69	.82	1.05	1.17	1.38	1.57	1.57	1.57	1.57	1.57
JUL 3	.15	.30	.35	.38	.50	.65	.75	.89	.90	.90	.93	.93
JUL 21	.30	.49	.64	.91	1.10	1.18	1.21	1.21	1.21	1.21	1.21	1.21
JUL 30	.25	.38	.50	.70	.90	1.15	1.23	1.33	1.33	1.33	1.33	1.33
AUG 8	.40	.57	.63	.75	.78	.89	.94	.95	.95	.95	.95	.95
AUG 11	.20	.38	.45	.63	.75	1.20	1.48	1.94	2.39	2.57	2.64	2.65
AUG 11	.20	.34	.51	.60	.69	.72	.75	.76	.81	.86	.87	.91
AUG 12	.22	.42	.60	.70	.93	1.01	1.11	1.33	1.36	1.46	1.55	1.58
AUG 29	.17	.32	.39	.42	.58	.75	.78	.78	.78	.78	.78	.78
OCT 4	.25	.49	.63	.77	.93	1.20	1.24	1.41	1.51	1.59	1.61	1.72
NOV 9	.29	.45	.62	.75	.86	1.01	1.09	1.20	1.27	1.34	1.40	1.52
DEC 27	.29	.44	.50	.57	.76	1.07	1.37	1.49	1.61	1.73	1.81	1.82
CALIFORNIA												
BAKERSFIELD						NONE						
BISHOP						NONE						
BLUE CANYON						NONE						
BURBANK C						NONE						
EUREKA U												
DEC 13	.24	.33	.36	.38	.40	.44	.47	.55	.57	.59	.60	.61
FRESNO						NONE						
LOS ANGELES												
NOV 7	.22	.33	.37	.40	.43	.54	.58	.69	.75	.79	.88	.90
NOV 7	.35	.52	.60	.67	.79	.84	.94	.99	1.01	1.01	1.05	1.11
MT SHASTA R						NONE						
OAKLAND						NONE						
RED BLUFF												
FEB 19	.16	.29	.35	.39	.50	.65	.70	.73	.82	.85	.90	.94
NOV 19	.25	.41	.49	.57	.70	.98	1.06	1.13	1.34	1.57	1.83	1.96
SACRAMENTO						NONE						
SANDBERG						NONE						
SAN DIEGO						NONE						
SAN FRANCISCO U						NONE						
SANTA MARIA						NONE						
COLORADO												
ALAMOSA						NONE						
DENVER												
AUG 18	.61	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64	.64
GRAND JUNCTION						NONE						
PUEBLO												
JUL 27	.48	.66	.77	.86	1.02	1.06	1.06	1.06	1.08	1.09	1.09	1.09
AUG 1	.25	.40	.47	.54	.61	.69	.71	.72	.74	.74	.75	.76
CONNECTICUT												
BRIDGEPORT												
MAY 6	.28	.32	.34	.34	.34	.34	.34	.38	.38	.38	.38	.38
JUL 7	.25	.33	.37	.38	.39	.39	.50	.52	.60	.65	.65	.65
AUG 16	.42	.52	.54	.56	.61	.63	.64	.65	.67	.67	.67	.67
HARTFORD												
JUN 10	.25	.40	.40	.41	.49	.51	.59	.85	.87	.97	.97	1.02
JUL 10	.45	.75	.87	.98	1.34	1.50	1.65	1.65	1.69	1.69	1.69	1.69
JUL 19	.33	.49	.52	.68	.85	1.02	1.15	1.18	1.24	1.28	1.36	1.39
AUG 11	.20	.34	.36	.44	.55	.73	.84	.91	.93	.95	.96	.96
SEP 4	.18	.35	.42	.53	.64	.73	.76	.78	.82	.85	.89	.94

C RECORD ENDED JUNE 30.

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
CONNECTICUT												
NEW HAVEN												
MAY 19	.18	.33	.40	.44	.54	.64	.75	.86	.98	1.08	1.22	1.35
JUL 19	.31	.46	.52	.60	.66	.71	.78	.83	.89	.97	.98	.99
DELAWARE												
WILMINGTON												
MAY 21	.30	.52	.64	.71	.84	.93	1.01	1.10	1.19	1.22	1.22	1.22
JUN 10	.40	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
JUL 6	.30	.54	.56	.62	.63	.63	.64	.64	.64	.64	.64	.64
JUL 8	.26	.44	.59	.61	.63	.64	.64	.64	.64	.64	.64	.64
JUL 27	.27	.41	.49	.54	.63	.70	.73	.94	1.02	1.28	1.30	1.30
AUG 15	.25	.31	.34	.36	.37	.37	.37	.37	.37	.37	.37	.37
SEP 14	.12	.20	.27	.34	.51	.72	.95	1.18	1.50	1.73	2.05	*2.34
SEP 21	.27	.46	.64	.81	.96	1.26	1.68	1.95	2.13	*2.20	2.24	2.27
FLORIDA												
APALACHICOLA U												
JAN 25	.14	.24	.37	.42	.59	.66	.79	.89	.95	1.06	1.14	1.36
FEB 27	.16	.30	.44	.52	.61	.73	.91	.93	1.00	1.07	1.18	1.28
FEB 28	.24	.37	.44	.46	.50	.52	.67	.69	.70	.70	.70	.70
MAY 7	.18	.31	.39	.47	.60	.70	.75	.76	.76	.76	.79	.89
MAY 23	.37	.69	.82	.99	1.16	1.22	1.23	1.23	1.23	1.23	1.23	1.24
JUN 18	.40	.70	.76	.79	.79	1.03	1.11	1.38	1.47	1.52	1.77	1.80
JUN 27	.18	.34	.49	.52	.63	.64	.64	.64	.64	.64	.64	.64
JUL 14	.37	.59	.82	.98	1.31	1.73	2.03	2.50	2.88	3.35	3.70	4.00
JUL 20	.26	.45	.66	.76	.81	.85	.99	1.01	1.03	1.07	1.12	1.13
JUL 21	.38	.56	.69	.72	.73	.73	.74	.75	.78	.84	.92	1.01
JUL 31	.33	.53	.59	.60	.71	.80	1.06	1.64	1.86	1.93	2.17	2.35
AUG 7	.39	.58	.68	.89	1.09	1.46	1.87	2.17	2.24	2.29	2.32	2.61
AUG 9	.30	.52	.61	.77	1.04	1.21	1.44	1.46	1.48	1.64	1.64	1.67
SEP 18	.28	.34	.43	.56	.75	.93	1.03	1.11	1.40	1.51	1.75	1.94
SEP 18	.30	.48	.62	.80	1.09	1.32	1.73	2.11	2.26	2.44	2.57	3.33
SEP 28	.45	.68	.93	.98	1.15	1.31	1.36	1.42	1.61	1.75	1.79	1.86
DEC 10	.32	.44	.59	.85	.98	1.14	1.28	1.34	1.36	1.38	1.46	1.50
DAYTONA BEACH												
APR 4	.15	.23	.35	.43	.51	.60	.70	.80	.88	.95	1.05	1.12
MAY 7	.54	.75	.81	.85	.88	.92	.97	1.01	1.06	1.08	1.08	1.09
MAY 8	*.60	.92	1.10	1.28	1.29	1.29	1.29	1.29	1.67	1.81	1.85	1.86
JUN 9	.38	.69	.91	1.24	1.61	1.70	1.90	2.01	2.20	2.24	2.27	2.41
JUN 19	.45	.85	.97	1.35	1.70	2.13	2.25	2.85	3.06	3.07	3.08	3.09
JUN 30	.14	.26	.35	.44	.58	.81	1.06	1.27	1.44	1.60	1.77	1.85
JUN 30	.53	.64	.66	.67	.70	.73	.84	1.21	1.33	1.37	1.48	1.56
JUL 7	.19	.37	.46	.52	.55	.56	.58	.59	.60	.60	.60	.60
JUL 22	.30	.50	.62	.72	1.15	1.45	1.50	1.52	1.53	1.54	1.54	1.54
JUL 25	.16	.31	.46	.55	.65	.75	.81	.83	.83	.83	.83	.86
JUL 26	.26	.46	.67	.82	1.02	1.09	1.11	1.13	1.15	1.18	1.22	1.24
AUG 2	.38	.73	.83	.92	1.13	1.43	1.70	1.70	1.70	1.70	1.70	1.70
AUG 8	.27	.54	.60	.62	.62	.62	.63	.64	.66	.67	.71	.73
AUG 13	.23	.46	.63	.72	.74	.75	.75	.75	.75	.75	.75	.75
AUG 24	.43	.82	1.12	1.52	1.93	1.97	2.12	2.12	2.12	2.19	2.19	2.19
AUG 31	.22	.42	.43	.44	.44	.44	.44	.44	.44	.44	.44	.44
OCT 2	.32	.51	.62	.71	.75	.76	.76	.85	.86	.86	.86	.86
OCT 8	.21	.42	.62	.72	1.03	1.26	1.50	1.65	1.87	1.94	1.94	1.94
FORT MYERS												
APR 9	.33	.41	.52	.72	.93	1.01	1.10	1.17	1.22	1.25	1.30	1.33
JUN 6	.35	.63	.70	.98	1.40	1.75	1.82	1.84	1.87	1.90	1.95	1.95
JUN 7	.40	.56	.56	.57	.64	.65	.66	.66	.66	.66	.66	.66
JUN 14	.38	.57	.67	.74	.82	.87	.89	.90	.91	.91	.91	.91
JUN 20	.30	.50	.58	.88	1.14	1.34	1.40	1.40	1.45	1.59	1.60	1.60
JUN 26	.44	.85	.95	1.13	1.35	1.44	1.54	1.60	1.70	1.95	2.13	2.15
JUL 6	.40	.50	.60	.67	1.15	1.40	1.43	1.45	1.45	1.45	1.45	1.45
JUL 12	.26	.49	.70	.75	.77	.97	1.05	1.06	1.06	1.06	1.06	1.06
JUL 16	.30	.41	.45	.55	.61	.65	.65	.65	.65	.65	.65	.65
JUL 29	.30	.45	.51	.65	.86	.88	.88	.91	.91	.91	.91	.91
JUL 30	.35	.42	.52	.60	.63	.63	.63	.63	.63	.63	.63	.63
JUL 31	.40	.75	.75	.76	.79	.80	.80	.80	.80	.80	.90	.95
AUG 4	.18	.32	.38	.49	.54	.55	.56	.56	.56	.56	.56	.56
AUG 7	.23	.42	.47	.60	.66	.81	1.03	1.08	1.11	1.15	1.21	1.21
AUG 10	.22	.35	.39	.41	.41	.41	.42	.42	.42	.43	.44	.44
AUG 15	.40	.62	.84	.86	1.10	1.15	1.25	1.35	1.45	1.50	1.57	1.60
AUG 17	.35	.47	.49	.52	.58	.68	.70	.70	.70	.70	.70	.70
AUG 19	.17	.30	.38	.39	.42	.43	.50	.50	.50	.50	.50	.50
AUG 22	.30	.50	.53	.66	.95	1.12	1.30	1.60	1.65	1.65	1.70	1.72
SEP 5	.25	.30	.31	.37	.40	.43	.43	.43	.43	.43	.43	.43
SEP 12	.55	.98	1.01	1.08	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.12
SEP 29	.26	.48	.56	.65	.73	.80	.80	.86	.86	.86	.90	.90
JACKSONVILLE												
FEB 28	.18	.32	.45	.54	.59	.65	.78	1.04	1.10	1.16	1.23	1.25
APR 27	.17	.31	.44	.54	.63	.68	.69	.70	.70	.70	.70	.70
MAY 6	.20	.38	.53	.63	.76	.99	1.08	1.19	1.22	1.24	1.34	1.51
MAY 9	.19	.29	.34	.37	.51	.55	.79	.88	.88	.90	.94	.96
MAY 22	.27	.41	.48	.55	.79	.96	1.22	1.50	1.89	2.06	2.06	2.07
MAY 25	.24	.44	.51	.52	.53	.53	.53	.53	.53	.53	.53	.53
JUN 9	.36	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
JUN 20	.39	.62	.71	.77	.84	.87	.96	1.38	1.65	1.68	1.71	1.77
JUL 1	.50	.93	1.28	1.54	2.01	2.94	*3.74	4.17	4.44	*5.17	5.61	*5.86
JUL 25	.30	.55	.75	.88	.98	1.12	1.50	1.77	1.96	1.97	2.05	2.06
AUG 7	.20	.29	.34	.44	.53	.61	.64	.69	.74	.76	.79	.81
AUG 14	.13	.25	.37	.44	.51	.54	.70	.79	.84	.88	.94	.96
SEP 18	.22	.25	.41	.42	.44	.49	.50	.50	.51	.58	.58	.58
SEP 26	.24	.47	.59	.70	.77	.78	.78	.81	.81	.81	.81	.81
OCT 10	.25	.35	.38	.40	.50	.58	.63	.67	.70	.73	.75	.76
KEY WEST												
FEB 22	.21	.30	.36	.39	.41	.49	.56	.75	.83	.94	1.11	1.12
MAR 13	.17	.30	.33	.35	.50	.53	.54	.54	.54	.54	.54	.55
APR 17	.27	.31	.33	.36	.38	.39	.40	.40	.40	.40	.40	.40
MAY 6	.27	.45	.58	.60	.61	.62	.62	.62	.62	.62	.62	.62
MAY 26	.33	.39	.41	.42	.43	.45	.47	.48	.48	.48	.48	.48
MAY 31	.32	.41	.43	.44	.44	.45	.46	.47	.48	.48	.48	.48
JUN 2	.29	.40	.42	.45	.62	.68	.69	.69	.69	.69	.69	.69
JUN 24	.35	.68	.88	1.10	1.33	1.35	1.36	1.37	1.37	1.37	1.37	1.37
FLORIDA												
KEY WEST												
JUN 26	.23	.32	.35	.37	.39	.39	.39	.41	.53	.54	.54	.54
JUN 27	.30	.46	.53	.69	.74	.77	.77	.77	.77	.77	.77	.77
JUN 30	.22	.41	.56	.62	.69	.80	1.00	1.51	1.72	1.75	1.77	1.93
JUL 10	.17	.27	.33	.43	.52	.57	.62	.66	.68	.73	.79	.81
JUL 17	.50	1.00	1.15	1.20	1.23	1.24	1.24	1.24	1.24	1.24	1.25	1.58
JUL 23	.18	.32	.43	.54	.56	.58	.66	.66	.66	.66	.66	.66
AUG 11	.40	.75	.87	.89	.94	.98	1.02	1.07	1.09	1.09	1.09	1.09
AUG 27	.36	.38	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
SEP 4	.45	.76	.99	1.12	1.15	1.16	1.16	1.16	1.16	1.16	1.17	1.17
SEP 7	.40	.47	.50	.52	.53	.55	.55	.55	.55	.55	.55	.55
SEP 10	.30	.47	.55	.66	.80	1.11	1.13	1.15	1.16	1.16	1.17	1.19
SEP 14	.30	.41	.50	.52	.55	.68	.69	.69	.70	.73	.74	.75
SEP 25	.38	.56	.62	.73	.97	1.32	1.78	2.14	2.25	2.50	2.75	3.07
OCT 5	.18	.26	.35	.45	.63	.82	1.08	1.25	1.37	1.50	1.70	1.96
NOV 19	.18	.33	.44	.46	.54	.55	.55	.55	.55	.55	.55	.55
MIAMI BEACH U												
JAN 11	.16	.31	.34	.34	.35	.40	.46	.76	.81	.86	.87	.87
MAR 13	.23	.43	.45	.50	.57	.63	.65	.68	.75	.78	.90	.93
MAR 29	.22	.32	.36	.38	.39	.39	.39	.39	.39	.39	.39	.39
APR 9	.20	.39	.54	.66	.88	1.07	1.15	1.35	1.39	1.57	1.60	1.63
MAY 7	.28	.55	.61	.63	.67	.74	.79	.86	1.00	1.12	1.27	1.32
MAY 23	.30	.50	.55	.70	.99	1.08	1.14	1.15	1.15	1.15	1.15	1.15
MAY 25	.23	.33	.36	.45	.57	.58	.58	.58	.58	.58	.58	.58
MAY 28	.40	.60	.65	.80	.93	1.06	1.25	1.36	1.38	1.38	1.38	1.39
MAY 30	.40	.65	.69	.79	.80	.80	.80	.80	.80	.80	.80	.80
JUN 1	.36	.38	.41	.42	.44	.47	.47	.47	.48	.49	.49	.49
JUN 19	.35	.56	.57	.60	.79	1.05	1.08	1.10	1.10	1.10	1.10	1.10
JUN 28	.15	.23	.26	.40	.46	.50	.51	.51	.51	.51	.52	.52
JUL 27	.25	.41	.43	.50	.56	.58	.58	.58	.58	.58	.58	.58
AUG 6	.33	.58	.87	1.00	1.19	1.66	1.92	2.19	2.22	2.22	2.25	2.28
AUG 7	.24	.38	.46	.48	.57	.71	.88	1.10	1.32	1.38	1.39	1.41
SEP 4	.28	.42	.50	.60	.80	.95	1.12	1.16	1.16	1.16	1.17	1.17
SEP 10	.35	.58	.69	.73	.75	.78	.80	.80	.80	.80	.80	.80
OCT 7	.30	.38	.48	.56	.88	1.07	1.13	1.21	1.30	1.33	1.39	1.42
OCT 21	.25	.40	.45	.55	.68	.95	1.15	1.19	1.28	1.35	1.55	1.72
MIAMI												
JAN 29	.41	.47	.50	.52	.52	.52	.66	.67	.67	.67	.67	.67
FEB 22	.25	.27	.27	.28	.33	.40	.50	.65	.74	.74	.77	.80
FEB 23	.55	.85	.85	.87	.97	.99	1.00	1.00	1.02	1.04	1.32	1.34
MAR 29	*1.00	*1.84	*2.01	2.01	2.01	2.01	2.02	2.03	2.03	2.03	2.04	2.04
APR 9	.17	.24	.27	.36	.53	.65	.73	.80	.90	1.03	1.15	1.21
MAY 22	.60	.92	1.00	1.13	1.43	1.54	1.55	1.56	1.57	1.69	1.86	1.87
MAY 25	.55	.65	.80	.89	.95	.99	.99	.99	.99	.99	.99	.99
MAY 26	.23	.41	.57	.64	.72	.73	.73	.74	.82	.83	.84	.84
JUN 8	.40	.55	.65	.95	1.20	1.45	1.65	1.70	1.75	1.75	1.87	2.05
JUN 9	.35	.52	.60	.70	.90	1.15	1.35	1.75	2.03	2.30	2.67	2.95
JUN 18	.38	.43	.45	.49	.53	.60	.65	.65	.65	.65	.65	.65
JUN 18	.32	.43	.45	.60	.75	.78	.80	.80	.80	.80	.80	.80
JUN 26	.20	.33	.45	.50	.73	.87	.92	.97	1.04	1.05	1.05	1.05
JUN 29	.46	.63	.73	.80	.85	.93	.93	1.25	1.35	1.42	1.45	1.58
JUL 6	.30	.50	.70	.83	1.32	1.46	1.47	1.47	1.47	1.47	1.47	1.47
JUL 22	.35	.70	.90	1.20	1.45	1.54	1.60	1.63	1.64	1.64	1.64	1.66
JUL 23	.25	.33	.34	.35	.35	.35	.35	.35	.49	.49	.49	.49
JUL 27	.33	.38	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40
AUG 3	.35	.44	.44	.45	.45	.46	.49	.49	.49	.49	.49	.49
AUG 7	.45	.64	.70	.72	.94	1.46	1.56	1.67	1.70	1.71	1.73	1.77
AUG 11	.28	.30	.36	.37	.40	.41	.41	.41	.41	.41	.41	.41
AUG 22	.20	.40	.43	.55	.75	.79	.79	.80	.85	.91	.92	.94
SEP 5	.28	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33	.33
SEP 10	.25	.33	.48	.56	.74	.74	.74	.74	.74	.74	.74	.74
SEP 21	.65	.92	1.05	1.70	1.95	2.01	2.02	2.02	2.02	2.02	2.02	2.02
SEP 22	.25	.35	.39	.40	.43	.65	.80	.81	.81	.81	.81	.81
SEP 23	.25	.50	.51	.53	.55	.55	.55	.55	.55	.55	.55	.55
OCT 4	.30	.35	.48	.50	.53	.54	.54	.56	.60	.64	.71	.96
OCT 4	.25	.50	.62	.62	.62	.62	.62	.62	.62	.62	.62	.72
OCT 7	.25	.35	.40	.48	.55	.70	.95	1.02	1.03	1.05	1.06	1.06
OCT 21	.20	.38	.47	.57	.83	1.00	1.20	1.25	1.33	1.40	2.22	2.48
OCT 22	.35	.50	.55	.57	.95	1.18	1.25	1.70	1.83	1.90	2.10	2.28
NOV 16	.43	.68	.75	.87	1.08	1.23	1.28	1.30	1.36	1.43	1.48	1.57
MIAMI U												
JAN 11	.21	.30	.39	.44	.57	.75	.79	1.04	1.24	1.33	1.41	1.77
FEB 19	.21	.41	.58	.62	.67	.72	.79	.82	.86	.90	.98	1.00
FEB 22	.37	.63	.75	.85	1.00	1.46	1.58	1.73	2.14	2.43	2.74	2.87
FEB 22	.25	.37	.43	.51	.83	.93	1.06	1.13	1.18	1.19	1.27	1.30
MAR 26	.43	.59	.84	1.03	1.21	1.32	1.33	1.34	1.34	1.35	1.35	1.35
APR 9	.32	.49	.59	.73	.86	1.06	1.35	1.47	1.54	1.61	1.69	1.74
MAY 23	.23	.34	.40	.47	.51	.51	.52	.55	.56	.56	.56	.56
MAY 24	.17	.30	.40	.51	.71	.84	.87	.88	.93	.94	.97	.97
MAY 25	.50	.86	1.09	1.25	1.35	1.42	1.55	1.55	1.55	1.55	1.55	1.55
MAY 26	.29	.36	.37	.42	.42	.42	.42	.78	.79	.79	.79	.79
MAY 27	.50	.94	1.09	1.14	1.15	1.15	1.22	1.25	1.26	1.33	1.37	1.37
JUN 3	.21	.37	.47	.53	.54	.73	.76	.77	.87	.90	.90	.90
JUN 8	.36	.48	.68	.77	1.19	1.40	1.49	1.56	1.62	1.69	1.77	1.81
JUN 9	.38	.60	.73	.80	1.01	1.28	1.41	1.93	2.17	2.33	2.69	2.98
JUN 18	.38	.53	.58	.67	.75	1.00	1.02	1.03	1.03	1.03	1.03	1.03
JUN 18	.21	.32	.40	.41	.42	.43	.43	.43	.43	.43	.43	.43
JUN 19	.19	.35	.38	.42	.49	.56	.66	.71	.88	.91	.92	.93
JUN 30	.17	.28	.36	.38	.38	.38	.39	.39	.39	.40	.53	.53
JUL 2	.22	.37	.44	.44	.44	.44	.44	.44	.44	.44	.45	.45
JUL 11	.24	.36	.44	.47	.47	.47	.47	.47	.47	.47	.47	.47
JUL 22	.33	.56	.77	.90	1.10	1.15	1.17	1.18	1.18	1.18	1.19	1.19
JUL 27	.44	.67	.76	.77	.81	.83	.83	.83	.83	.83	.83	.83
SEP 4	.19	.27	.37	.46	.54	.59	.60	.60	.60	.60	.60	.60
SEP 13	.22	.40	.50	.57	.59	.62	.64	.66	.66	.67	.68	.68
SEP 15	.28	.45	.51	.52	.73	.92	1.16	1.32	1.32	1.33	1.33	1.33
SEP 23	.22	.35	.40	.41	.42	.43	.43	.43	.43	.56	.65	.65
SEP 25	.25	.41	.52	.62	.68	.69	.70	.71	.72	.72	.72	.72
OCT 7	.23	.40	.51	.69	.81	.81	.94	1.05	1.05	1.07	1.08	1.08
OCT 19	.15	.26	.37	.42	.43	.46	.48	.60	.67	.67	.79	.79
OCT 21	.22	.38	.59	.70	.99	1.24	1.61	2.09	2.28	2.45	2.96	3.14
OCT 22	.29	.47	.63	.73	.94	1.37	1.54	1.74	2.04	2.15	2.32	2.42
ORLANDO												
FEB 27	.80	1.00	1.05	1.08	1.19	1.26	1.28	1.35	1.39	1.42	1.57	1.57
MAR 5	.19	.30	.38	.42	.70	.81	1.04	1.07	1.26	1.36	1.57	1.59
MAR 14	.70	.84	.84	.85	.85	.85	.85	.85	.85	.85	.85	.85
APR 4	.38	.66	.68	.82	1.01	1.14	1.20	1.28	1.36	1.41	1.45	1.49

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
FLORIDA												
ORLANDO												
MAY 8	.25	.33	.42	.49	.78	.86	.90	.92	1.00	1.07	1.19	1.32
MAY 9	.25	.35	.37	.39	.40	.42	.42	.42	.42	.42	.42	.42
MAY 9	.27	.43	.47	.54	.57	.58	.58	.58	.58	.58	.58	.58
MAY 23	.35	.55	.61	.62	.62	.62	.63	.63	.63	.63	.63	.63
MAY 24	.26	.37	.39	.44	.45	.48	.48	.52	.63	.67	.71	.73
MAY 29	.25	.46	.59	.70	.78	.79	.81	.82	.82	.82	.82	.82
JUN 8	.25	.34	.35	.36	.37	.43	.51	.57	.60	.62	.66	.79
JUN 9	.21	.25	.27	.40	.42	.42	.42	.43	.44	.46	.46	.51
JUN 18	.55	.85	1.10	1.30	1.50	1.52	1.52	1.54	1.55	1.55	1.55	1.55
JUN 30	.24	.43	.49	.57	.74	.82	.93	.95	1.07	1.08	1.45	1.52
JUL 7	.42	.68	.79	.93	1.30	1.46	1.47	1.49	1.54	1.55	1.55	1.55
JUL 21	.55	.86	1.02	1.17	1.19	1.20	1.20	1.20	1.21	1.21	1.24	1.24
JUL 27	.35	.65	.70	1.05	1.18	1.23	1.23	1.24	1.26	1.27	1.27	1.27
JUL 31	.25	.44	.49	.61	.78	1.10	1.38	1.39	1.40	1.40	1.40	1.40
AUG 2	.33	.40	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42
AUG 8	.29	.46	.52	.59	.63	.68	.70	.70	.70	.70	.70	.70
AUG 15	.22	.35	.44	.53	.60	.62	.63	.64	.64	.65	.65	.66
AUG 22	.25	.49	.58	.71	.86	1.07	1.38	1.58	1.58	1.58	1.58	1.58
AUG 23	.32	.55	.65	.77	.94	.95	.95	.95	.95	.95	.95	.95
SEP 10	.42	.57	.66	.93	1.09	1.12	1.14	1.16	1.21	1.21	1.21	1.21
SEP 12	.32	.39	.41	.41	.41	.41	.41	.56	.60	.60	.61	.61
SEP 18	.22	.33	.34	.35	.37	.40	.40	.40	.40	.40	.40	.40
SEP 20	.26	.37	.39	.41	.48	.50	.51	.51	.60	.62	.62	.62
SEP 21	.30	.53	.58	.59	.60	.61	.61	.61	.61	.61	.61	.61
OCT 22	.30	.44	.48	.55	.79	.88	1.06	1.23	1.28	1.29	1.44	1.45
PENSACOLA												
FEB 12	.15	.29	.37	.43	.63	.76	.85	.91	.97	1.05	1.19	1.31
FEB 16	.21	.32	.42	.54	.69	.82	1.07	1.18	1.29	1.46	1.62	1.65
FEB 28	.23	.30	.39	.52	.70	.93	1.11	1.25	1.36	1.42	1.66	2.11
MAR 4	.15	.23	.32	.38	.52	.76	.81	.83	.83	.83	.84	.85
MAY 13	.28	.48	.60	.64	.80	.96	1.08	1.17	1.20	1.21	1.21	1.22
MAY 21	.23	.42	.51	.60	.75	.94	.97	.97	.97	.97	.97	.97
MAY 21	.30	.35	.35	.36	.42	.43	.43	.64	.65	.65	.65	.65
JUN 29	.34	.54	.63	.63	.65	.75	.79	.79	.79	.79	.79	.79
JUL 5	.29	.49	.56	.57	.57	.61	1.08	1.09	1.09	1.09	1.09	1.09
JUL 14	.18	.34	.49	.57	.76	.86	.88	.89	.90	.90	.90	.90
AUG 4	.27	.40	.47	.55	.63	.63	.64	.64	.65	.73	.73	.73
AUG 9	.27	.42	.57	.76	1.13	1.24	1.25	1.25	1.25	1.25	1.25	1.26
AUG 18	.34	.45	.56	.71	.78	.85	.85	.85	.85	.85	.86	.86
SEP 6	.28	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
SEP 11	.25	.45	.55	.57	.59	.59	.60	.60	.60	.60	.60	.60
SEP 27	.20	.31	.36	.37	.40	.41	.42	.47	.48	.52	.59	.66
OCT 9	.17	.28	.38	.45	.56	.77	.84	.90	.94	.95	.97	1.06
DEC 9	.42	.79	1.14	1.35	1.60	1.70	1.74	1.74	1.74	1.74	1.74	1.76
TALLASSEE												
JAN 5	.30	.50	.57	.66	.75	.80	.81	.88	1.03	1.04	1.08	1.09
JAN 6	.35	.58	.63	.65	.86	.91	.96	.97	.98	.99	.99	1.01
FEB 28	.25	.50	.65	.89	1.04	1.13	1.19	1.37	1.50	1.50	1.50	1.50
MAR 4	.36	.66	.72	.97	1.18	1.28	1.36	1.54	1.63	1.65	1.69	2.07
APR 14	.18	.36	.37	.38	.39	.45	.46	.46	.49	.49	.49	.49
APR 29	.20	.33	.35	.40	.42	.43	.43	.45	.46	.46	.46	.46
MAY 8	.25	.34	.35	.38	.39	.42	.43	.43	.43	.43	.43	.43
MAY 20	.35	.54	.58	.76	.84	.94	.99	1.21	1.22	1.25	1.26	1.26
MAY 20	.32	.59	.63	.73	.75	.83	.86	.86	.86	.86	.86	.86
MAY 28	.20	.31	.33	.34	.37	.39	.41	.43	.43	.43	.43	.43
JUN 9	.24	.42	.47	.57	.80	.94	1.14	1.32	1.84	2.08	2.34	2.89
JUL 13	.32	.43	.50	.55	.56	.67	.84	.88	.92	.93	.93	.93
JUL 14	.34	.52	.56	.63	.74	.83	.93	1.02	1.63	1.84	1.90	1.98
JUL 16	.22	.31	.43	.48	.52	.53	.53	.53	.53	.53	.53	.53
JUL 20	.36	.63	.73	.78	.82	.83	.85	.85	.85	.85	.85	.85
JUL 24	.28	.33	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
JUL 28	.32	.40	.44	.58	.63	.63	.63	.63	.63	.63	.63	.63
AUG 3	.13	.25	.37	.50	.73	1.00	1.14	1.14	1.14	1.14	1.14	1.14
AUG 8	.25	.36	.38	.42	.43	.43	.43	.43	.44	.49	.55	.56
AUG 8	.20	.39	.45	.55	.68	.91	.94	.94	.94	.94	.94	.94
AUG 9	.25	.38	.50	.64	.91	1.15	1.20	1.35	1.44	1.52	1.64	1.68
AUG 14	.53	.66	.67	.67	.67	.67	.67	.67	.67	.67	.67	.67
SEP 15	.33	.47	.50	.78	.82	.82	.82	.83	1.25	1.34	1.52	1.65
SEP 19	.30	.60	.65	.75	.86	.98	1.06	1.14	1.24	1.33	1.51	1.66
SEP 19	.25	.35	.38	.41	.43	.44	.44	.44	.44	.44	.45	.47
OCT 19	.20	.35	.37	.44	.60	.68	.74	.92	1.02	1.07	1.10	1.12
DEC 28	.18	.29	.40	.55	.72	.81	.92	.98	1.01	1.05	1.06	1.12
TAMPA												
MAR 18	.19	.31	.32	.33	.43	.44	.44	.44	.44	.44	.44	.44
JUN 6	.25	.45	.60	.78	1.10	1.32	1.37	1.40	1.40	1.40	1.40	1.43
JUN 10	.30	.50	.53	.56	.59	.59	.59	.59	.59	.59	.62	.63
JUL 16	.40	.74	.77	1.00	1.16	1.19	1.20	1.20	1.21	1.22	1.22	1.22
JUL 18	.16	.32	.33	.40	.43	.43	.43	.43	.43	.48	.49	.49
JUL 21	.55	.76	.77	.77	.93	1.26	1.27	1.37	1.42	1.42	1.89	2.07
JUL 22	.18	.31	.31	.31	.31	.33	.33	.33	.33	.33	.33	.33
AUG 9	.23	.46	.48	.56	.80	.98	1.04	1.05	1.05	1.05	1.05	1.05
SEP 8	.26	.37	.42	.48	.64	.68	.70	.70	.71	.72	.72	1.04
WEST PALM BEACH												
JAN 4	.25	.40	.50	.56	.65	.73	.84	1.07	1.13	1.20	1.36	1.47
JAN 22	.25	.45	.54	.57	.59	.62	.63	.64	.64	.64	.64	.64
JAN 29	.15	.28	.37	.41	.51	.76	.85	.88	.99	1.08	1.09	1.09
FEB 22	.30	.50	.55	.63	.85	1.04	1.28	1.50	1.86	2.06	2.26	2.34
FEB 23	.14	.25	.35	.45	.55	.65	.75	.84	.88	.95	1.05	1.09
MAR 14	.20	.35	.45	.55	.80	1.02	1.19	1.34	1.50	1.58	1.60	1.62
APR 9	.40	.60	.72	.75	.77	.77	.77	.77	.77	.77	.79	.93
MAY 27	.25	.36	.40	.40	.45	.48	.48	.48	.48	.51	.66	.66
MAY 30	.25	.40	.40	.43	.47	.47	.47	.47	.47	.47	.47	.47
JUN 2	.23	.43	.49	.58	.80	1.04	1.13	1.13	1.16	1.17	1.17	1.17
JUN 7	.27	.50	.66	.75	.92	1.30	1.42	1.48	1.50	1.53	1.58	1.62
JUN 8	.23	.38	.41	.42	.43	.45	.48	.55	.59	.65	.75	.79
JUN 9	.32	.45	.57	.65	.88	1.10	1.30	1.50	1.58	1.60	1.71	1.71
JUN 14	.20	.29	.35	.42	.42	.42	.45	.45	.45	.45	.45	.45
JUN 20	.30	.37	.45	.60	.79	.83	.96	1.35	1.61	1.66	1.78	1.80
JUN 24	.29	.45	.57	.62	.65	.65	.66	.66	.66	.67	.67	.67
JUN 30	.21	.29	.35	.56	.65	.69	.75	.84	.91	1.19	1.43	1.65
JUL 7	.15	.24	.30	.32	.50	.63	.72	.76	.79	.79	.81	.84
JUL 7	.12	.23	.32	.40	.55	.67	.70	.72	.73	.74	.76	.81
JUL 21	.27	.35	.37	.38	.39	.50	.51	.53	.72	.84	.84	.84
JUL 27	.18	.30	.35	.40	.44	.45	.47	.50	.51	.51	.51	.51
JUL 28	.14	.27	.39	.45	.59	.65	.67	.69	.69	.69	.69	.69
JUL 30	.49	.89	1.00	1.09	1.16	1.20	1.22	1.23	1.24	1.24	1.24	1.24

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
FLORIDA												
WEST PALM BEACH												
JUL 31	.15	.25	.40	.43	.47	.50	.50	.54	.60	.63	.64	.64
AUG 2	.35	.65	.89	.94	1.07	1.08	1.09	1.10	1.11	1.14	1.14	1.14
AUG 7	.35	.60	.80	1.00	1.16	1.40	1.57	1.63	1.64	1.65	1.65	1.65
AUG 22	.35	.50	.75	.95	1.15	1.22	1.22	1.31	1.40	1.40	1.40	1.40
AUG 26	.25	.40	.55	.70	.91	1.19	1.42	1.63	1.75	1.78	1.80	1.81
SEP 1	.40	.75	1.10	1.50	1.86	2.06	2.10	2.10	2.10	2.10	2.10	2.10
SEP 3	.15	.30	.40	.48	.52	.56	.60	.60	.60	.60	.60	.60
SEP 7	.34	.51	.72	1.00	1.37	1.74	1.94	2.00	2.00	2.00	2.00	2.00
SEP 20	.26	.51	.71	.81	.91	.95	1.01	1.25	1.35	1.41	1.43	1.43
SEP 22	.23	.42	.55	.68	.74	.74	.75	.77	.81	.83	.95	.96
OCT 7	.13	.25	.38	.48	.58	.65	.66	.68	.68	.68	.71	.73
OCT 8	.28	.53	.68	.88	1.09	1.10	1.10	1.10	1.11	1.11	1.11	1.11
OCT 14	.18	.35	.46	.48	.50	.52	.52	.52	.52	.53	.56	.59
OCT 21	.14	.23	.30	.39	.50	.55	.55	.55	.56	.63	.65	.80
OCT 22	.17	.30	.36	.44	.64	.73	.96	1.22	1.50	1.57	1.60	1.63
GEORGIA												
ATHENS												
APR 3	.21	.32	.36	.39	.44	.56	.60	.65	.71	.79	.87	.89
APR 27	.29	.39	.43	.46	.55	.57	.59	.64	.67	.70	.73	.74
MAY 26	.36	.54	.61	.74	.85	.90	.95	1.00	1.08	1.11	1.42	1.51
JUN 14	* .62*	.95	1.01	1.10	1.12	1.13	1.17	1.17	1.18	1.18	1.19	1.19
JUL 15	.35	.67	.68	.68	.68	.68	.68	.68	.68	.68	.68	.68
JUL 30	.38	.61	.75	.83	.83	.83	.83	.83	.83	.83	.84	.84
AUG 6	.45	.73	.80	.88	1.25	1.52	1.65	1.68	1.69	1.70	1.70	1.71
AUG 19	.15	.25	.33	.40	.55	.80	1.09	1.21	1.25	1.25	1.25	1.25
NOV 10	.20	.37	.45	.55	.80	.85	.95	1.03	1.14	1.20	1.33	1.40
ATLANTA												
FEB 13	.16	.32	.42	.46	.57	.73	.85	1.00	1.21	1.37	1.56	1.70
APR 3	.13	.23	.32	.41	.55	.60	.62	.67	.69	.73	.80	.83
APR 26	.26	.35	.40	.45	.51	.52	.58	.80	.87	.90	.90	.92
APR 27	.17	.27	.41	.47	.53	.55	.59	.71	.76	.80	.88	.90
MAY 12	.18	.36	.45	.55	.60	.65	.70	.71	.71	.73	.84	.86
MAY 16	.19	.38	.42	.50	.61	.69	.75	.79	.85	.87	.90	.97
MAY 19	.24	.37	.44	.48	.49	.50	.53	.53	.54	.54	.55	.55
MAY 26	.22	.33	.37	.38	.43	.52	.54	.55	.60	.61	.65	.67
JUN 29	.45	.69	.88	.99	1.25	1.51	1.54	1.55	1.55	1.55	1.55	1.55
JUL 4	.38	.56	.61	.64	.66	.66	.66	.66	.66	.66	.66	.66
AUG 6	.15	.30	.40	.44	.47	.50	.52	.53	.53	.53	.53	.53
AUG 12	.16	.29	.37	.37	.37	.37	.37	.37	.37	.37	.42	.46
OCT 1	.36	.46	.50	.52	.54	.54	.54	.54	.54	.54	.54	.55
OCT 15	.16	.27	.31	.40	.49	.69	.84	1.09	1.35	1.45	1.58	1.60
NOV 10	.21	.34	.50	.57	.87	1.12	1.40	1.68	2.04	2.32	2.50	2.55
DEC 10	.20	.29	.35	.39	.42	.58	.65	.71	.76	.79	1.11	1.19
AUGUSTA												
MAR 4	.22	.27	.28	.41	.50	.52	.53	.56	.63	.70	.82	.94
APR 4	.19	.34	.36	.38	.50	.61	.67	.87	1.03	1.11	1.27	1.33
MAY 27	.50	.87	.94	1.08	1.37	1.43	1.48	1.66	1.70	1.73	1.82	1.85
JUN 15	.22	.38	.38	.39	.40	.41	.41	.41	.41	.41	.41	.41
JUL 19	.32	.52	.57	.58	.58	.60	.63	.70	.70	.70	.70	.70
AUG 3	.30	.35	.36	.37	.44	.45	.47	.47	.47	.47	.47	.52
AUG 4	.23	.32	.33	.35	.35	.35	.35	.35	.35	.35	.35	.35
AUG 16	.45	.73	.83	.98	1.35	1.46	1.47	1.48	1.50	1.53	1.53	1.53
AUG 20	.34	.54	.60	.61	.62	.63	.63	.63	.63	.63	.63	.63
AUG 23	.14	.24	.28	.36	.55	.68	.71	.72	.72	.72	.72	.72
OCT 19	.21	.36	.39	.49	.53	.60	.65	.67	.70	.88	1.04	1.18
COLUMBUS												
FEB 12	.19	.31	.35	.42	.46	.49	.58	.66	.69	.71	.73	.82
MAR 3	.45	.61	.79	.94	1.37	1.70	1.85	2.00	2.35	2.52	2.84	3.12
MAY 13	.50	.85	1.00	1.15	1.37	1.49	1.68	1.83	1.93	2.08	2.22	2.55
MAY 13	.28	.55	.61	.74	1.03	1.16	1.22	1.24	1.25	1.26	1.30	1.35
MAY 16	.26	.35	.42	.46	.51	.61	.70	.74	.75	.75	.75	.76
MAY 18	.28	.34	.35	.40	.52	.55	.56	.56	.56	.56	.56	.58
MAY 22	.30	.50	.56	.65	.82	.92	.95	.95	.97	1.00	1.00	1.00
JUN 14	.55	.90	1.06	1.28	1.45	1.49	1.50	1.50	1.50	1.50	1.50	1.50
JUN 17	.27	.32	.33	.35	.36	.39	.46	.53	.62	.66	.76	.87
JUN 18	.37	.55	.57	.60	.60	.60	.60	.60	.60	.60	.60	.60
JUN 30	.29	.37	.38	.39	.40	.40	.40	.40	.40	.40	.40	.40
JUL 2	.30	.59	.65	.88	.98	1.35	1.83	1.98	1.98	1.98	1.98	1.98
JUL 19	.41	.51	.70	.84	.87	.89	.90	.90	.90	.90	.90	.90
AUG 3	.40	.60	.65	.74	.78	.79	.79	.79	.80	.80	.80	.80
AUG 6	.36	.60	.71	.85	1.18	1.45	1.54	1.61	1.62	1.65	1.65	1.65
AUG 12	.15	.30	.32	.40	.52	.58	.59	.59	.59	.59	.59	.59
AUG 16	.35	.63	.76	.83	1.12	1.27	1.28	1.29	1.29	1.29	1.29	1.29
SEP 13	.34	.48	.53	.62	.93	1.00	1.04	1.05	1.10	1.13	1.15	1.16
OCT 9	.39	.55	.66	.80	.82	.92	.92	.93	.95	1.01	1.02	1.02
NOV 10	.24	.35	.48	.53	.64	.80	.85	1.02	1.06	1.11	1.15	1.21
MACON												
MAR 3	.33	.54	.70	.77	.87	.95	1.03	1.18	1.30	1.38	1.54	1.72
MAY 18	.50	.78	.86	.88	.92	.95	.97	1.00	1.02	1.02	1.02	1.03
JUN 9	.18	.30	.38	.45	.56	.58	.59	.60	.64	.70	.73	.73
JUN 16	.22	.35	.36	.36	.36	.38	.38	.44	.48	.50	.52	.53
JUN 18	.33	.56	.72	.77	.79	.90	1.00	1.01	1.01	1.01	1.01	1.01
AUG 12	.24	.33	.35	.35	.35	.35	.36	.36	.36	.36	.36	.36
AUG 25	.28	.51	.63	.70	.90	.93	.94	.94	.94	.94	.94	.94
OCT 9	.35	.52	.75	.84	1.34	1.91	2.45	2.94	3.16	3.44	3.69	3.80
ROME												
MAR 3	.51	.73	.78	.83	1.31	1.43	1.79	1.93	2.17	2.31	2.36	2.53
MAY 12	.37	.59	.86	1.04	1.17	1.35	1.35	1.38	1.39	1.52	1.53	1.55
JUL 1	.20	.31	.49	.55	.59	.63	.64	.65	.65	.66	.66	.69
JUL 16	.23	.28	.40	.44	.61	.63	.64	.64	.64	.64	.64	.65
JUL 29	.25	.35	.35	.35	.35	.35	.40	.40	.40	.40	.40	.40
AUG 6	.65	.95	1.13	1.48	1.67	1.78	1.80	1.82	1.84	1.84	1.84	1.84
AUG 14	.38	.40	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43
AUG 16	.31	.47	.47	.48	.48	.48	.75	.81	.81	.81	.81	.81
SEP 4	.34	.48	.49	.49	.49	.49	.49	.49	.49	.49	.49	.49
SEP 28	.45	.58	.67	.71	.73	.78	.81	.81	.88	.98	1.03	1.13
OCT 9	.32	.33	.34	.40	.56	.60	.65	.78	.80	.80	.80	.81
OCT 15	.27	.30	.42	.52	.63	.67	.68	.68	.68	.68	.72	.72
OCT 25	.23	.35	.41	.43	.47	.53	.56	.63	.65	.67	.67	.67

EXCESSIVE SHORT DURATION RAINFALL

Station and date		Maximum precipitation in inches (5 to 180 minutes)											
		5	10	15	20	30	45	60	80	100	120	150	180
GEORGIA													
SAVANNAH													
FEB 28		.40	.48	.51	.53	.58	.63	.68	.75	.83	.86	.91	.95
MAR 4		.22	.32	.46	.55	.62	.64	.66	.70	.76	.83	.86	.90
MAY 8		.20	.30	.34	.35	.39	.41	.43	.44	.44	.45	.48	.56
MAY 8		.17	.32	.35	.39	.43	.45	.48	.50	.57	.59	.63	.66
MAY 19		.26	.49	.57	.60	.81	.86	.88	.90	.94	.94	.94	.94
MAY 22		.14	.27	.36	.37	.39	.48	.61	.86	1.07	1.21	1.23	1.23
JUN 17		.45	.67	.69	.71	.72	.73	.74	.75	.76	.76	.76	1.45
JUN 18		.20	.38	.48	.57	.76	.98	1.00	1.05	1.08	1.36	1.71	1.80
JUL 2		.44	.83	1.17	1.27	1.38	1.48	1.51	1.70	1.86	1.86	1.88	1.90
JUL 25		.19	.31	.46	.50	.51	.61	.68	.68	.72	.84	.84	.84
JUL 28		.17	.26	.36	.42	.44	.47	.56	.71	.77	.78	.78	.78
AUG 5		.23	.39	.42	.43	.45	.51	.79	.88	.89	.89	.89	.89
AUG 9		.24	.33	.35	.36	.36	.36	.37	.41	.43	.51	.52	.54
AUG 24		.18	.29	.39	.40	.43	.43	.44	.45	.45	.45	.68	.82
SEP 13		.15	.30	.35	.36	.37	.37	.37	.37	.37	.37	.37	.37
OCT 1		.18	.32	.33	.33	.33	.33	.34	.34	.34	.34	.56	.58
HAWAII													
HILO													
JAN 14		.21	.32	.37	.45	.60	.67	.72	.74	.74	.75	.77	.92
JAN 21		.27	.36	.43	.45	.54	.58	.61	.75	.85	.98	1.10	1.35
JAN 21		.22	.33	.33	.33	.33	.33	.33	.40	.40	.40	.44	.44
FEB 19		.19	.34	.40	.50	.79	1.13	1.42	1.77	1.90	2.18	2.44	2.60
MAR 20		.31	.37	.49	.50	.52	.54	.56	.58	.60	.60	.62	.62
MAY 11		.23	.30	.32	.34	.36	.37	.38	.38	.38	.38	.48	.50
JUL 25		.35	.44	.50	.62	.69	.90	1.07	1.19	1.23	1.28	1.29	1.30
OCT 15		.34	.64	.88	1.15	1.66	2.08	2.26	2.31	2.70	3.08	3.80	3.90
OCT 23		.23	.32	.33	.36	.40	.50	.61	.63	.63	.70	.71	.71
NOV 4		.38	.75	.85	.95	1.16	1.37	1.42	1.51	1.76	1.84	2.14	2.32
NOV 5		.18	.32	.40	.48	.62	.79	.93	.95	1.04	1.08	1.08	1.08
NOV 16		.20	.37	.44	.54	.60	.79	.91	1.12	1.35	1.47	1.55	1.62
NOV 22		.33	.54	.75	.88	1.30	1.49	1.72	1.85	1.87	1.87	1.91	1.92
DEC 26		*.50	*.85	1.06	1.38	*2.06	2.26	2.67	2.76	2.78	2.78	2.78	2.78
DEC 28		.25	.39	.40	.42	.47	.48	.75	.77	.82	.97	1.05	1.07
DEC 29		.22	.33	.35	.37	.47	.54	.65	.68	.68	.70	.96	1.09
HONOLULU													
OCT 10		.16	.29	.42	.52	.68	.71	.72	.74	.76	.76	.79	.81
OCT 11		.20	.31	.43	.53	.70	.78	.81	.89	.92	.95	.99	1.01
NOV 2		.20	.30	.45	.53	.62	.62	.67	.94	.94	.94	.94	.94
NOV 4		.26	.33	.40	.49	.69	.69	.81	.98	1.07	1.16	1.28	1.28
NOV 5		.36	.59	.71	.79	.90	.96	.98	1.04	1.21	1.39	1.58	1.63
NOV 6		.25	.35	.36	.39	.41	.47	.50	.54	.72	.82	.90	1.00
KAHULUI													
NOV 4		.34	.61	.79	.81	.81	.81	.87	.89	.92	.98	1.01	1.14
LIHUE													
FEB 27		.23	.38	.52	.62	.71	.90	.95	.96	.96	.97	1.14	1.16
OCT 10		.35	.49	.60	.77	1.12	1.47	1.94	2.33	3.05	3.23	3.34	3.75
OCT 15		.21	.34	.46	.51	.59	.64	.90	.93	.93	.93	.93	.93
OCT 16		.23	.38	.45	.48	.54	.61	.65	.67	.68	.73	.78	.78
NOV 5		.36	.52	.62	.74	.94	.98	1.12	1.36	1.42	1.47	1.58	1.70
DEC 2		.18	.30	.32	.33	.34	.37	.37	.37	.38	.38	.38	.38
IDAHO													
BOISE							NONE						
LEWISTON							NONE						
POCATELLO							NONE						
ILLINOIS													
CAIRO U													
APR 12		.17	.31	.40	.45	.57	.68	.77	.80	.90	.96	1.03	1.04
APR 20		.27	.37	.44	.46	.51	.63	.68	.74	.76	.76	.76	.76
APR 23		.16	.30	.44	.54	.65	.81	.93	1.05	1.09	1.14	1.18	1.21
MAY 13		.25	.43	.53	.58	.63	.69	.74	.85	.93	.99	1.02	1.02
MAY 15	T	*.23	*.42	*.57	.78	*.93	.	M	M	M	*1.53	1.69	*1.75
MAY 18		.23	.40	.48	.65	.95	1.10	1.16	1.17	1.17	1.17	1.17	1.17
MAY 24	T	M	M	M	M	M	M	M	2.01	2.69	*3.02	3.13	*3.21
JUN 7		.25	.42	.54	.54	.55	.57	.59	.76	.80	.87	.93	.95
JUN 13		.45	.70	.94	1.20	1.37	1.43	1.51	1.59	1.67	1.72	1.79	1.80
AUG 2		.25	.39	.53	.60	.67	.75	.80	.84	.88	.94	.99	1.00
AUG 15		.15	.27	.40	.45	.52	.52	.52	.56	.57	.58	.58	.58
SEP 14		.33	.40	.47	.51	.60	.61	.61	.61	.61	.61	.61	.61
SEP 19		.17	.33	.36	.39	.41	.45	.48	.54	.54	.54	.65	.71
OCT 9		.22	.28	.39	.51	.55	.55	.55	.55	.55	.55	.55	.55
CHICAGO O HARE													
MAR 22		.28	.32	.33	.34	.35	.35	.35	.35	.35	.36	.36	.36
APR 20		.27	.44	.66	.74	.81	.87	.92	.97	1.05	1.11	1.12	1.14
APR 28		.24	.44	.52	.64	.82	.88	.94	1.05	1.11	1.13	1.13	1.13
MAY 23		.30	.36	.38	.42	.49	.57	.59	.61	.63	.65	.69	.72
JUN 13		.18	.31	.34	.40	.47	.53	.62	.67	.72	.74	.76	.78
CHICAGO MIDWAY													
APR 20		.16	.28	.44	.54	.59	.63	.68	.71	.73	.73	.75	.77
MAY 23		.22	.34	.38	.44	.52	.53	.57	.62	.67	.72	.82	.88
JUL 26		.38	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39
JUL 27		.34	.63	.82	.96	1.24	1.64	1.78	1.86	2.03	2.05	2.09	2.11
JUL 27		.21	.36	.48	.64	.86	1.06	1.16	1.26	1.43	1.66	1.66	1.66
AUG 21		.20	.32	.38	.41	.43	.45	.50	.51	.53	.58	.60	.60
NOV 9		.27	.32	.43	.50	.68	.75	.84	1.10	1.35	1.41	1.51	1.57
MOLINE													
MAY 23		.26	.38	.49	.60	.79	.87	.89	.94	1.03	1.06	1.12	1.19
JUN 6		.36	.52	.57	.58	.59	.60	.62	.69	.73	.77	.77	.77
JUL 5		.22	.38	.48	.55	.68	.80	.86	.91	.93	1.11	1.24	1.42
JUL 9		.22	.31	.42	.47	.57	.60	.62	.62	.63	.63	.63	.63

T CLOCK MALFUNCTION
M NO RECORD

Station and date		Maximum precipitation in inches (5 to 180 minutes)											
		5	10	15	20	30	45	60	80	100	120	150	180
ILLINOIS													
MOLINE													
JUL 26		.50	.84	1.12	1.35	1.70	2.25	2.68	2.79	2.88	2.91	2.95	2.95
JUL 28		.39	.67	1.02	1.17	1.27	1.30	1.36	1.42	1.42	1.42	1.42	1.42
SEP 2		.35	.51	.59	.64	.70	.78	.84	.89	.89	.89	.89	.89
OCT 14		.29	.47	.51	.67	.85	.93	1.02	1.05	1.07	1.11	1.16	1.16
PEORIA													
APR 19		.28	.32	.33	.34	.38	.41	.45	.48	.50	.50	.50	.50
MAY 17		.34	.54	.57	.64	.76	.78	.78	.78	.78	.78	.78	.78
JUN 12		.22	.34	.40	.46	.50	.60	.65	.73	.76	.80	.82	.84
JUL 28		.58	*1.05	*1.37	1.60	*2.22	2.55	*2.62	2.66	2.67	2.68	2.69	2.69
AUG 1		.25	.36	.38	.44	.52	.56	.56	.56	.56	.56	.56	.56
NOV 26		.28	.28	.29	.30	.30	.36	.37	.37	.37	.37	.45	.55
ROCKFORD													
MAY 23		.34	.67	.77	.88	.93	1.00	1.13	1.23	1.33	1.34	1.37	1.38
JUN 6		.31	.40	.42	.43	.44	.47	.54	.55	.55	.58	.59	.59
JUN 15		.25	.29	.30	.33	.35	.42	.62	.68	.70	.71	.72	.72
JUN 27		.20	.35	.42	.44	.46	.49	.59	.65	.65	.66	.66	.66
AUG 1		.31	.43	.68	.71	.73	.73	.73	.73	.73	.73	.73	.73
AUG 15		.22	.32	.39	.51	.56	.56	.56	.56	.56	.56	.56	.56
SPRINGFIELD													
APR 20		.19	.36	.38	.38	.49	.58	.66	.74	.82	.85	.87	.87
MAY 17		.34	.54	.63	.66	.68	.74	.78	.81	.89	.96	1.01	1.01
MAY 21		.13	.25	.32	.38	.54	.68	.90	1.00	1.04	1.05	1.05	1.06
JUL 27		.18	.30	.40	.42	.46	.54	.60	.63	.66	.67	.67	.67
AUG 15		.24	.39	.55	.67	.91	.95	.95	.96	.96	.96	.96	.96
SEP 3		.26	.41	.51	.60	.80	.87	.90	.96	.99	1.00	1.00	1.00
SEP 14		.19	.28	.32	.41	.46	.49	.52	.56	.58	.58	.58	.58
OCT 14		.32	.46	.61	.66	.78	.92	.98	1.12	1.22	1.50	1.59	1.65
NOV 27		.18	.26	.34	.42	.55	.59	.66	.81	.83	.87	.93	.99
INDIANA													
EVANSVILLE													
JUN 13		.26	.33	.36	.39	.41	.44	.49	.62	.65	.75	.80	.81
JUL 5		.18	.30	.35	.42	.53	.68	.94	.97	.97	.97	.97	.97
AUG 10		.24	.35	.37	.37	.37	.37	.37	.37	.37	.37	.55	.73
SEP 3		.27	.46	.59	.64	.69	.74	.77	.79	.79	.79	.79	.79
FORT WAYNE													
JUL 6		.30	.53	.56	.56	.56	.56	.56	.56	.56	.56	.56	.57
JUL 9		.39	.78	1.04	1.20	1.74	2.10	2.25	2.29	2.29	2.29	2.29	2.29
AUG 21		.60	.98	1.08	1.18	1.32	1.34	1.40	1.44	2.10	2.11	2.18	2.18
SEP 14		.16	.30	.36	.43	.51	.63	.84	.94	.98	1.00	1.01	1.04
INDIANAPOLIS													
JUL 3		.18	.36	.47	.58	.85	.88	.92	.92	.92	.92	.92	.92
SOUTH BEND													
APR 20		.35	.45	.50	.55	.62	.69	.75	.83	.95	1.08	1.24	1.34
JUN 13		.30	.33	.35	.37	.37	.44	.44	.44	.44	.44	.44	.44
JUL 5		.49	.87	.91	1.15	1.28	1.41	1.44	1.45	1.45	1.45	1.45	1.45
AUG 21		.60	.70	.75	.90	1.25	1.52	1.98	2.70	2.92	*3.03	3.05	*3.11
DEC 7		.18	.32	.37	.45	.58	.66	.82	.94	.99	1.05	1.15	1.20
IOWA													
DES MOINES													
MAY 23		.32	.36	.40	.44	.52	.60	.72	.74	.78	.79	.80	.81
JUN 5		.22	.33	.37	.41	.47	.48	.48	.48	.48	.48	.48	.48
JUL 5		.43	.59	.62	.65	.67	.68	.68	.68	.68	.68	.68	.68
JUL 22		.16	.25	.29	.35	.50	.65	.74	.84	.86	.86	.87	.87
AUG 6		.26	.42	.52	.54	.55	.57	.57	.60	.66	.71	.76	.76
DUBUQUE													
MAR 17		.20	.27	.30	.38	.50	.64	.70	.88	1.00	1.11	1.12	1.12
MAR 21		.25	.46	.51	.52	.52	.52	.52	.54	.56	.77	.83	.84
MAR 21		.21	.28	.35	.39	.44	.45	.45	.45	.46	.46	.52	.52
MAY 23		.25	.45	.48	.50	.53	.57	.57	.57	.57	.57	.57	.59
JUN 9		.18	.34	.43	.50	.82	.98	1.16	1.47	1.59	1.75	1.92	2.13
JUN 11		.25	.29	.31	.36	.42	.44	.44	.44	.44	.44	.44	.44
JUN 11		.23	.40	.43	.46	.56	.59	.62	.62	.63	.68	.80	.94
JUN 27		.55	1.06	1.43	1.70	1.83	1.88	1.96	2.02	2.11	2.19	2.22	2.24
JUL 14		.21	.36	.45	.53	.63	.76	.87	1.01	1.15	1.25	1.40	1.46
AUG 21		.35	.70	.73	.86	.99	1.04	1.10	1.17	1.19	1.34	1.46	1.51
OCT 14		.27	.33	.34	.34	.34	.34	.35	.36	.38	.39	.39	.39
SIOUX CITY													
MAY 23		.22	.32	.36	.37	.42	.43	.43	.43	.43	.43	.43	.43
JUN 3		.26	.38	.43	.46	.49	.50	.51	.58	.60	.64	.74	.80
JUN 15		.22	.26	.26	.37	.51	.55	.55	.55	.55	.55	.55	.55
JUN 23		.22	.33	.34	.36	.44	.62	.64	.69	.71	.74	.78	.82
JUL 8		.22	.35	.43	.51	.55	.55	.58	.62	.69	.72	.84	.97
JUL 26		.29	.42	.48	.49	.50	.50	.50	.50	.50	.50	.51	.51
AUG 6		.17	.34	.40	.42	.44	.46	.48	.50	.51	.51	.51	.51
AUG 17		.19	.32	.37	.38	.44	.46	.46	.46	.46	.46	.46	.46
AUG 20		.26	.34	.39	.41	.45	.63	.71	.83	.96	1.18	1.45	1.58
WATERLOO													
FEB 22		.12	.22	.25	.32	.48	.58	.83	1.03	1.22	1.26	1.50	1.61
JUN 5		.34	.48	.62	.65	.71	.74	.74	.75	.79	.82	.83	.83
JUN 11		.25	.49	.60	.70	.90	1.03	1.15	1.25	1.30	1.32	1.39	1.43
JUN 13		.32	.60	.62	.63	.63	.63	.63	.63	.63	.63	.63	.63
JUN 25		.34	.46	.47	.54	.56	.57	.58	.58	.67	.77	1.05	1.06
JUN 27		.70	.96	1.02	1.18	1.20	1.25	1.27	1.27	1.31	1.32	1.32	1.32
JUL 14		.54	.78	.98	1.16	1.46	1.51	1.85	2.23	2.48	2.76	3.03	3.03
AUG 20	T	M	M	M	M	M	M	1.22	M	M	2.12	M	2.93
OCT 14	T	.20	.39	.45	.47	.69	M	M	M	M	1.47	1.47	1.47

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
KANSAS												
CONCORDIA												
JUN 8	.23	.42	.49	.52	.53	.53	.53	.53	.53	.53	.53	.53
AUG 20	.28	.51	.61	.76	.78	.79	.80	.84	.87	.87	.87	.87
SEP 1	.27	.43	.45	.46	.49	.51	.54	.57	.60	.60	.60	.60
SEP 3	.24	.40	.45	.47	.55	.75	.99	1.04	1.05	1.07	1.08	1.08
DODGE CITY												
APR 29	.28	.48	.54	.62	.67	.98	1.16	1.16	1.16	1.24	1.29	1.29
JUN 7	.20	.32	.34	.35	.36	.36	.42	.68	.68	.68	.68	.68
JUN 13	.25	.27	.28	.28	.29	.29	.29	.29	.32	.32	.32	.32
AUG 9	.36	.50	.66	.79	.81	.82	.82	.82	.82	.82	.82	.82
AUG 12	.32	.57	.62	.64	.66	.67	.70	.77	.90	.97	1.03	1.08
AUG 17	.44	.68	.73	.87	.91	.95	.97	1.21	1.58	1.66	1.67	1.68
SEP 2	.38	.52	.64	.65	.65	.70	.70	.70	.70	.70	.70	.70
GOODLAND												
JUN 26	.28	.40	.52	.54	.66	.82	.86	.92	.97	.98	.98	.98
AUG 7	.30	.45	.47	.70	.75	.75	.75	.85	.87	.88	.89	.95
AUG 9	.25	.38	.39	.40	.40	.43	.44	.44	.44	.44	.44	.44
TOPEKA												
JUN 5	.19	.33	.44	.48	.55	.58	.58	.58	.58	.58	.58	.58
JUN 8	.24	.36	.60	.70	.82	.82	.82	.82	.82	.82	.82	.82
JUN 13	.30	.50	.64	.80	1.02	1.28	1.50	1.74	1.87	2.03	2.17	2.29
JUN 26	.15	.28	.33	.46	.57	.58	.68	.71	.72	1.04	1.16	1.26
AUG 18	.20	.34	.44	.56	.63	.95	.97	1.05	1.10	1.21	1.23	1.45
WICHITA												
FEB 8	.30	.42	.48	.52	.56	.62	.68	.73	.76	.77	.82	.84
JUN 7	.79	1.08	1.08	1.08	1.08	1.21	1.22	1.23	1.23	1.23	1.25	1.27
KENTUCKY												
COVINGTON												
MAY 28	.25	.40	.48	.57	.58	.58	.58	.58	.58	.58	.58	.58
JUN 9	.39	.57	.69	.69	.75	.76	.76	.76	.76	.76	.76	.76
JUN 13	.30	.34	.40	.41	.41	.53	.53	.54	.54	.54	.54	.54
JUL 9	.20	.30	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
JUL 13	.30	.60*	.90	1.07*	1.11	1.14	1.14	1.14	1.14	1.14	1.14	1.14
JUL 14	.20	.27	.36	.37	.39	.40	.40	.40	.40	.41	.43	.63
AUG 14	.34*	.65*	.95	1.06*	1.30	1.82*	2.01	2.12	2.15*	2.15	2.15*	2.15
NOV 10	.15	.25	.32	.40	.55	.72	.79	.92	.98	.98	1.00	1.04
LEXINGTON												
APR 28	.34	.63	.86	1.03	1.20	1.28	1.29	1.30	1.38	1.40	1.45	1.47
MAY 24	.37	.70	.87	.90	.93	.95	.97	1.49	1.58	1.61	1.85	1.89
JUN 6	.25	.32	.37	.41	.45	.47	.47	.47	.47	.47	.47	.47
JUL 6	.32	.47	.52	.55	.63	.65	1.03	1.14	1.16	1.18	1.21	1.21
JUL 11	.40	.67	.75	.80	.86	.87	.87	.87	.87	.87	.87	.87
JUL 14	.19	.35	.47	.55	.70	.93	.96	.97	.97	.97	.97	.97
JUL 18	.22	.42	.51	.52	.53	.54	.55	.56	.56	.56	.56	.56
JUL 28	.24	.33	.35	.36	.36	.39	.41	.44	.46	.47	.47	.47
AUG 10	.22	.30	.42	.53	.61	.65	.68	.83	.84	.84	.84	.88
AUG 14	.18	.30	.32	.37	.52	.53	.73	.79	.85	.93	.94	.94
LOUISVILLE												
MAY 13	.16	.29	.35	.41	.46	.50	.57	.62	.75	.78	.82	.83
MAY 21	.32	.57	.58	.58	.59	.61	.62	.62	.62	.62	.62	.62
JUL 6	.18	.30	.34	.36	.40	.42	.42	.43	.44	.46	.46	.46
AUG 14	.47	.54	.68	.76	.79	.79	.79	.79	.79	.79	.79	.79
AUG 19	.36	.64	.84	1.18	1.40	1.71	1.77	1.77	1.77	1.77	1.77	1.77
AUG 20	.30	.42	.58	.60	.63	.64	.64	.64	.64	.64	.66	.66
OCT 15	.17	.27	.35	.36	.39	.43	.44	.44	.44	.44	.44	.47
NOV 10	.26	.36	.57	.67	.87	1.00	1.07	1.16	1.20	1.20	1.20	1.20
LOUISIANA												
ALEXANDRIA												
FEB 9	.22	.28	.35	.42	.67	.74	.77	.86	.95	1.00	1.49	1.70
FEB 10	.27	.54	.60	.78	.95	1.04	1.11	1.17	1.27	1.46	1.53	1.92
APR 13	.23	.43	.46	.53	.66	.88	1.12	1.15	1.24	1.28	1.32	1.32
APR 21	.23	.35	.40	.50	.76	.90	1.07	1.22	1.50	1.65	1.77	1.99
APR 26	.41	.65	.92	.95	1.16	1.20	1.26	1.68	1.76	1.88	2.05	2.19
MAY 13	.15	.23	.35	.41	.49	.61	.72	.78	.81	.89	1.12	1.17
MAY 18	.20	.33	.40	.46	.56	.60	.62	.64	.65	.67	.68	.68
JUL 4	.24	.41	.50	.56	.60	.60	.60	.60	.60	.60	.60	.60
JUL 21 T	M	M	M	M	M	M	1.60	M	M	1.75	M	1.75
AUG 3	.29	.54	.65	.71	.76	.87	1.13	1.52	1.84	1.96	2.11	2.28
AUG 12	.23	.39	.52	.72	.98	1.01	1.03	1.08	1.10	1.13	1.15	1.15
AUG 18	.30	.55	.75	.92	1.01	1.03	1.04	1.05	1.07	1.07	1.07	1.07
AUG 18	.25	.50	.75	1.00	1.29	1.36	1.38	1.42	1.42	1.44	1.48	1.48
AUG 20	.29	.51	.59	.61	.61	.64	.64	.64	.65	.65	.65	.65
SEP 1	.26	.40	.48	.56	.67	.74	.75	.76	.77	.77	.77	.78
SEP 5	.27	.38	.38	.39	.39	.39	.40	.40	.40	.40	.40	.40
SEP 28	.34	.43	.46	.47	.49	.49	.49	.50	.52	.52	.52	.52
DEC 8 T	M	M	M	M	M	M	M	M	M	M	M	M
DEC 22	.18	.33	.41	.51	.59	.61	.63	.71	.82	.84	.84	.84
BATON ROUGE												
JAN 28	.24	.35	.37	.39	.43	.49	.55	.63	.66	.72	.85	.97
FEB 10	.19	.23	.28	.35	.44	.68	.86	.99	1.32	1.67	1.77	1.87
FEB 12	.15	.20	.33	.40	.55	.75	.99	1.15	1.30	1.50	1.75	1.99
APR 13	*.67	.97	1.08	1.15	1.28	1.35	1.55	1.86	2.06	2.12	2.16	2.16
APR 21 T	M	M	M	M	M	M	M	M	M	M	M	M
MAY 1	.27	.40	.49	.54	.58	.59	.59	.59	.59	.59	.59	.59
MAY 6	.25	.35	.43	.50	.57	.63	.67	.68	.71	.72	.99	1.23
MAY 19	.16	.25	.32	.40	.61	.66	.79	.83	.83	.83	.85	.85
JUN 12	.30	.44	.53	.63	.74	.74	.74	.74	.74	.74	.74	.74
JUL 2	.64*	1.20	1.49	1.70	2.00	2.35*	2.50	2.64	2.71	2.72	2.72	2.72
JUL 4	.20	.34	.39	.40	.41	.43	.44	.45	.46	.48	.49	.49
JUL 22	.42	.68	.86	.87	.93	.96	.96	.96	.96	.96	.96	.96
JUL 23	.28	.40	.47	.54	.77	.82	.85	.85	.85	.85	.85	.85
AUG 5	.38	.48	.60	.79	.98	1.02	1.04	1.21	1.41	1.54	1.70	1.88
AUG 10	.30	.51	.56	.57	.58	.75	.85	1.35	1.37	1.39	1.41	1.46

T CLOCK MALFUNCTION
M NO RECORD

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
LOUISIANA												
BATON ROUGE												
AUG 17	.17	.30	.46	.48	.65	.68	.70	.70	.70	.70	.71	.71
SEP 18	.60	.86	1.06	1.17	1.20	1.26	1.29	1.30	1.31	1.31	1.31	1.31
NOV 11	.25	.35	.50	.56	.73	.78	.78	.78	.78	.78	.79	.80
NOV 12	.24	.31	.40	.51	.58	.63	.64	.66	.66	.66	.66	.66
LAKE CHARLES												
FEB 10	.25	.44	.47	.55	.62	.67	.70	.72	.73	1.00	1.15	1.21
APR 18	.28	.51	.60	.74	.91	.97	1.06	1.23	1.37	1.54	1.61	1.68
APR 21	.16	.29	.33	.35	.52	.67	.86	1.03	1.18	1.30	1.38	1.38
APR 25	.26	.50	.63	.66	.66	.66	.66	.66	.71	.71	.71	.75
MAY 1	.27	.33	.45	.52	.52	.52	.52	.54	.54	.54	.54	.55
MAY 13	*.70	1.05	1.20	1.30	1.40	1.70	1.90	2.10	2.15	2.24	2.30	2.32
MAY 20	.30	.45	.46	.54	.65	.68	.70	.71	.77	.78	.82	.82
JUN 13	.45	.85	1.00	1.45	1.85	2.30	2.88	3.23	3.38	3.45	3.45	3.45
JUN 23	.26	.31	.32	.35	.46	.47	.48	.48	.48	.48	.48	.48
JUL 4	.45	.75	.77	.77	.77	.77	.77	.79	.79	.79	.85	.85
JUL 22	.20	.40	.50	.55	.85	1.05	1.20	1.33	1.44	1.75	2.30	2.63
AUG 5	.25	.40	.50	.53	.55	.55	.55	.55	.55	.55	.55	.55
AUG 6	.30	.45	.62	.82	1.07	1.15	1.15	1.15	1.15	1.15	1.15	1.15
AUG 6	.17	.25	.30	.45	.55	.66	.66	.66	.66	.66	.66	.66
AUG 11	.30	.54	.57	.59	.60	.62	.63	.69	.76	.81	.86	.96
AUG 19	.17	.34	.36	.39	.40	.41	.42	.44	.46	.46	.46	.46
SEP 1	.23	.37	.39	.40	.43	.46	.48	.48	.48	.48	.48	.48
SEP 30 T	.23	.34	.36	.41	.50	.56	.61	M	M	M	M	M
OCT 9	.26	.45	.55	.59	.68	.77	.79	.81	.81	.81	.81	.81
NOV 11	.34	.43	.46	.53	.63	.67	.82	.94	1.23	1.37	1.75	1.96
NOV 27	.23	.36	.38	.39	.41	.42	.43	.45	.45	.45	.45	.45
DEC 8	.22	.35	.35	.43	.60	.75	.93	1.18	1.50	1.62	1.73	1.85
NEW ORLEANS												
JAN 4	.17	.32	.44	.51	.62	.68	.72	.76	.80	.90	1.02	1.08
FEB 1	.27	.50	.54	.56	.57	.58	.58	.58	.58	.58	.58	.58
FEB 10	.23	.30	.38	.40	.43	.46	.50	.57	.62	.67	.70	.77
FEB 27	.20	.36	.44	.57	.67	.78	1.06	1.16	1.27	1.45	1.60	1.75
APR 13	.24	.36	.39	.53	.65	.77	.88	.90	.94	.97	1.00	1.03
APR 18	.21	.35	.40	.52	.63	.67	.68	.80	.80	.80	.81	.85
APR 19	.12	.22	.32	.37	.50	.55	.56	.68	.70	.74	.78	.85
APR 21	.33	.47	.67	.87	1.09	1.27	1.47	1.48	1.52	1.52	1.52	1.55
APR 26	.22	.40	.45	.47	.51	.57	.62	.62	.62	.62	.75	.76
MAY 18	.29	.34	.35	.50	.62	.68	.72	.75	.76	.76	.76	.76
MAY 19	.50	.95	1.13	1.35	1.62	1.72	1.77	1.86	1.88	1.99	2.03	2.12
MAY 21	.39	.56	.65	.96	1.13	1.35	1.60	1.72	1.73	1.73	1.75	1.81
JUN 15	.15	.30	.31	.37	.56	.62	.62	.67	.94	1.00	1.01	1.02
JUL 3	.28	.30	.33	.37	.51	.63	.69	.74	.74	.84	.84	.84
JUL 13	.55	.80	1.00	1.05	1.10	1.50	1.50	1.50	1.50	1.50	1.50	1.50
JUL 15	.46	.78	.85	1.07	1.37	1.67	2.00	2.10	2.13	2.16	2.20	2.26
JUL 31	.35	.53	.55	.62	.86	1.15	1.52	2.10	2.19	2.56	2.99	3.31
AUG 3	.49	.68	.73	.80	1.13	1.17	1.20	1.20	1.20	1.20	1.20	1.20
AUG 5	.43	.56	.58	.59	.60	.62	.63	.64	.64	.64	.64	.64
AUG 14	.32	.45	.57	.70	1.02	1.28	1.53	1.55	1.55	1.55	1.55	1.55
AUG 28	.25	.34	.35	.42	.60	.80	.81	.84	.84	.84	.87	.87
AUG 30	.23	.32	.38	.43	.57	.60	.60	.60	.60	.60	.60	.60
SEP 1	.25	.39	.47	.54	.63	.69	.73	.74	.74	.74	.74	.74
SEP 3	.47	.67	.77	1.12	1.48	1.60	1.64	1.66	1.66	1.66	1.66	1.66
SEP 5	.37	.60	.67	.68	.73	.74	.75	.95	.96	.97	.97	.97
SEP 12	.28	.43	.48	.58	.70	.70	.70	.70	.70	.70	.70	.70
SEP 27	.23	.33	.35	.38	.58	.73	.73	.73	.77	.78	.82	.87
DEC 31	.16	.27	.29	.37	.54	.66	.68	.71	.82	.84	.87	.87
SHREVEPORT												
JAN 31	.22	.33	.35	.37	.38	.41	.41	.41	.41	.41	.41	.41
FEB 9	.23	.44	.47	.57	.62	.68	.76	.93	1.10	1.18	1.25	1.25
APR 14	.26	.35	.39	.50	.62	.71	.72	.72	.76	.90	.99	1.00
APR 24	.44	.63	.69	.72	.82	.87	.92	1.00	1.07	1.13	1.22	1.26
APR 30	.19	.27	.46	.53	.68	.73	.74	.78	.83	.88	.94	1.03
JUN 13	.25	.43	.48	.51	.80	.80	.83	.83	.83	.83	.83	.83
JUN 13	.29	.47	.64	.86	1.08	1.09	1.11	1.12	1.12	1.13	1.13	1.13
SEP 10	.15	.25	.35	.45	.58	.63	.68	.72	.84	.88	1.02	1.08
OCT 14	.23	.31	.37	.39	.44	.45	.46	.46	.46	.46	.46	.46
MAINE												
CARIBOU												
JUN 7	.25	.37	.50	.64	.70	.72	.82	.88	.95	.99	1.02	1.03
PORTLAND												
MARYLAND												
BALTIMORE												
MAY 27	.26	.38	.45	.58	.85	.95	1.09	1.18	1.20	1.20	1.22	1.22
JUN 16	.29	.35	.35	.39	.41	.41	.41	.43	.45	.45	.45	.45
JUL 5	.65	.94	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
AUG 11	.23	.43	.44	.46	.56	.64	.69	.74	.75	.76	.77	.77
AUG 16	.28	.30	.31	.31	.31	.34	.34	.34	.34	.34	.34	.34
NOV 2	.26	.47	.50	.64	.88	1.00	1.07	1.20	1.21	1.22	1.22	1.22
BALTIMORE U												
MAY 21	.35	.53	.60	.65	.70	.72	1.00	1.05	1.15	1.15	1.15	1.15
JUN 28	.30	.36	.41	.42	.43	.44	.44	.44	.44	.45	.46	.47
JUL 5	.51	.65	.72	.90	.98	1.03	1.10	1.11	1.11	1.11	1.11	1.11
AUG 9	.44	.54	.57	.58	.59	.67	.68	.68	.68	.68	.68	.68
AUG 11	.34	.35	.38	.40	.45	.66	.72	.75	.77	.79	.82	.82
NOV 2	.28	.36	.37	.41	.71	.83	1.05	1.37	1.48	1.51	1.52	1.52
MASSACHUSETTS												
BLUE HILL												
JUL 7	.20	.25	.31	.40*	.56	.70*	.88	1.02	1.19*	1.52	1.72*	1.83

T CLOCK MALFUNCTION
M NO RECORD

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
MASSACHUSETTS												
BOSTON												
JUN 7	.28	.39	.51	.64	.88	.90	1.00	1.00	1.00	1.14	1.14	1.14
JUL 12	.18	.30	.33	.35	.40	.43	.43	.43	.43	.43	.43	.43
AUG 17	.23	.28	.35	.42	.51	.54	.57	.58	.58	.58	.58	.58
NANTUCKET												
MAY 19	.23	.43	.57	.68	.83	.90	.96	1.01	1.18	1.25	1.40	1.70
MAY 28	.16	.32	.36	.38	.40	.42	.46	.49	.58	.67	.82	.90
JUN 10	.22	.34	.43	.48	.52	.56	.60	.63	.64	.65	.66	.66
AUG 10	.13	.23	.29	.37	.51	.78	.85	.89	.91	.91	.91	.91
AUG 17	.25	.43	.47	.50	.60	.78	.83	.89	.90	.90	.90	.90
AUG 23	.39	.55	.59	.62	.67	.73	.79	.79	.80	.81	.81	.82
NOV 3	.25	.40	.48	.60	.64	.85	1.01	1.14	1.27	1.44	1.73	1.98
PITTSFIELD												
JUL 6	.20	.32	.42	.42	.47	.48	.49	.50	.50	.50	.50	.50
JUL 8	.23	.43	.48	.49	.49	.49	.50	.50	.51	.51	.51	.51
JUL 10	.27	.37	.39	.61	.70	.80	1.10	1.35	1.40	1.40	1.40	1.40
JUL 19	.40	.70	.75	1.02	1.32	1.46	1.53	2.15	2.33	2.35	2.38	2.45
JUL 26	.24	.35	.50	.50	.52	.52	.52	.52	.52	.52	.52	.52
AUG 29	.25	.41	.43	.43	.43	.43	.43	.43	.45	.45	.45	.45
MICHIGAN												
ALPENA												
JUN 13	.20	.30	.37	.38	.45	.65	.89	.92	.92	.92	.92	.92
JUL 27	.24	.36	.40	.43	.49	.53	.53	.53	.53	.53	.53	.53
SEP 4	.22	.32	.42	.44	.45	.45	.47	.63	.65	.66	.77	.87
DETROIT												
JUL 12 C	.26	.30	.35	.41	.42	.42	.53	.73	.88	.94	1.00	1.00
DETROIT M WAYNE CO												
JUN 14	.33	.49	.56	.77	1.01	1.20	1.35	1.41	1.47	1.55	1.63	1.71
JUL 12	.26	.38	.50	.57	.64	.72	.87	1.34	1.44	1.45	1.51	1.56
AUG 11	.22	.40	.46	.50	.51	.52	.52	.52	.52	.52	.52	.52
AUG 16	.26	.44	.50	.64	.88	.97	1.04	1.08	1.09	1.10	1.10	1.10
AUG 18	.21	.30	.41	.47	.62	.66	.77	.77	.77	.77	.77	.77
SEP 3	.20	.31	.39	.46	.48	.49	.49	.49	.49	.49	.49	.50
DETROIT WILLOW RUN												
JUL 4	.40	.70	.95	1.20	1.42	1.48	1.49	1.49	1.49	1.49	1.49	1.49
JUL 9	.21	.32	.33	.34	.40	.44	.45	.46	.46	.46	.46	.46
JUL 12	.60	*1.09	1.14	1.19	1.48	1.52	1.53	1.55	1.71	1.74	1.78	1.83
JUL 12	.28	.46	.58	.62	.65	.65	.69	.69	.69	.69	.69	.69
AUG 16	.55	.66	.79	1.00	1.20	1.27	1.31	1.33	1.34	1.36	1.36	1.36
SEP 3	.55	.82	.86	.94	.95	.96	.96	.96	.96	.96	.96	.98
FLINT												
JUN 9	.53	.55	.57	.62	.70	.75	.80	.85	.93	1.03	1.09	1.16
JUL 9	.28	.38	.43	.47	.51	.53	.55	.55	.55	.55	.55	.55
JUL 12	.26	.37	.38	.39	.41	.41	.41	.41	.41	.41	.41	.41
AUG 15	.28	.40	.45	.56	.65	.66	.66	.68	.75	.76	.80	.83
AUG 30	.30	.40	.42	.45	.57	.61	.63	.63	.63	.63	.63	.63
GRAND RAPIDS												
JUN 9	.18	.31	.43	.61	.80	.91	.94	1.05	1.10	1.12	1.19	1.25
JUL 9	.24	.40	.46	.50	.53	.66	.69	.69	.69	.69	.69	.69
AUG 8	.20	.30	.30	.30	.30	.36	.38	.42	.42	.42	.42	.42
AUG 15	.28	.38	.48	.68	.71	.74	.78	.80	.80	.80	.80	.80
AUG 21	.44	.70	.78	.86	.94	1.00	1.02	1.04	1.04	1.05	1.08	1.17
NOV 9	.27	.36	.43	.48	.64	.73	.78	.91	1.04	1.11	1.50	1.59
HOUGHTON LAKE												
JUN 6	.40	.50	.51	.51	.51	.51	.51	.51	.51	.51	.51	.51
JUL 26	.26	.45	.51	.55	.56	.58	.62	.62	.62	.68	.73	.74
LANSING												
JUN 9	.32	.60	.63	.66	.75	.83	.96	1.01	1.09	1.19	1.39	1.46
JUL 9	.20	.34	.35	.38	.44	.45	.47	.47	.47	.47	.47	.47
JUL 12	.34	.43	.44	.50	.52	.55	.62	.63	.63	.63	.63	.63
MARQUETTE U												
SEP 13	.23	.34	.42	.47	.51	.55	.59	.64	.72	.78	.84	.89
MUSKEGON												
AUG 1	.26	.30	.35	.45	.52	.58	.61	.63	.65	.86	.90	1.00
SAULT STE MARIE												
AUG 6	.20	.35	.38	.45	.47	.49	.50	.50	.50	.50	.50	.50
MINNESOTA												
DULUTH												
JUN 4	.19	.34	.36	.40	.40	.40	.40	.41	.41	.41	.41	.44
JUL 3	.25	.33	.35	.37	.41	.53	.70	.77	.82	.92	1.22	1.26
JUL 18	.48	.84	1.12	1.33	1.42	1.44	1.62	1.84	1.84	1.84	1.84	1.84
JUL 25	.29	.40	.42	.49	.56	.62	.63	.63	.66	.69	.75	.81
AUG 1	.33	.40	.41	.42	.46	.49	.55	.60	.66	.68	.71	.77
SEP 13	.20	.31	.32	.35	.39	.43	.49	.59	.65	.78	1.08	1.17
OCT 14	.13	.26	.32	.41	.61	.77	.94	1.16	1.36	1.51	1.52	1.54
INTERNATIONAL FALLS												
JUL 2	.38	.70	.84	1.00	*1.53	2.15	*2.90	3.38	3.50	*3.65	4.05	*4.20
JUL 3	.19	.34	.40	.43	.46	.47	.53	.55	.56	.60	.61	.64
JUL 4	.35	.48	.49	.50	.52	.54	.57	.58	.58	.58	.58	.58
JUL 31	.73	1.01	1.02	1.02	1.02	1.06	1.07	1.16	1.56	1.59	1.83	2.16

C RECORD ENDED AUGUST 1.

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
MINNESOTA												
MINNEAPOLIS												
JUN 4	.25	.41	.48	.55	.62	.76	.80	.86	.88	.89	.89	.89
JUN 11	.30	.47	.48	.48	.48	.48	.48	.48	.48	.48	.48	.48
JUL 10	.20	.31	.42	.54	.67	.76	.79	.79	.79	.79	.79	.80
AUG 6	.16	.28	.32	.42	.50	.54	.58	.77	.84	.95	1.00	1.01
AUG 15	.13	.23	.34	.46	.55	.68	.72	.74	.75	.76	.86	.88
OCT 14	.26	.32	.37	.44	.49	.50	.50	.50	.51	.52	.52	.82
ROCHESTER												
JUN 25	.20	.30	.32	.32	.32	.32	.32	.32	.32	.32	.36	.53
JUL 13	.40	.66	.92	1.17	1.35	1.43	1.49	1.52	1.54	1.55	1.56	1.57
AUG 6	.44	.82	1.17	1.37	1.61	1.72	1.75	1.78	1.95	2.01	2.07	2.11
OCT 14	.37	.53	.65	.78	1.05	1.17	1.19	1.20	1.20	1.20	1.20	1.20
ST CLOUD												
JUN 2	.23	.31	.35	.43	.50	.58	.64	.68	.70	.70	.70	.70
JUN 3	.22	.40	.46	.51	.55	.55	.55	.55	.55	.55	.55	.55
JUL 10	.25	.40	.41	.44	.63	.82	1.05	1.15	1.17	1.18	1.29	1.32
JUL 11	.23	.40	.46	.52	.81	1.09	1.23	1.24	1.25	1.25	1.25	1.25
AUG 6	.27	.44	.48	.63	.72	.78	.99	1.02	1.03	1.04	1.05	1.05
SEP 1	.29	.39	.43	.45	.50	.53	.54	.54	.54	.54	.54	.54
MISSISSIPPI												
JACKSON												
FEB 10	.30	.50	.60	.72	.75	.78	.87	.94	1.00	1.08	1.17	1.32
MAR 3	.30	.36	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40
MAR 3	.38	.75	.75	.75	.75	.75	.75	.78	.83	.83	.83	.83
APR 21	.22	.31	.36	.42	.62	.90	1.07	1.17	1.27	1.39	1.46	1.52
APR 26	.21	.38	.51	.59	.65	.79	.81	.84	.87	.93	1.01	1.03
MAY 18	.18	.30	.33	.40	.58	.64	.67	.73	.73	.73	.97	.97
MAY 19	.28	.53	.77	.93	1.32	1.70	1.91	2.00	2.18	2.24	2.29	2.41
MAY 24	.30	.43	.48	.60	.78	.81	.85	1.35	1.39	1.41	1.41	1.41
JUN 16	.20	.34	.45	.51	.60	.62	.63	.63	.64	.64	.64	.64
JUL 17	.40	.41	.42	.43	.43	.43	.43	.43	.43	.43	.43	.43
JUL 30	.35	.60	.70	.90	1.10	1.30	1.36	1.38	1.40	1.41	1.41	1.41
AUG 3	.14	.28	.31	.40	.51	.59	.62	.65	.65	.65	.65	.65
AUG [illegible]	.25	.40	.50	.59	.72	.77	.80	.82	.83	.83	.83	.83
AUG 10	.58	1.10	1.26	1.47	*2.26	2.55	*2.56	2.56	2.56	2.56	2.58	2.60
AUG 20	.42	.50	.55	.66	.68	.70	.71	.72	.73	.74	.74	.74
SEP 4	.30	.34	.38	.38	.38	.38	.38	.38	.38	.38	.38	.38
SEP [illegible]	.48	.66	.74	.80	.85	.90	.90	.98	1.03	1.03	1.04	1.06
SEP 15	.32	.36	.36	.38	.40	.40	.40	.40	.40	.40	.40	.40
SEP 17	.26	.32	.33	.35	.36	.42	.51	.51	.52	.52	.52	.52
SEP 28	.25	.40	.64	.74	.94	.97	.97	.97	.97	.97	.97	.97
DEC 28	.35	.44	.47	.55	.64	.79	.84	.86	.87	.89	.92	.92
MERIDIAN												
FEB 10	.22	.37	.43	.60	.72	.93	1.10	1.18	1.25	1.33	1.45	1.66
APR 4	.26	.30	.35	.36	.40	.42	.50	.51	.54	.55	.55	.55
MAY 1	.23	.37	.43	.48	.54	.56	.67	.74	1.01	1.03	1.05	1.12
MAY 1	.18	.34	.34	.34	.34	.34	.34	.34	.34	.35	.38*	.
MAY 18	.27	.33	.38	.42	.47	.50	.70	.92	.97	.99	.99	.99
MAY 19	.32	.45	.52	.60	.87	.92	1.02	1.20	1.30	1.34	1.40	1.40
MAY 26	.22	.36	.40	.49	.58	.67	.72	.77	.82	.82	.86	.88
JUL 16	.16	.30	.35	.47	.65	.74	.79	.80	.87	.93	.97	.98
AUG 2	.27	.48	.63	.80	1.08	1.20	1.23	1.26	1.30	1.30	1.30	1.30
AUG 3	.20	.38	.41	.54	.68	.84	.94	.97	.99	.99	1.00	1.00
AUG 10	.30	.50	.55	.62	.64	.65	.65	.65	.66	.67	.68	.68
AUG 15	.29	.44	.49	.53	.64	.65	.88	.93	.95	.97	.98	1.25
AUG 19	.49	.87	1.14	1.42	1.65	1.73	1.78	1.80	1.83	1.89	2.16	2.23
SEP 4	.21	.32	.34	.34	.35	.38	.38	.39	.40	.40	.40	.41
SEP 18	.22	.33	.38	.44	.62	.81	1.07	1.14	1.16	1.17	1.17	1.17
NOV 11	.13	.22	.30	.38	.57	.68	.83	.88	.97	1.01	1.03	1.11
DEC 9	.18	.33	.35	.43	.56	.72	.83	.91	1.15	1.30	1.37	1.48
VICKSBURG U												
FEB 10	.37	.58	.76	.86	1.32	1.54	1.75	2.00	2.17	2.32	3.10	3.37
APR 20	.45	.67	1.04	1.33	1.65	1.77	2.09	2.21	2.25	2.31	2.46	2.78
APR 28	.29	.44	.55	.74	.94	.94	.97	1.00	1.00	1.00	1.03	1.04
APR 29	.38	.50	.54	.67	1.07	1.19	1.21	1.23	1.45	1.58	1.64	1.68
MAY 19	.23	.29	.42	.57	.71	1.04	1.21	1.58	1.74	1.81	1.83	1.86
MAY 21	.19	.31	.47	.60	.72	.87	1.01	1.16	1.34	1.37	1.37	1.37
JUN 16	.23	.45	.64	.84	1.08	1.40	1.46	1.50	1.55	1.56	1.56	1.56
AUG 19	.35	.48	.49	.53	.53	.53	.53	.53	.54	.66	.66	.66
SEP 1	.25	.36	.51	.59	.68	.78	.81	.81	.82	.83	.84	.84
SEP 17	.20	.30	.44	.59	.87	1.07	1.18	1.18	1.18	1.18	1.18	1.18
SEP 18	.35	.59	.77	1.01	1.18	1.28	1.31	1.34	1.37	1.43	1.55	1.61
SEP 27	.18	.33	.45	.49	.49	.49	.49	.49	.49	.49	.49	.49
SEP 30	.19	.31	.38	.44	.71	.79	.81	.82	.87	.94	1.04	1.05
NOV 10	.32	.40	.50	.55	.57	.60	.61	.61	.61	.61	.88	.94
DEC 8	.32	.41	.43	.43	.43	.43	.43	.43	.43	.43	.43	.43
DEC 8	.31	.46	.55	.77	.86	.99	1.29	1.53	1.55	1.55	1.55	1.55
MISSOURI												
COLUMBIA												
JUN 6	.23	.32	.34	.35	.36	.36	.37	.37	.38	.38	.38	.38
JUN 8	.33	.42	.43	.44	.48	.51	.71	.79	.79	.79	.79	.79
JUL 15	.26	.34	.60	.62	.64	.65	.66	.66	.66	.66	.66	.66
JUL 19	.28	.45	.51	.66	.83	.88	1.07	1.22	1.31	1.36	1.39	1.41
JUL 29	.54	1.08	1.40	1.64	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.83
SEP 3	.41	.75	1.04	1.26	1.34	1.42	1.44	1.44	1.44	1.44	1.44	1.44
OCT 14	.25	.34	.38	.43	.59	.80	.82	.83	1.12	1.15	1.15	1.15
KANSAS CITY												
MAR 21	.18	.30	.42	.53	.66	.79	.79	.79	.79	.79	.79	.79
MAY 15	.22	.42	.45	.46	.46	.46	.46	.46	.46	.46	.46	.46
JUN 4	.23	.37	.42	.44	.44	.45	.45	.45	.45	.45	.45	.46
JUN 8	.15	.21	.30	.39	.59	.67	.85	.95	.96	1.16	1.23	1.26
JUN 12	.25	.44	.62	.70	.90	1.06	1.25	1.36	1.42	1.44	1.54	1.78
JUN 13	.18	.35	.46	.50	.53	.56	.58	.63	.65	.67	.71	.74
AUG 7	.18	.31	.32	.35	.36	.38	.38	.38	.38	.38	.62	.65
AUG 17	.20	.32	.40	.43	.50	.53	.54	.97	1.01	1.01	1.01	1.01
AUG 18	.16	.32	.47	.63	.87	.93	.94	.94	1.01	1.06	1.16	1.26
SEP 3	.24	.44	.60	.80	.95	.97	.98	.98	.98	.98	.98	.98

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1966

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
MISSOURI												
ST LOUIS												
MAR 3	.25	.34	.46	.50	.50	.50	.50	.50	.50	.50	.50	.50
MAY 17	.28	.56	.66	.80	.96	1.42	1.45	1.46	1.46	1.46	1.46	1.48
MAY 23	.14	.26	.36	.46	.50	.52	.52	.54	.56	.56	.56	.56
JUL 28	.22	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34	.34
AUG 1	.16	.32	.38	.38	.38	.39	.70	.70	.70	.70	.83	.89
AUG 14	.21	.41	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
AUG 15	.38	.52	.66	.70	.84	.93	.93	.95	.95	.95	.95	.95
OCT 14	.20	.31	.40	.41	.48	.61	.63	.68	.68	.72	.76	.76
SPRINGFIELD												
SEP 14	.28	.35	.45	.46	.49	.60	.69	1.13	1.15	1.19	1.20	1.20
APR 19	.26	.46	.52	.56	.66	.82	.85	.88	.93	.99	1.01	1.05
APR 20	.18	.30	.32	.34	.38	.42	.57	.72	.86	.89	.93	.97
JUN 13	.21	.35	.40	.42	.45	.48	.50	.56	.61	.63	.68	.70
JUL 15	.58	.88	1.20	1.40	1.64	1.65	1.65	1.65	1.65	1.65	1.65	1.65
JUL 29	.24	.48	.60	.61	.69	.88	1.06	1.20	1.21	1.29	1.43	1.47
AUG 2	.18	.30	.41	.46	.69	.70	.73	.75	.76	.79	.85	.86
AUG 10	.21	.36	.43	.51	.62	.71	.76	.81	.90	1.03	1.19	1.29
AUG 16	.22	.35	.42	.45	.51	.52	.52	.52	.52	.52	.52	.52
AUG 19	.28	.51	.65	.73	.76	.80	.81	.81	.81	.81	.81	.81
SEP 26	.18	.28	.40	.49	.54	.63	.64	.68	.69	.70	.71	.72
NOV 9	.22	.37	.57	.60	.69	.85	1.03	1.16	1.25	1.32	1.37	1.38
MONTANA												
BILLINGS												
JUL 14	.27	.40	.47	.49	.49	.49	.49	.49	.49	.49	.49	.50
JUL 25	.30	.50	.78	.86	.92	.92	.92	.92	.92	.92	.92	.92
GLASGOW												
JUL 28	.32	.42	.47	.60	.62	.75	.84	.84	.84	.84	.84	.84
AUG 19	.38	.56	.64	.85*	.92	.93	.94	1.01	1.03	1.04	1.04	1.07
GREAT FALLS												
JUN 3	.21	.35	.38	.42	.49	.52	.52	.52	.52	.52	.52	.52
JUL 12	.20	.24	.30	.32	.40	.65	.66	.66	.66	.71	.73	.76
HAVRE						NONE						
HELENA						NONE						
KALISPELL						NONE						
MISSOULA						NONE						
NEBRASKA												
GRAND ISLAND												
JUL 22	.27	.36	.41	.53	.65	.72	.78	.79	.79	.79	.79	.79
JUL 26	.26	.50	.55	.67	.78	.80	.87	.93	.94	.94	.94	.94
JUL 29	.38	.66	.76	.82	.85	.90	.95	1.02	1.04	1.05	1.05	1.05
LINCOLN J												
JUN 27	.48	.74	.85	.97	1.32	1.46	1.46	1.46	1.47	1.47	1.50	1.83
JUL 15	.28	.33	.34	.35	.38	.39	.39	.39	.39	.39	.39	.39
JUL 26	.25	.42	.47	.50	.66	.81	.85	.86	.89	.90	.95	.98
AUG 13	.21	.25	.34	.42	.50	.55	.60	.66	.71	.73	.74	.75
AUG 20	.25	.45	.50	.65	.70	.75	.78	1.40	1.41	1.53	1.54	1.55
SEP 1	.40	.55	.70	.77	.78	.78	.78	.78	.78	.79	.80	.80
NORFOLK												
MAY 16	.27	.31	.33	.38	.40	.43	.48	.51	.51	.51	.51	.51
JUN 3	.24	.35	.43	.50	.55	.55	.61	.65	.68	.74	.80	.85
JUL 26	.18	.35	.45	.52	.63	.67	.73	.73	.73	.73	.73	.73
AUG 12	.45	.60	.77	.86	1.00	1.09	1.14	1.23	1.30	1.34	1.37	1.43
SEP 1	.31	.33	.35	.35	.35	.37	.45	.58	.58	.62	.62	.62
NORTH PLATTE												
JUN 23	.21	.37	.39	.47	.75	.88	1.08	1.30	1.71	2.06	2.28	2.37
JUL 14	.28	.54	.54	.64	.75	.93	1.00	1.04	1.08	1.10	1.13	1.13
JUL 26	.28	.56	.60	.73	.81	.96	1.01	1.02	1.02	1.03	1.03	1.03
AUG 20	.20	.28	.31	.35	.51	.53	.54	.55	.55	.55	.55	.55
OMAHA												
MAY 22	.28	.53	.62	.80	1.17	1.27	1.39	1.39	1.39	1.39	1.39	1.39
JUN 5	.53	.81	.84	.94	1.08	1.13	1.13	1.13	1.13	1.13	1.13	1.13
JUN 26	.27	.48	.54	.68	.75	.90	1.05	1.13	1.30	1.40	1.47	1.69
JUL 5	.22	.42	.45	.62	.78	.95	.96	.98	.98	.98	.98	.98
JUL 15	.24	.39	.45	.50	.71	.83	.89	.92	1.16	1.25	1.40	1.44
JUL 26	.40	.64	.78	.88	1.40	1.66	1.73	1.76	1.78	1.80	1.80	1.80
AUG 1	.27	.33	.34	.35	.36	.43	.51	.54	.54	.54	.54	.54
SEP 3	.27	.39	.40	.44	.45	.46	.47	.50	.52	.53	.53	.53
SCOTTSBLUFF												
JUL 13	.34	.54	.71	.81	.93	1.01	1.03	1.10	1.12	1.16	1.16	1.16
JUL 21	.42	.69	.92	.94	.95	.95	.95	.95	.95	.95	.95	.95
VALENTINE												
JUN 1	.20	.35	.45	.53	.57	.58	.58	.63	.63	.64	.68	.71
JUN 22	.15	.30	.34	.38	.55	.63	.67	.73	.74	.78	.86	.93
JUL 11	.32	.51	.51	.51	.60	.73	.78	.79	.96	.99	.99	.99
AUG 11	.46	.76	.80	.98	1.14	1.18	1.29	1.31	1.31	1.51	1.90	2.10
AUG 12	.32	.46	.47	.50	.55	.71	.77	.80	.81	.81	.81	.81
AUG 31	.24	.46	.50	.60	.70	.90	1.02	1.08	1.13	1.23	1.35	1.50
SEP 13	.12	.24	.29	.40	.57	.65	.71	.80	.84	.89	.93	.94

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
NEVADA												
VALENTINE						NONE						
ELY						NONE						
LAS VEGAS						NONE						
RENO						NONE						
WINNEMUCCA						NONE						
NEW HAMPSHIRE												
CONCORD												
AUG 11	.18	.30	.40	.47	.50	.67	.81	.83	.86	.88	.92	.92
SEP 22	.16	.26	.37	.42	.55	.61	.66	.90	1.03	1.05	1.07	1.08
NEW JERSEY												
ATLANTIC CITY												
JUL 7	.26	.36	.42	.43	.44	.46	.46	.46	.46	.46	.46	.46
JUL 19	.26	.32	.38	.41	.49	.60	.63	.71	.74	.75	.93	1.01
AUG 2	.26	.44	.47	.47	.54	.70	.80	.91	1.12	1.25	1.30	1.31
AUG 23	.60	1.05	1.35	1.50	2.35	2.75	3.00	3.60	4.00	4.70	5.45	*6.09
SEP 21	.22	.34	.45	.50	.82	1.06	1.10	1.11	1.13	1.20	1.42	1.67
NOV 28	.26	.40	.41	.46	.50	.51	.53	.55	.56	.57	.66	.69
NEWARK												
MAY 19	.20	.39	.55	.75	.80	.90	1.10	1.20	1.40	1.45	1.71	1.92
AUG 11	.45	.58	.62	.66	.67	.68	.74	.77	.77	.77	.77	.77
AUG 16	.32	.54	.62	.72	.78	.86	1.23	1.27	1.30	1.32	1.33	1.34
SEP 21	.20	.30	.45	.50	.70	.90	1.25	1.45	1.70	2.00	2.30	2.45
TRENTON U												
MAY 19	.15	.25	.36	.41	.56	.72	.81	.99	1.13	1.20	1.39	1.57
MAY 19	.25	.33	.40	.44	.51	.51	.51	.51	.51	.51	.51	.51
SEP 14	.20	.29	.40	.51	.72	.87	.96	1.05	1.18	1.27	1.34	1.45
SEP 21	.21	.27	.30	.44	.57	.71	.86	1.01	1.08	1.35	1.57	1.76
SEP 22	.22	.36	.39	.41	.42	.42	.42	.42	.42	.42	.43	.43
NOV 28	.27	.39	.45	.47	.54	.57	.61	.66	.69	.73	.81	.84
NEW MEXICO												
ALBUQUERQUE												
JUL 15	.19	.27	.35	.43	.46	.47	.47	.47	.47	.47	.47	.47
JUL 16	.28	.50	.60	.63	.64	.64	.64	.64	.64	.64	.64	.64
OCT 11	.28	.44	.46	.47	.54	.54	.54	.54	.54	.54	.54	.54
CLAYTON												
JUN 17	* .80	*1.25	*1.55	1.63	*1.79	1.82	*1.95	2.35	1.43	1.44	1.44	1.44
AUG 17	.30	.60	.75	1.00	1.24	1.27	1.27	1.27	1.27	1.27	1.27	1.27
SEP 15	.30	.50	.65	.70	1.00	1.01	1.01	1.02	1.02	1.02	1.02	1.03
RATON												
JUL 6	.42	.64	.76	.84	1.13	1.37	1.58	1.61	1.63	1.63	1.63	1.63
JUL 14	.28	.43	.48	.52	.60	.61	.62	.63	.63	.63	.63	.65
JUL 29	.27	.51	.58	.67	.78	.81	.81	.82	.83	.84	.90	.92
AUG 21	.31	.41	.44	.50	.56	.58	.59	.60	.60	.60	.60	.60
SEP 22	.30	.40	.42	.43	.47	.48	.48	.48	.48	.48	.48	.48
ROSWELL												
JUN 1	.27	.35	.41	.48	.63	.68	.68	.68	.68	.68	.68	.68
SILVER CITY						NONE						
NEW YORK												
ALBANY												
JUN 6	.31	.36	.37	.38	.40	.40	.40	.40	.40	.40	.40	.40
JUN 14	.36	.56	.70	.70	.71	.71	.72	.72	.72	.72	.72	.72
JUL 8	.36	.57	.58	.59	.59	.59	.59	.59	.59	.59	.59	.59
JUL 19	.25	.45	.57	.66	.97	1.23	1.32	1.60	1.68	1.70	1.91	2.02
BINGHAMTON												
JUN 9	.44	.52	.54	.60	.68	.77	.79	.99	1.07	1.11	1.18	1.28
BUFFALO												
JUL 10	.18	.27	.38	.41	.61	.69	.72	.77	.77	.77	.77	.77
JUL 19	.32	.40	.55	.64	.77	.88	.97	.97	.97	.97	.97	.97
JUL 27	.24	.38	.42	.54	.58	.65	.86	.89	.91	1.06	1.12	1.12
JUL 28	.27	.38	.45	.55	.60	.60	.60	.60	.84	1.15	1.56	1.56
SEP 4	.23	.32	.33	.35	.38	.38	.38	.38	.38	.38	.38	.38
NEW YORK CENT PK												
JUN 10	.25	.39	.41	.47	.50	.56	.56	.57	.57	.57	.57	.57
SEP 21	.25	.42	.37	.40	.48	.52	.66	.76	1.00	1.08	1.36	1.53
NEW YORK LA GUARDIA												
MAY 19	.13	.25	.38	.44	.64	.90	1.00	1.09	1.21	1.31	1.48	1.64
JUN 7	* .59	.76	.79	.80	.80	.80	.80	.80	.80	.80	.81	.81
AUG 16	.15	.23	.35	.46	.58	.61	.62	.63	.68	.68	.68	.68
SEP 21	.27	.30	.35	.35	.35	.36	.36	.36	.36	.39	.44	.47
ROCHESTER												
JUL 28	.54	.84	1.02	1.11	1.26	1.31	1.44	1.47	1.48	1.48	1.48	1.48

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1966

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
NEW YORK												
SYRACUSE												
JUN 5	.28	.39	.44	.44	.44	.45	.46	.46	.47	.47	.49	.49
JUN 9	.30	.38	.40	.41	.44	.56	.70	.81	.82	.82	.87	.93
JUL 19	.24	.26	.35	.44	.54	.57	.57	.57	.57	.57	.57	.58
AUG 16	.24	.44	.48	.54	.59	.61	.61	.61	.61	.61	.61	.61
SEP 4	.39	.47	.53	.57	.59	.86	.99	1.04	1.13	1.53	1.58	1.60
NORTH CAROLINA												
ASHEVILLE												
APR 28	.21	.41	.48	.63	.79	.93	.98	1.00	1.01	1.02	1.03	1.07
APR 30	.16	.31	.34	.41	.59	.71	.84	.94	.99	1.10	1.19	1.35
MAY 14	.35	.49	.53	.63	.87	.92	.96	1.05	1.28	1.28	1.29	1.29
JUN 10	.28	.54	.70	.86	1.02	1.03	1.03	1.03	1.03	1.08	1.08	1.21
JUL 19	.30	.45	.47	.50	.52	.55	.55	.55	.55	.55	.55	.55
AUG 3	.25	.32	.36	.39	.40	.40	.40	.40	.40	.40	.40	.40
AUG 3	*.53	*.86	*.99	1.21	*1.33	1.56	*1.69	1.70	1.97	*2.10	2.22	*2.23
AUG 13	.32	.58	.63	.74	1.07	1.08	1.10	1.11	1.12	1.12	1.12	1.12
AUG 20	.15	.30	.34	.46	.50	.50	.51	.53	.54	.55	.55	.55
CAPE HATTERAS R												
MAR 4	.40	.75	.80	.89	1.00	1.01	1.04	1.08	1.13	1.16	1.21	1.23
MAY 25	.27	.33	.37	.41	.52	.59	.66	.77	.96	1.11	1.18	1.18
JUN 11	.12	.22	.34	.42	.55	.68	.90	1.08	1.33	1.40	1.58	1.89
JUL 30	.23	.33	.34	.41	.48	.50	.53	.56	.56	.56	.65	.81
AUG 18	.37	.43	.52	.77	.89	.99	1.04	1.09	1.27	1.29	1.31	1.38
SEP 13	.16	.31	.37	.38	.39	.39	.40	.40	.40	.41	.42	.45
SEP 20	.35	.57	.58	.59	1.04	1.15	1.31	1.52	1.54	1.60	1.61	1.61
SEP 22	.30	.48	.51	.54	.69	.74	.77	.79	.79	.79	.79	.79
OCT 1	.25	.40	.45	.50	.80	1.10	1.20	1.23	1.26	1.28	1.30	1.31
OCT 4	.29	.46	.60	.62	.65	.80	.81	.84	.90	.95	.96	.96
DEC 29	.25	.38	.41	.46	.53	.77	1.00	1.13	1.18	1.25	1.28	1.28
CHARLOTTE												
MAR 4	.22	.36	.45	.50	.56	.66	.69	.80	.91	.99	1.10	1.24
MAR 4	.22	.36	.45	.50	.56	.66	.69	.80	.91	.99	1.10	1.24
MAY 26	.24	.38	.44	.49	.51	.53	.53	.53	.53	.53	.53	.53
JUN 29	.18	.32	.44	.58	.58	.58	.58	.58	.58	.58	.58	.58
AUG 15	.22	.35	.43	.54	.58	.59	.62	.65	.68	.71	.80	.82
SEP 19	.25	.34	.38	.40	.50	.59	.85	.94	1.02	1.16	1.25	1.35
SEP 21	.38	.64	.94	1.00	1.04	1.08	1.08	1.08	1.08	1.08	1.08	1.08
NOV 2	.25	.30	.33	.34	.35	.36	.36	.36	.36	.36	.36	.36
GREENSBORO												
MAY 29	.23	.38	.54	.64	.72	.81	.84	.90	.97	.97	.97	.97
JUN 8	.16	.32	.46	.50	.66	.82	.88	.88	.88	.89	.90	.91
JUN 18	.40	.65	.80	.84	.93	1.00	1.04	1.09	1.10	1.14	1.15	1.15
AUG 9	.25	.29	.30	.31	.31	.31	.31	.32	.32	.32	.32	.32
AUG 12	.38	.57	.63	.67	.69	.70	.70	.70	.70	.70	.70	.70
AUG 20	.13	.24	.33	.45	.55	.57	.57	.57	.57	.57	.57	.57
RALEIGH												
MAY 21	.20	.38	.55	.67	.90	.95	1.00	1.09	1.18	1.26	1.38	1.49
JUN 16	.28	.52	.57	.60	.65	.65	.65	.66	.66	.66	.66	.66
JUN 18	.40	.73	1.02	1.03	1.18	1.22	1.23	1.38	1.45	1.47	1.52	1.54
JUN 29	.42	.70	.95	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
AUG 4	.23	.39	.50	.59	.96	1.05	1.17	1.21	1.23	1.24	1.24	1.24
AUG 12	.25	.36	.49	.70	.91	1.01	1.03	1.05	1.06	1.10	1.10	1.10
NOV 2	.34	.49	.54	.55	.55	.55	.56	.56	.56	.56	.56	.56
WILMINGTON												
FEB 28	.15	.29	.34	.40	.65	.91	1.14	1.35	1.47	1.54	1.74	1.85
MAY 2	.16	.30	.35	.49	.68	.80	1.10	1.36	1.46	1.49	1.54	1.55
MAY 14	.28	.38	.41	.42	.62	.76	.79	.83	.90	.91	1.16	1.16
MAY 21	.25	.45	.54	.63	.69	.70	.76	.80	.84	.86	.89	1.02
JUN 11	.27	.48	.57	.70	.88	1.10	1.35	1.80	1.95	2.25	2.68	3.29
JUL 6	.25	.45	.60	.70	.74	.74	.74	.74	.75	.75	.75	.75
JUL 9	.41	.80	.95	1.19	1.69	2.44	3.33	4.05	4.60	4.90	5.30	*5.43
JUL 15	.30	.57	.73	.81	1.12	1.56	1.71	1.74	1.74	1.79	1.87	2.21
JUL 30	.25	.45	.54	.63	.77	.86	.86	.95	1.54	1.56	1.60	1.65
AUG 15	.19	.37	.39	.43	.54	.55	.57	.63	.78	.89	1.18	1.20
AUG 19	.47	.82	.85	1.00	1.27	1.67	1.73	1.73	1.73	1.73	1.73	1.73
SEP 4	.17	.30	.40	.49	.60	.78	.89	.93	.94	.94	.94	.94
SEP 5	.22	.30	.35	.43	.59	.85	1.09	1.15	1.17	1.20	1.20	1.36
SEP 19	.26	.41	.51	.58	.66	.73	.76	.80	.90	.95	1.00	1.11
SEP 21	.17	.34	.35	.37	.39	.39	.39	.39	.39	.39	.39	.39
NORTH DAKOTA												
BISMARCK												
JUN 22	.19	.36	.41	.44	.46	.49	.53	.58	.60	.60	.60	.60
JUN 24	.36	.40	.54	.66	.81	.87	.93	.95	.99	1.05	1.08	1.08
JUL 2	.18	.25	.28	.36	.47	.65	.72	1.00	1.01	1.02	1.04	1.06
JUL 27	.20	.31	.36	.41	.44	.57	.61	.62	.63	.64	.66	.67
JUL 31	.27	.45	.58	.72	1.08	1.19	1.32	1.38	1.38	1.40	1.40	1.40
FARGO												
MAY 23	.19	.35	.43	.53	.56	.58	.59	.61	.64	.70	.76	.78
JUN 24	.16	.30	.41	.43	.46	.48	.50	.50	.50	.50	.50	.50
JUL 8	.18	.32	.40	.48	.69	.73	.73	.73	.73	.73	.73	.73
JUL 26	.34	.64	.69	.80	.88	.88	.88	.88	.88	.88	.88	.88
WILLISTON						NONE						
OHIO												
AKRON												
APR 28	.22	.34	.38	.39	.40	.40	.40	.40	.40	.40	.40	.40
MAY 12	.28	.32	.35	.35	.36	.37	.43	.46	.49	.49	.49	.49
JUN 28	.29	.48	.54	.57	.64	.65	.68	.69	.71	.73	.77	.77
JUL 10	.25	.44	.54	.60	.65	.81	.83	.86	.86	.86	.86	.86
AUG 10	.30	.38	.52	.54	.58	.79	1.12	1.18	1.18	1.20	1.22	1.41
SEP 3	.23	.32	.49	.54	.57	.59	.60	.60	.63	.64	.64	.64
OHIO												
CINCINNATI OBS												
MAY 28	.17	.31	.41	.42	.58	.60	.60	.62	.71	.72	.73	.73
AUG 22	.18	.29	.35	.37	.38	.38	.38	.54	.55	.55	.55	.55
SEP 20	.21	.36	.48	.54	.61	.73	.80	.91	1.00	1.07	1.10	1.10
NOV 10	.15	.30	.35	.45	.58	.70	.81	.93	1.00	1.06	1.07	1.10
CINCINNATI U												
JUN 5	.25	.43	.45	.63	.72	.77	.82	.82	.82	.82	.82	.87
JUL 3	.25	.45	.57	.62	.64	.73	.73	.73	.73	.73	.73	.73
JUL 13	.19	.33	.42	.48	.55	.56	.56	.56	.56	.56	.56	.56
JUL 14	.30	.50	.64	.67	.68	.69	.69	.69	.69	.69	.69	.69
JUL 28	.40	.56	.67	.82	.84	.85	.89	.94	.97	.97	.97	.97
AUG 10	.21	.28	.40	.42	.50	.52	.55	.58	.69	.74	.77	.82
AUG 14	.25	.42	.47	.55	.85	.95	1.00	1.05	1.08	1.09	1.10	1.10
NOV 6	.16	.25	.30	.38	.52	.65	.90	1.02	1.09	1.12	1.14	1.16
CLEVELAND												
JUL 24	.50	.60	.79	1.04	1.35	1.58	1.77	1.90	1.90	1.93	1.93	1.93
AUG 2	.18	.24	.37	.39	.40	.43	.46	.51	.51	.51	.51	.52
AUG 10	.44	.57	.65	.68	.69	.69	.69	.70	.70	.70	.70	.70
COLUMBUS												
APR 27	.37	.69	.70	.73	.74	.76	.76	.76	.82	.84	.84	.84
JUL 10	.40	.70	.98	1.08	1.17	1.43	1.80	1.86	1.88	1.88	1.88	1.88
JUL 12	.25	.30	.33	.36	.47	.69	.70	.78	.79	.79	.79	.79
JUL 12	.26	.39	.43	.46	.63	.78	.81	.87	.92	.95	.96	.96
AUG 2	.31	.53	.67	.79	.82	.86	.92	.99	1.03	1.03	1.03	1.03
AUG 10	.37	.50	.59	.63	.67	.70	.75	.91	1.03	1.09	1.14	1.21
AUG 16	.24	.32	.48	.51	.55	.55	.56	.56	.57	.57	.57	.57
DAYTON												
JUN 27	.50	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55	.55
JUN 28	.20	.35	.42	.42	.42	.42	.42	.42	.42	.42	.42	.44
JUL 4	.20	.27	.38	.43	.49	.49	.49	.49	.49	.49	.49	.49
JUL 12	.15	.25	.35	.46	.57	.71	.73	.73	.75	.75	.95	.97
AUG 2	.20	.30	.34	.35	.37	.42	.53	.57	.59	.60	.72	.83
MANSFIELD												
AUG 10	.32	.58	.83	1.00	1.15	1.23	1.35	1.58	1.59	1.75	1.97	*2.16
AUG 22	.26	.40	.56	.77	.93	1.02	1.02	1.02	1.02	1.02	1.02	1.03
TOLEDO												
JUL 4	.16	.30	.31	.40	.55	.60	.63	.85	.89	.89	.89	.89
JUL 12	.19	.35	.35	.36	.36	.36	.36	.36	.36	.36	.36	.36
JUL 12	.34	.58	.68	.81	.84	.84	.84	.84	.95	.98	.98	1.15
AUG 9	.18	.35	.37	.41	.43	.46	.51	.58	.60	.62	.64	.65
AUG 16	.13	.26	.37	.39	.41	.41	.41	.41	.41	.41	.41	.41
AUG 21	.44	.83	.90	1.11	1.66	1.67	1.67	1.67	1.71	1.71	1.72	1.73
YOUNGSTOWN												
JUN 9	.25	.25	.27	.40	.42	.43	.50	.73	.88	.92	1.08	1.08
JUL 19	.25	.45	.60	.73	.94	.96	.96	.96	.96	.96	.96	.96
JUL 24	.30	.55	.70	.85	.98	.99	1.00	1.00	1.00	1.00	1.00	1.00
AUG 8	.31	.53	.54	.57	.58	.60	.61	.61	.61	.61	.61	.61
AUG 10	.52	.63	.67	.70	.75	.91	.91	.91	.91	.91	.91	1.14
AUG 15	.31	.50	.65	.72	.73	.74	.75	.75	.75	.75	.75	.75
OKLAHOMA												
OKLAHOMA CITY												
MAR 12	.23	.32	.38	.43	.52	.58	.64	.71	.84	.99	1.06	1.13
JUN 15	.50	.60	.61	.66	.90	.99	1.00	1.00	1.00	1.00	1.00	1.00
JUN 16	.23	.37	.39	.46	.53	.57	.58	.61	.64	.67	.69	.69
JUL 23	.20	.40	.55	.65	.84	.91	.94	.99	1.02	1.03	1.05	1.08
AUG 18	.19	.32	.45	.64	.89	1.21	1.41	1.76	1.95	2.15	2.50	2.62
AUG 31	.25	.47	.52	.70	1.03	1.38	1.66	1.78	1.84	1.88	2.05	2.15
SEP 13	.15	.30	.35	.43	.56	.65	.67	.69	.69	.69	.69	.69
NOV 26	.23	.30	.35	.38	.45	.47	.53	.55	.57	.62	.67	.68
TULSA												
JUN 6	.35	.43	.52	.53	.54	.55	.56	.57	.58	.59	.60	.61
JUN 7	.55	.75	.80	.88	.93	.95	1.02	1.05	1.07	1.12	1.17	1.21
JUL 25	.17	.29	.37	.42	.48	.49	.50	.50	.50	.50	.50	.50
AUG 10	.25	.30	.35	.40	.65	.80	.93	1.00	1.03	1.03	1.03	1.03
AUG 11	.20	.40	.50	.60	.63	.64	.65	.65	.70	.70	.72	.73
AUG 13	.15	.25	.30	.40	.45	.47	.55	.63	.63	.63	.63	.63
AUG 21	.41	.81	.97	1.16	1.22	1.23	1.27	1.28	1.29	1.31	1.31	1.31
OCT 14	.21	.32	.33	.39	.43	.43	.43	.43	.43	.61	.62	.62
OREGON												
ASTORIA						NONE						
BURNS U						NONE						
EUGENE						NONE						
MEACHAM						NONE						
MEDFORD												
JUL 13	*.51	*.81	*.92	1.00	1.04	1.04	1.05	1.05	1.07	1.07	1.07	1.07
PENDLETON						NONE						
PORTLAND												
AUG 29	.33	.35	.39	.40	.40	.40	.40	.40	.40	.40	.40	.40
SEP 11	.28	.30	.33	.33	.34	.35	.36	.36	.36	.36	.36	.36

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1966

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
OREGON												
PORTLAND						NONE						
SEXTON SUMMIT						NONE						
PACIFIC AREA												
CANTON ISLAND												
JAN 5 T	.43	.85	M	M	M	M	1.38	1.38	1.39	1.50	1.55	1.60
JAN 12	.37	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
JAN 14	.35	.38	.39	.40	.43	.45	.46	.46	.46	.46	.46	.46
JAN 20	.30	.60	.65	.76	1.00	1.35	1.75	2.10	2.38	2.52	2.73	2.85
JAN 22	.15	.24	.30	.33	.54	.70	1.00	1.26	1.51	1.75	2.20	2.38
JAN 24	.45	.63	.73	.95	1.25	1.43	1.60	1.66	1.68	1.75	1.88	2.03
JAN 25	.37	.74	.83	.94	1.06	1.12	1.15	1.15	1.15	1.15	1.15	1.15
FEB 5	.25	.41	.43	.44	.50	.65	.80	.82	.86	.92	.95	.98
FEB 27	.15	.30	.32	.35	.38	.40	.40	.41	.44	.44	.44	.44
MAR 3	.26	.29	.29	.29	.29	.29	.29	.29	.29	.29	.29	.29
MAR 16	.25	.29	.31	.31	.31	.31	.31	.31	.31	.31	.31	.31
MAR 17	.25	.29	.30	.31	.32	.32	.32	.32	.32	.32	.32	.32
APR 2	.23	.35	.40	.51	.68	.69	.71	.72	.72	.72	.73	.73
APR 2	.32	.63	.76	.87	.93	.96	.98	.99	.99	.99	1.03	1.09
APR 2	.21	.40	.44	.52	.65	.76	.87	1.02	1.09	1.12	1.13	1.16
JUN 6	.35	.46	.47	.48	.49	.49	.49	.49	.49	.49	.49	.49
JUN 15	.27	.50	.52	.54	.58	.58	.58	.58	.58	.58	.58	.58
JUN 28	.30	.55	.63	.75	.88	.95	1.08	1.12	1.16	1.24	1.25	1.25
JUN 29	.32	.44	.48	.71	.95	1.17	1.26	1.26	1.38	1.38	1.38	1.38
JUL 22	.28	.29	.31	.31	.31	.31	.31	.31	.40	.55	.55	.55
JUL 25	.29	.41	.45	.47	.47	.58	.60	.60	.60	.61	.65	.70
JOHNSON ISLAND												
FEB 15	.24	.46	.63	.75	.89	.93	.93	.94	1.15	1.16	1.59	1.74
FEB 18	.23	.33	.44	.51	.66	.85	.90	.93	.96	.97	.97	.98
OCT 3	.24	.44	.65	.85	1.03	1.35	1.56	1.77	1.83	1.92	1.97	1.99
OCT 9	.29	.46	.53	.55	.57	.65	.75	.83	.83	.83	.83	.83
OCT 21	.14	.24	.32	.45	.54	.59	.74	.75	.75	.75	.75	.75
KOROR												
JAN 7	.20	.30	.33	.33	.33	.33	.33	.35	.38	.38	.38	.38
JAN 13	.25	.46	.61	.67	.85	.99	1.01	1.33	1.46	1.70	1.74	1.78
JAN 13	.18	.28	.36	.44	.53	.59	.64	.69	.70	.71	.78	1.10
MAR 14	.25	.41	.61	.78	.92	.98	1.04	1.08	1.15	1.19	1.20	1.20
MAR 26	.38	.71	.92	1.17	1.65	1.76	1.77	1.77	1.77	1.77	1.78	1.78
APR 13	.16	.28	.37	.44	.63	.85	.89	.93	.99	1.00	1.09	1.17
APR 21	.33	.45	.67	.79	1.19	1.52	1.80	2.23	2.35	2.84	2.97	2.99
APR 28	.21	.33	.40	.42	.48	.53	.57	.78	.82	.82	.82	.82
APR 30	.16	.30	.41	.46	.62	.77	.88	.98	1.11	1.35	1.51	1.68
MAY 5	.26	.38	.47	.50	.53	.53	.55	.65	.66	.66	.83	1.13
MAY 13	.22	.33	.41	.42	.49	.52	.52	.52	.52	.52	.52	.52
MAY 22	.25	.49	.62	.70	.75	.76	.76	.76	.76	.76	.76	.76
JUN 15	.34	.57	.74	.84	.87	.87	.87	.87	.87	.87	.87	.87
JUN 21	.20	.40	.43	.50	.62	.79	.98	1.14	1.19	1.22	1.26	1.27
JUN 26	.18	.28	.36	.39	.41	.44	.44	.47	.51	.52	.55	.56
JUL 9	.30	.54	.76	.99	1.15	1.70	1.96	2.13	2.18	2.19	2.20	2.23
JUL 20	.14	.28	.36	.49	.60	.71	.78	.95	1.00	1.00	1.00	1.02
JUL 21	.17	.28	.34	.38	.53	.60	.62	.69	.72	.76	.89	.99
JUL 22	.30	.39	.43	.45	.53	.88	1.04	1.23	1.51	1.67	1.81	1.93
JUL 22	.14	.25	.38	.48	.64	.82	.94	1.07	1.17	1.28	1.44	1.71
JUL 24	.13	.22	.31	.37	.51	.76	.86	.91	.97	1.00	1.05	1.14
JUL 28	.33	.55	.65	.78	.96	1.07	1.10	1.15	1.23	1.31	1.37	1.42
JUL 30	.22	.36	.49	.59	.82	1.09	1.28	1.37	1.88	2.09	2.13	2.16
AUG 4	.33	.51	.64	.72	.77	.78	.78	.78	.79	.79	.80	.80
AUG 24	.29	.35	.38	.43	.51	.53	.53	.53	.53	.72	.89	.93
AUG 31	.18	.31	.40	.49	.55	.60	.62	.62	.63	.66	.69	.70
AUG 31	.22	.39	.52	.62	.69	.70	.70	.71	.71	.71	.73	.73
SEP 4	.23	.40	.44	.47	.52	.57	.58	.59	.59	.59	.59	.59
SEP 10	.40	.67	.81	.82	.84	.84	.84	.84	.84	.84	.84	.84
SEP 11	.37	.57	.68	.73	.75	.75	.92	.98	.98	.98	.98	.98
SEP 30	.34	.59	.80	.89	.93	1.07	1.22	1.28	1.41	1.68	1.69	1.69
OCT 3	.23	.36	.44	.46	.50	.50	.50	.50	.50	.50	.50	.50
OCT 7	.39	.73	.96	.99	.99	1.00	1.01	1.01	1.04	1.06	1.08	1.11
OCT 8	.30	.54	.73	.86	1.04	1.20	1.28	1.62	1.79	1.86	1.93	1.97
OCT 15	.43	.59	.63	.64	.64	.96	.99	.99	.99	.99	.99	1.00
OCT 26	.17	.27	.41	.48	.52	.61	.68	.71	.80	.81	.82	1.00
OCT 27	.24	.37	.41	.42	.44	.50	.54	.63	.69	.74	.77	.81
NOV 7	.21	.34	.47	.58	.70	.71	.83	1.12	1.20	1.23	1.24	1.26
NOV 8	.26	.45	.54	.58	.59	.59	.59	.59	.61	.92	.94	1.05
NOV 13	.23	.38	.47	.49	.49	.49	.53	.53	.54	.54	.54	.54
NOV 16	.17	.31	.39	.43	.69	.76	.76	.76	.77	.77	.77	.77
NOV 17	.32	.46	.63	.70	.74	.76	.82	.83	.83	.86	.86	.86
NOV 22 T	M	M	M	M	M	M	M	M	M	M	M	M
NOV 23	.20	.31	.46	.49	.52	.57	.60	.61	.61	.61	.61	.61
DEC 4	.26	.34	.34	.34	.34	.34	.41	.41	.41	.56	.60	.60
DEC 6	.24	.36	.36	.36	.36	.36	.36	.36	.36	.36	.37	.37
DEC 7	.27	.34	.35	.35	.35	.51	.51	.52	.52	.52	.56	.58
DEC 7	.21	.40	.49	.54	.56	.64	.66	.67	.67	.67	.67	.68
DEC 8	.20	.29	.36	.44	.48	.53	.62	.70	.73	.79	.82	.83
DEC 19	.32	.43	.48	.52	.61	.71	.73	.81	.83	.86	.86	.86
DEC 21	.26	.42	.56	.65	.67	.75	.77	.83	1.13	1.15	1.17	1.20
DEC 21	.36	.64	.77	.90	.96	1.13	1.51	1.85	1.87	1.87	1.87	1.87
DEC 30	.21	.37	.38	.41	.43	.46	.63	.85	.91	.95	1.22	1.27
MAJURO												
JAN 9	.20	.29	.34	.41	.48	.51	.52	.54	.55	.55	.56	.56
JAN 9	.22	.27	.35	.38	.46	.49	.49	.64	.81	.81	.81	.91
FEB 26	.18	.30	.38	.46	.67	.93	1.15	1.27	1.33	1.40	1.45	1.46
FEB 26	.20	.28	.34	.50	.63	.69	.71	.73	.74	.78	.89	1.09
FEB 26	.23	.30	.31	.32	.32	.33	.33	.35	.44	.44	.44	.44
MAR 9	.27	.33	.33	.33	.34	.34	.35	.37	.38	.39	.40	.41
MAR 15	*.50	.75	.87	.96	1.11	1.53	1.76	1.86	1.96	2.02	2.11	2.17
APR 1	.25	.40	.53	.66	.79	.81	.83	.90	.96	1.06	1.29	1.35
APR 1	.30	.43	.45	.49	.55	.73	.96	1.07	1.08	1.09	1.26	1.34
APR 3	.47	.71	.89	.96	1.12	1.26	1.39	1.51	1.57	1.65	1.75	1.79
APR 9	*.30	.39	.48	.57	.67	.71	.75	.96	1.05	1.09	1.16	1.24
APR 15	.24	.31	.36	.39	.40	.40	.40	.40	.40	.40	.58	.64
APR 16	.35	.57	.71	.78	.83	.83	.84	.84	.84	.90	.95	.95
APR 28	.28	.42	.57	.70	.91	1.07	1.16	1.17	1.18	1.18	1.18	1.18
APR 30	.43	.67	.87	1.07	1.30	1.55	1.83	1.87	2.15	2.43	2.58	2.62
MAY 1	.26	.36	.37	.43	.65	.69	.71	.71	.71	.72	.72	.72
MAY 15	.21	.27	.47	.50	.50	.51	.64	.66	.72	.74	.76	.84
MAY 21	.36	.50	.58	.63	.93	1.01	1.05	1.29	1.35	1.43	1.43	1.43
JUN 1	.24	.40	.44	.46	.47	.47	.47	.47	.47	.47	.48	.48

T CLOCK MALFUNCTION
M NO RECORD

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
PACIFIC AREA												
MAJURO												
JUN 2	.21	.33	.37	.38	.40	.41	.41	.42	.42	.42	.42	.49
JUN 9	.18	.25	.31	.39	.52	.64	.70	.85	.88	.90	.91	.92
JUN 16	.22	.31	.33	.35	.38	.43	.53	.54	.56	.58	.58	.58
JUN 29	.20	.30	.43	.52	.66	.77	.84	.88	.96	1.00	1.01	1.01
JUL 4	.29	.40	.40	.41	.42	.43	.43	.43	.43	.43	.61	.71
JUL 5	.23	.31	.34	.37	.38	.38	.38	.38	.38	.38	.39	.39
JUL 7	.28	.44	.52	.55	.59	.59	.59	.68	.68	.76	.77	.81
JUL 12	.27	.51	.66	.83	1.15	1.37	1.42	1.44	1.55	1.59	2.04	2.37
JUL 20	.49	.62	.78	.89	1.03	1.11	1.51	1.88	1.99	2.12	2.16	2.28
AUG 14	.24	.35	.40	.42	.43	.44	.44	.44	.44	.44	.44	.46
AUG 14	.35	.60	.89	1.05	1.17	1.29	1.39	1.72	1.79	1.89	2.00	2.11
SEP 1	.39	.54	.63	.67	1.06	1.27	1.38	1.41	1.46	1.46	1.52	1.52
SEP 1	.19	.32	.37	.41	.46	.49	.50	.50	.50	.74	.96	1.12
SEP 4	.20	.34	.40	.40	.41	.41	.41	.41	.52	.52	.52	.65
SEP 4	.30	.47	.58	.68	.83	.89	.89	.93	.93	.93	.95	.95
SEP 5	.24	.34	.37	.37	.37	.37	.39	.40	.40	.40	.40	.41
SEP 6	.36	.49	.53	.56	.59	.60	.61	.61	.69	.73	.75	.75
SEP 13	.46	*.90	*1.20	1.43	*1.98	2.22	2.37	2.43	2.52	2.62	2.69	2.72
SEP 17	.19	.29	.32	.49	.58	.58	.60	.67	.67	.70	.70	.70
SEP 20	.20	.33	.35	.36	.47	.47	.65	.71	.76	.76	.76	.76
SEP 25	.25	.43	.48	.51	.58	.60	.61	.61	.62	.62	.62	.62
OCT 1	.34	.61	.74	.80	.84	.91	.97	1.01	1.06	1.08	1.31	1.69
OCT 9	.43	.56	.69	.89	1.15	1.34	1.43	1.52	1.53	1.54	1.58	1.64
OCT 15	.16	.25	.34	.43	.57	.63	.64	.66	.67	.69	.78	.79
OCT 18	.25	.41	.51	.62	.86	1.06	1.07	1.07	1.17	1.28	1.28	1.28
OCT 25	.48	.68	.85	.95	1.34	1.62	1.77	1.92	1.99	2.05	2.16	2.25
NOV 7	.25	.43	.53	.69	.95	1.28	1.39	1.42	1.47	1.51	1.51	1.55
NOV 7	.22	.33	.46	.57	.70	.73	.74	.74	.74	.74	.74	.74
NOV 22	.38	.73	.93	1.05	1.11	1.14	1.39	1.42	1.45	1.51	1.63	1.71
NOV 29	.32	.56	.73	.77	.78	.78	.78	.78	.78	.78	.78	.78
NOV 30	.24	.34	.42	.47	.51	.53	.53	.53	.53	.53	.53	.53
DEC 5	.70	*1.12	*1.56	1.89	*2.22	2.62	*2.77	2.80	2.80	2.80	2.80	2.80
DEC 10	.25	.27	.28	.29	.30	.30	.30	.30	.30	.30	.30	.35
DEC 11	.26	.35	.44	.55	.69	.79	.97	1.13	1.49	1.67	1.86	2.24
DEC 13	.35	.47	.49	.50	.50	.50	.50	.50	.50	.50	.50	.50
DEC 16	.20	.23	.35	.36	.37	.39	.39	.39	.45	.56	.59	.59
DEC 27	.44	.65	.92	.97	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.02
DEC 31	.16	.29	.41	.51	.65	.93	1.22	1.37	1.54	1.61	1.71	1.78
MARCUS ISLAND												
JUN 9	.26	.50	.63	.69	.78	.79	1.17	1.60	1.62	1.62	1.62	1.62
JUL 21	.34	.52	.73	.82	.87	1.00	1.19	1.52	1.65	1.68	1.79	1.89
JUL 24	.25	.34	.34	.34	.34	.34	.36	.36	.50	.50	.52	.52
SEP 25	.25	.46	.61	.65	.73	.74	.74	.75	.77	.77	.77	.78
SEP 27	.22	.39	.48	.58	.80	.99	1.06	1.07	1.08	1.08	1.07	1.08
OCT 14	.34	.64	.75	.84	.96	1.11	1.28	1.40	1.53	1.66	1.84	2.08
PAGO PAGO, A.S.												
APR 1 S	*.21	*.31	*.38	.43	*.46	.46	*.46	.46	.46	*.46	.46	*.46
APR 17	*.23	*.40	*.55	.71	*.79	.83	*.88	.98	1.00	*1.01	1.01	*1.01
APR 22	.18	.33	.43	.51	.62	.69	.78	1.13	1.20	*1.21	1.24	*1.29
MAY 15	*.29	*.47	*.56	.72	*.99	1.10	*1.12	1.12	1.12	1.12	1.26	*1.38
MAY 15	.26	.38	.44	.50	.67	.97	1.09	1.10	1.30	*1.55	1.68	*1.91
MAY 17	.16	.26	.39	.42	.62	.81	.88	.88	.88	.88	.88	.88
MAY 20	.25	.43	*.61	.71	.89	1.27	*1.44	1.47	1.56	*1.66	1.66	1.66
MAY 21	.15	.26	.38	.43	.49	.53	.55	.73	.80	1.03	1.26	1.31
MAY 22	.19	.33	.44	.54	.79	.91	1.00	1.02	1.03	1.07	1.20	1.22
MAY 22	*.30	*.52	*.62	.67	.74	.78	.79	.82	.85	.94	.98	1.05
MAY 28	.27	.34	.34	.35	.35	.35	.35	.35	.35	.35	.35	.35
MAY 29	*.37	*.63	*.69	.71	.72	.72	.72	.72	.72	.72	.72	.72
MAY 29	.30	.42	.54	.64	.72	.86	.94	.96	1.02	1.03	1.03	1.03
JUN 20	.17	.34	.46	.55	.68	.69	.69	.69	.70	.70	.70	.71
JUN 24	.27	.39	.53	.68	.74	.89	.98	1.04	1.16	1.25	1.41	1.50
JUL 4	.15	.23	.31	.42	.61	.72	.72	.73	.73	.73	.73	.78
JUL 5	.23	.31	.46	.57	.69	.78	.90	1.25	1.46	1.60	1.75	1.77
JUL 25	.27	.45	.49	.50	.52	.52	.53	.53	.53	.53	.53	.53
AUG 3	.22	.39	.51	.55	.64	.78	.84	.84	.84	.84	.96	1.00
AUG 3	.24	.43	.55	.63	.77	.93	1.07	1.15	1.25	1.33	1.38	1.44
AUG 3	.18	.27	.39	.52	.62	.80	1.03	1.16	1.27	1.33	1.46	1.55
AUG 20	.20	.31	.35	.39	.44	.48	.51	.54	.56	.56	.56	.57
SEP 16	.18	.33	.51	.63	.65	.91	.98	1.00	1.05	1.08	1.08	1.08
SEP 17	.30	.44	.51	.57	.80	1.01	1.12	1.26	1.32	1.38	1.46	1.58
SEP 23	.12	.24	.36	.38	.39	.40	.40	.40	.41	.42	.42	.42
OCT 2	.27	.29	.29	.29	.29	.29	.41	.41	.41	.41	.43	.43
OCT 2	*.48	*.84	*1.08	1.46	*1.98	2.78	*3.16	3.65	3.84	*3.90	3.97	*4.00
OCT 20	.23	.40	.46	.48	.50	.50	.50	.50	.53	.62	.62	.62
OCT 21	.21	.28	.36	.41	.48	.54	.62	.62	.64	.67	.67	.67
OCT 26	.22	.35	.45	.51	.61	.70	.77	.81	.88	1.00	1.15	1.24
OCT 27	.18	.31	.35	.38	.40	.41	.43	.46	.54	.65	.73	.87
OCT 28	.17	.27	.34	.42	.57	.74	.74	.75	.79	.82	.82	.82
OCT 29	.25	.49	.65	.78	1.05	1.24	1.28	1.29	1.29	1.29	1.49	1.49
OCT 31	.21	.34	.37	.37	.37	.37	.37	.37	.37	.37	.37	.37
NOV 20	.16	.27	.35	.45	.62	.72	.72	.75	.75	.75	.75	.76
NOV 29	.35	.47	.64	.69	.91	.97	.98	.98	.98	.98	.98	.98
DEC 1	.27	.49	.73	.91	1.12	1.31	1.34	1.35	1.35	1.40	1.50	1.87
DEC 1	.21	.34	.43	.52	.85	1.07	1.18	1.30	1.32	1.32	1.32	1.35
DEC 2	.16	.29	.35	.40	.51	.70	.84	1.04	1.16	1.25	1.30	1.40
DEC 5	.17	.29	.44	.51	.61	.72	.75	.78	.78	.78	.78	.78
DEC 7	.17	.33	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38
DEC 20	.25	.40	.52	.65	.82	.90	1.13	1.17	1.50	1.51	1.52	1.52
DEC 22	.23	.31	.31	.37	.45	.47	.47	.47	.47	.69	.82	.94
PONAPE												
JAN 2	.29	.37	.40	.42	.47	.49	.56	.56	.56	.56	.59	.59
JAN 8	.21	.28	.38	.42	.46	.48	.49	.50	.50	.65	.98	1.05
JAN 9	.16	.29	.38	.44	.52	.55	.55	.57	.57	.57	.70	.71
JAN 10	.30	.38	.51	.59	.72	.85	.89	1.09	1.29	1.47	1.85	2.03
JAN 13	.28	.38	.43	.46	.48	.55	.57	.62	.76	.93	1.04	1.08
MAR 3	.32	.53	.66	.75	.87	.96	.98	1.00	1.02	1.11	1.34	1.37
MAR 8	.19	.38	.41	.57	.68	.77	.82	.86	1.01	1.19	1.23	1.32
MAR 12	.41	.65	.71	.73	1.02	1.45	1.91	1.97	2.04	2.08	2.11	2.13
MAR 13	.40	.60	.80	.92	1.12	1.34	1.47	1.57	1.58	1.60	1.61	1.64
MAR 14	.23	.42	.46	.46	.46	.49	.49	.50	.53	.58	.75	.76
APR 19	.26	.45	.49	.52	.52	.52	.52	.52	.55	.55	.55	.55
MAY 11	.19	.33	.40	.43	.45	.46	.50	.51	.53	.53	.53	.53
MAY 11	.23	.40	.56	.59	.60	.62	.71	.72	.72	.77	.87	.97
MAY 14	.26	.38	.51	.61	.64	.69	.70	.71	.71	.73	.79	.81
MAY 18	.27	.40	.59	.78	1.00	1.26	1.30	1.30	1.46	1.63	1.66	1.69
MAY 25	.23	.40	.58	.71	.77	.77	.77	.77	.77	.77	.77	.77
MAY 31	.38	.49	.49	.49	.50	.50	.60	.61	.62	.63	.64	.64
JUN 9	.35	.48	.62	.75	.83	.85	.86	.88	.88	.88	.88	.88

S RECORD BEGAN APRIL 1.

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
PACIFIC AREA												
PONAPE												
JUN 14	.30	.46	.47	.48	.48	.50	.50	.73	.74	.76	.85	.86
JUN 14	.23	.31	.34	.39	.59	.70	.78	.83	.83	.83	.83	.83
JUN 26	.29	.33	.43	.50	.52	.52	.52	.52	.52	.52	.52	.52
JUN 26	.23	.33	.43	.50	.51	.52	.59	.68	.73	.88	.92	.92
JUN 28	.24	.38	.45	.46	.46	.46	.46	.50	.57	.71	.72	.72
JUN 28	.23	.39	.50	.59	.73	.75	.75	.76	.85	.97	.98	.98
JUL 5	.34	.53	.63	.75	1.00	1.08	1.08	1.08	1.08	1.08	1.08	1.08
JUL 9	.29	.44	.56	.68	.92	1.03	1.08	1.13	1.21	1.28	1.44	1.61
JUL 11	.39	.54	.62	.64	.66	.66	.66	.66	.66	.66	.69	.70
JUL 13	.28	.35	.41	.45	.54	.63	.74	.85	.98	1.10	1.22	1.28
JUL 15	.22	.31	.34	.34	.37	.37	.37	.37	.37	.42	.45	.45
JUL 17	.31	.47	.63	.80	.90	.94	.97	1.02	1.13	1.19	1.60	1.66
JUL 18	.36	.55	.67	.82	1.04	1.17	1.25	1.29	1.36	1.46	1.56	1.56
JUL 22	.46	.69	.89	.97	1.33	1.63	1.69	1.71	1.72	1.72	1.72	1.72
JUL 25	.21	.34	.48	.63	.82	1.07	1.24	1.39	1.57	1.60	1.61	1.61
JUL 27	.22	.32	.35	.36	.37	.40	.43	.45	.46	.57	.62	.83
JUL 30	.18	.32	.42	.51	.55	.58	.59	.59	.59	.60	.63	.67
AUG 1	.20	.23	.35	.40	.59	.65	.70	.99	1.11	1.21	1.21	1.21
AUG 10	.30	.41	.42	.44	.58	.67	.78	.78	.78	.80	.80	.80
AUG 10	.29	.46	.52	.58	.66	.73	.78	.78	.79	.79	.79	.79
AUG 13	.35	.49	.61	.68	.82	.86	.87	.87	.92	1.01	1.17	1.24
AUG 25	.27	.33	.44	.47	.47	.47	.50	.51	.51	.53	.63	.64
AUG 30	.26	.39	.53	.65	.68	.71	.71	.73	.73	.73	.73	.80
SEP 17	.35	.58	.75	.95	1.18	1.40	1.60	1.84	2.01	2.10	2.24	2.35
SEP 23	.47	.69	.92	1.05	1.13	1.15	1.19	1.21	1.35	1.42	1.47	1.52
SEP 25	.29	.41	.43	.43	.43	.43	.43	.49	.68	.68	.68	.68
SEP 26	.43	.59	.74	.84	.90	.90	.90	.90	.90	.90	.90	.90
OCT 8	.26	.26	.26	.31	.32	.32	.32	.32	.32	.32	.32	.32
OCT 10	.31	.47	.58	.66	1.05	1.39	1.43	1.59	1.60	1.78	1.83	1.86
OCT 11	.33	.44	.58	.67	.69	.78	.87	.90	.92	.92	.93	.95
OCT 15	.24	.30	.39	.46	.49	.51	.51	.51	.51	.56	.56	.56
OCT 15	.25	.37	.47	.52	.74	1.01	1.04	1.09	1.15	1.28	1.56	1.67
OCT 31	.31	.34	.34	.34	.35	.42	.43	.43	.46	.49	.63	.67
OCT 31	.28	.40	.54	.57	.79	.87	.93	1.00	1.05	1.08	1.31	1.37
NOV 7	.38	.65	.93	1.15	1.25	1.46	1.66	1.70	1.72	1.74	1.75	1.75
NOV 7	.37	.62	.70	.77	.89	1.17	1.27	1.52	1.53	1.53	1.55	1.55
NOV 15	.47	.63	.63	.63	.64	.68	.76	1.17	1.32	1.38	1.41	1.44
NOV 18	.25	.47	.62	.73	1.07	1.25	1.31	1.32	1.33	1.33	1.36	1.37
NOV 19	.18	.30	.37	.39	.40	.40	.40	.41	.41	.42	.65	.80
NOV 20	.36	.51	.54	.54	.54	.54	.54	.54	.54	.54	.54	.54
NOV 22	.19	.29	.37	.42	.47	.48	.77	.83	.85	.85	.85	.85
NOV 23	.17	.28	.38	.45	.67	.61	.64	.65	.65	.66	.66	.76
NOV 23	.30	.36	.39	.41	.45	.78	.84	.90	.97	1.02	1.06	1.07
DEC 4	.32	.36	.43	.55	.70	.71	.98	1.06	1.20	1.28	1.52	1.68
DEC 11	.25	.36	.51	.69	.98	1.06	1.08	1.08	1.09	1.09	1.12	1.12
DEC 12	.23	.37	.48	.53	.61	.65	.80	.84	.86	.89	.90	.94
TRUK												
MAR 12	.40	.56	.65	.70	.72	.73	1.03	1.11	1.11	1.11	1.11	1.11
MAR 17	.27	.30	.31	.33	.33	.35	.39	.42	.53	.54	.61	.65
MAR 31	.46	.62	.67	.74	.75	.75	.75	.75	.78	.78	.78	.81
APR 9	.26	.44	.60	.75	.87	1.03	1.17	1.48	1.66	1.84	2.17	2.37
MAY 10 T	M	M	M	M	M	M	M	M	M	M	M	*1.99
MAY 20	.20	.37	.53	.62	.82	.89	.90	.92	.93	.93	.95	.95
MAY 24	.40	.46	.46	.46	.47	.47	.47	.47	.47	.47	.47	.47
JUN 23	.30	.37	.59	.66	.75	.80	.82	.84	.90	.95	1.01	1.04
JUL 15	.41	.59	.82	.87	1.05	1.13	1.24	1.29	1.33	1.33	1.33	1.33
JUL 17	.41	.65	.84	.95	1.23	1.58	1.70	1.83	1.94	1.98	2.09	2.14
JUL 21	.17	.31	.38	.39	.40	.40	.40	.40	.40	.40	.40	.40
JUL 28	.36	.66	.88	1.09	1.45	1.66	1.84	2.17	2.25	2.41	2.43	2.43
JUL 29	.23	.38	.41	.43	.46	.47	.47	.47	.55	.60	.72	.73
JUL 30	.41	.68	.90	1.15	1.53	2.19	2.76	3.16	3.23	3.36	3.68	3.88
JUL 30	.18	.29	.41	.51	.68	.79	.87	.94	1.00	1.00	1.00	1.00
AUG 2	.27	.39	.52	.61	.92	1.23	1.51	1.93	2.05	2.11	2.14	2.15
AUG 2	.12	.20	.29	.40	.55	.72	.80	.96	.97	1.18	1.24	1.24
AUG 6	.28	.42	.49	.53	.60	.72	.76	.78	.81	.83	.84	.84
AUG 16	.23	.36	.38	.38	.41	.42	.42	.42	.42	.42	.42	.42
AUG 31	.25	.33	.44	.49	.52	.56	.63	.80	.85	.86	.88	.91
SEP 6	.55	1.02	1.22	1.30	1.55	1.92	2.05	2.29	2.39	2.46	2.51	2.56
SEP 15	.34	.63	.75	.84	1.07	1.31	1.57	1.96	2.11	2.16	2.17	2.19
SEP 16	.15	.25	.37	.42	.46	.49	.49	.50	.50	.50	.50	.50
SEP 19	.19	.33	.38	.47	.64	.78	.86	.88	.91	.93	.96	1.21
SEP 20	.43	.49	.51	.66	.89	.91	.95	1.02	1.02	1.02	1.02	1.02
SEP 30	.15	.28	.43	.48	.51	.51	.51	.51	.51	.51	.51	.51
OCT 12	.26	.40	.47	.52	.68	.86	.95	1.02	1.09	1.16	1.24	1.25
OCT 13	.30	.41	.46	.49	.53	.54	.54	.55	.55	.55	.55	.55
OCT 17	.50	.77	.99	1.19	1.32	1.33	1.35	1.38	1.49	1.58	1.71	1.81
NOV 2	.25	.38	.40	.40	.41	.41	.41	.41	.41	.41	.41	.41
NOV 12	.39	.46	.47	.47	.49	.49	.50	.50	.50	.50	.67	.78
NOV 14	.29	.40	.41	.41	.41	.41	.41	.42	.58	.58	.60	.60
DEC 3	.31	.37	.38	.38	.38	.38	.45	.45	.45	.45	.47	.48
DEC 6	.61	.85	.87	.95	1.07	1.19	1.55	1.68	1.86	2.66	3.03	3.27
DEC 11	.21	.38	.40	.41	.41	.45	.48	.48	.48	.48	.48	.51
DEC 12	.42	.67	.85	.93	.97	.98	1.06	1.06	1.06	1.06	1.06	1.12
DEC 14	.23	.38	.48	.62	.73	.78	.80	.82	.83	.86	.95	1.11
WAKE												
AUG 10	.23	.35	.43	.54	.75	.82	.85	.87	.90	.90	.91	.91
YAP R												
MAR 14	.13	.23	.30	.40	.47	.52	.62	.67	.68	.69	.69	.70
MAY 4	.21	.30	.42	.46	.59	.63	.65	.66	.66	.66	.71	.80
JUN 3	.15	.25	.35	.44	.60	.62	.63	.64	.64	.64	.64	.64
JUN 22	.41	.73	1.02	1.34	1.97	2.16	2.23	2.32	2.52	2.71	2.93	2.97
JUN 24	.32	.32	.32	.37	.43	.47	.47	.47	.47	.47	.47	.47
JUL 6	.35	.64	.89	1.09	1.14	1.17	1.17	1.17	1.17	1.20	1.26	1.61
JUL 9	.27	.48	.60	.70	.78	.78	.78	.78	.78	.78	.78	.78
JUL 17	.16	.31	.39	.41	.51	.53	.53	.53	.53	.53	.53	.53
JUL 18	.26	.39	.43	.44	.45	.45	.47	.47	.47	.47	.81	.82
JUL 27	.30	.53	.74	.90	1.25	1.90	2.20	2.37	2.42	2.44	2.54	2.63
AUG 8	.30	.57	.84	1.06	1.26	1.46	1.49	1.51	1.51	1.51	1.51	1.51
AUG 14	.21	.35	.50	.61	.74	.81	.83	.83	.83	.89	.89	.89
AUG 30	.24	.44	.48	.50	.57	.58	.61	.63	.63	.63	.63	.63
SEP 15	.20	.34	.49	.54	.59	.90	1.02	1.07	1.12	1.15	1.19	1.19
SEP 22	.16	.28	.39	.47	.58	.60	.69	.71	.74	.78	.79	.80
SEP 25	.20	.40	.57	.73	.91	.97	.97	.97	.97	.98	.99	1.17
SEP 28	.17	.28	.35	.43	.57	.70	.76	.77	.77	.77	.77	.77
OCT 8	.20	.23	.35	.45	.66	.86	1.05	1.24	1.42	1.55	1.71	1.73
OCT 25	.21	.36	.46	.46	.46	.46	.46	.46	.46	.46	.46	.46
OCT 26	.20	.36	.37	.41	.44	.44	.44	.44	.44	.44	.44	.44
NOV 5	.31	.37	.39	.39	.39	.39	.39	.39	.39	.39	.39	.39

T CLOCK MALFUNCTION
M NO RECORD

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
PACIFIC AREA												
YAP R												
NOV 17	.32	.44	.45	.46	.48	.50	.51	.51	.54	.62	.63	.70
NOV 22	.21	.41	.43	.44	.48	.50	.70	.74	.74	.74	.74	.74
NOV 24	.33	.60	.71	.76	.80	1.23	1.33	1.36	1.37	1.41	1.77	1.82
DEC 3	.23	.43	.54	.57	.60	.62	.63	.63	.63	.63	.63	.63
DEC 10	.21	.36	.44	.49	.52	.52	.52	.52	.52	.52	.54	.55
DEC 23	.21	.33	.34	.35	.40	.40	.40	.40	.46	.47	.48	.48
DEC 24	.37	.69	.75	.80	.83	.88	.92	.99	1.07	1.09	1.11	1.12
DEC 26	.17	.34	.38	.40	.40	.41	.45	.45	.45	.45	.45	.45
PENNSYLVANIA												
ALLENTOWN												
MAY 28	.30	.45	.50	.60	.70	.75	.76	.78	.80	.83	.84	.84
JUN 28	.18	.35	.41	.42	.43	.44	.44	.44	.44	.44	.44	.44
JUL 19	.30	.43	.49	.50	.51	.52	.72	.80	.87	.92	.92	.92
JUL 27	.22	.32	.40	.44	.51	.54	.56	.60	.65	.73	.78	.79
AUG 16	.35	.66	.86	.97	1.17	1.31	1.33	1.33	1.33	1.33	1.33	1.33
SEP 3	.23	.38	.55	.60	.67	.69	.82	.88	.93	.94	.96	.96
NOV 10	.25	.28	.32	.37	.37	.41	.41	.41	.41	.41	.41	.60
ERIE												
JUN 9	.26	.39	.46	.47	.49	.60	.67	.77	.94	1.00	1.14	1.22
JUL 27	.24	.35	.45	.52	.64	.74	.77	.79	.84	.85	.86	.93
AUG 10	.27	.50	.56	.64	.75	.83	.92	1.00	1.07	1.16	1.26	1.26
HARRISBURG												
NOV 2	.22	.38	.49	.58	.64	.71	.78	.84	.85	.86	.92	.92
NOV 10	.13	.20	.33	.40	.41	.42	.42	.42	.42	.42	.42	.42
PHILADELPHIA												
APR 24	.16	.26	.36	.48	.60	.65	.74	.74	.76	.78	.79	.79
APR 24	.20	.34	.38	.43	.60	.66	.82	.88	.92	.93	.94	.94
MAY 22	.31	.40	.42	.44	.46	.56	.64	.74	.82	.88	.92	.92
JUL 19	.23	.40	.52	.54	.56	.59	.60	.64	.66	.66	.69	.70
AUG 11	.28	.32	.33	.41	.44	.45	.48	.50	.54	.57	.60	.60
SEP 3	.30	.60	.66	.70	.71	.73	.78	.81	.81	.81	.81	.81
SEP 14	.30	.46	.56	.74	.96	1.20	1.50	1.78	1.99	2.20	2.34	2.48
PITTSBURGH												
JUL 5	.19	.34	.37	.38	.38	.38	.38	.38	.38	.38	.38	.38
AUG 7	.14	.26	.28	.38	.51	.54	.75	.82	.88	1.06	1.10	1.12
AUG 16	.30	.46	.55	.63	.66	.66	.66	.66	.66	.76	.98	.98
PITTSBURGH U												
JUL 29	.30	.36	.37	.37	.37	.37	.39	.39	.42	.43	.44	.45
AUG 11	.22	.33	.34	.34	.43	.49	.75	.84	.92	.92	.92	.92
AUG 22	.28	.28	.28	.28	.28	.38	.39	.41	.44	.47	.51	.51
READING U												
FEB 13	.25	.28	.29	.30	.32	.34	.34	.34	.34	.39	.46	.57
JUN 14	.51	.68	.76	.77	.78	.78	.78	.78	.78	.78	.78	.78
JUL 10	.25	.35	.41	.46	.59	.67	.70	.71	.71	.71	.71	.71
AUG 11	.18	.26	.38	.48	.63	.72	.77	.79	.84	.85	.86	1.15
WILKES BARRE												
JUL 8	.36	.46	.49	.49	.49	.49	.49	.53	.53	.53	.53	.53
AUG 16	.32	.52	.66	.88	.98	1.14	1.20	1.68	2.06	2.24	2.33	*3.07
RHODE ISLAND												
BLOCK ISLAND												
JUL 10	.35	.44	.46	.47	.47	.59	.65	.65	.78	.79	.80	.80
AUG 17	.33	.63	.64	.65	.68	.70	.70	.73	.73	.73	.73	.73
PROVIDENCE												
AUG 23	.32	.55	.69	.76	1.10	1.22	1.33	1.48	1.50	1.51	1.52	1.57
SEP 4	.19	.31	.41	.47	.55	.68	.83	.89	.96	.97	1.08	1.13
SOUTH CAROLINA												
CHARLESTON												
FEB 28	.23	.32	.42	.47	.60	.87	.98	1.10	1.20	1.25	1.29	1.32
MAY 22	.23	.31	.32	.43	.63	.65	.69	.86	.95	1.04	1.20	1.33
MAY 22	.35	.67	.69	.72	.78	.79	.81	.82	.83	.94	1.05	1.07
JUN 15	.30	.59	.66	.84	1.09	1.15	1.16	1.16	1.18	1.20	1.21	1.23
JUN 18	*.63	1.00	1.02	1.22	1.63	1.66	1.75	1.79	1.85	1.88	2.01	2.10
JUL 2	.43	.85	1.15	1.25	1.55	2.15	*2.40	2.78	3.20	*3.55	3.63	*3.67
JUL 2	.48	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60	.60
JUL 9	.55	.78	.85	.90	.92	.94	.94	.94	.94	.94	.94	.94
JUL 13	.33	.65	.80	1.00	1.29	1.35	1.35	1.35	1.35	1.35	1.35	1.35
JUL 15	.22	.43	.49	.53	.63	.84	1.00	1.26	1.33	1.36	1.41	1.42
JUL 26	.25	.49	.57	.58	.58	.58	.58	.58	.58	.58	.58	.58
AUG 4	.22	.41	.46	.52	.61	.62	.62	.62	.62	.62	.62	.62
AUG 25	.18	.36	.42	.44	.47	.48	.48	.48	.48	.48	.48	.48
SEP 19	.25	.43	.48	.62	.88	1.04	1.16	1.17	1.17	1.17	1.17	1.17
OCT 1	.57	.74	.77	.84	.84	.85	.85	.85	.85	.85	.85	1.32
CHARLESTON U												
MAY 21	.39	.67	.91	1.15	1.31	1.33	1.46	1.75	1.85	1.89	2.02	2.10
JUN 18	.33	.45	.53	.72	.88	1.09	1.17	1.24	1.34	1.42	1.46	1.48
JUL 2	.26	.43	.60	.76	.86	1.03	1.17	1.30	1.74	2.17	2.38	2.41
JUL 2	.27	.42	.49	.60	.63	.64	.65	.66	.68	.70	.70	.70
JUL 3	.27	.46	.60	.71	.94	1.28	1.51	1.60	1.60	1.60	1.60	1.60
JUL 30	.25	.36	.40	.43	.48	.54	.55	.57	.58	.59	.61	.67
AUG 7	.26	.30	.30	.30	.32	.32	.32	.32	.32	.32	.32	.32
AUG 15	.20	.31	.37	.42	.47	.47	.47	.47	.47	.50	.52	.52
AUG 26	.24	.33	.35	.35	.35	.35	.36	.36	.36	.36	.36	.36
SEP 11	.18	.25	.34	.38	.55	.68	.79	.80	.81	.82	.82	.82
SEP 19	.52	.60	.60	.60	.60	.60	.60	.62	.62	.62	.65	.67

EXCESSIVE SHORT DURATION RAINFALL

YEAR 1966

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
SOUTH CAROLINA												
COLUMBIA												
APR 4	.33	.40	.44	.46	.48	.50	.52	.54	.57	.59	.60	.64
APR 28	.24	.28	.31	.36	.52	.74	.92	.95	.97	.97	.97	.97
MAY 21	.25	.45	.50	.58	.65	.70	.71	.75	.79	.82	.83	.84
MAY 24	.28	.40	.44	.48	.50	.60	.66	.67	.67	.67	.67	.67
MAY 24	.40	.50	.52	.53	.54	.70	.73	.75	.77	.79	.81	.83
JUN 10	.36	.55	.59	.60	.65	.72	.90	1.28	1.31	1.41	1.51	1.55
JUL 3	.30	.54	.60	.72	.88	.96	.96	.96	.96	.96	.96	.96
JUL 29	.40	.65	.70	.80	.85	.89	.89	.89	.89	1.10	1.26	1.28
AUG 9	.50	.78	.79	.80	.90	.95	.99	1.04	1.04	1.04	1.04	1.04
GNVLE SPARTANBURG												
MAR 4	.21	.33	.40	.44	.59	.77	.92	1.05	1.16	1.23	1.37	1.52
APR 27	.27	.32	.39	.42	.48	.49	.50	.50	.50	.50	.50	.50
MAY 9	.22	.32	.41	.42	.42	.42	.42	.42	.42	.42	.42	.42
JUN 17	.19	.35	.40	.55	.80	1.01	1.25	1.46	1.56	1.56	1.56	1.56
JUN 29	.13	.22	.32	.43	.53	.56	.60	.60	.61	.62	.64	.68
AUG 3	.25	.32	.35	.37	.44	.48	.50	.53	.54	.56	.64	.66
AUG 19	.29	.50	.51	.51	.51	.51	.51	.51	.55	.55	.55	.55
AUG 26	.26	.46	.56	.68	.86	.90	.91	.91	.91	.91	.91	.91
SEP 13	.18	.28	.35	.43	.69	.89	1.10	1.35	1.49	1.75	2.07	2.46
SOUTH DAKOTA												
ABERDEEN												
JUN 5	.22	.36	.43	.46	.51	.55	.62	.69	.78	.83	.92	.94
JUN 24	.40	.61	.68	.72	.79	.79	.81	.81	.81	.81	.94	1.12
JUL 11	.36	.57	.63	.74	.84	.94	.98	.98	1.01	1.01	1.01	1.01
JUL 26	.28	.46	.66	.84	*1.30	1.35	*1.37	1.38	1.41	*1.43	1.44	1.44
JUL 31	* .50	.51	.51	.51	.52	.52	.56	.80	.88	.88	.88	.88
HURON												
MAY 22	.30	.40	.43	.44	.44	.44	.44	.45	.46	.46	.46	.46
JUN 22	.22	.42	.52	.56	.60	.68	.75	.90	1.05	1.05	1.05	1.05
JUL 11	.48	.56	.58	.60	.69	.79	.93	.96	.98	1.05	1.08	1.11
JUL 13	.45	.62	.69	.75	.82	.86	.95	1.01	1.06	1.10	1.15	1.21
JUL 27	.23	.37	.41	.44	.50	.52	.55	.55	.55	.55	.55	.55
AUG 14	.33	.54	.61	.66	.67	.68	.68	.68	.68	.68	.68	.68
OCT 14	.32	.50	.66	.80	.94	1.45	1.78	2.03	2.05	2.12	2.20	2.32
RAPID CITY												
JUL 13	.40	.70	.73	.80	1.02	1.06	1.06	1.06	1.06	1.06	1.06	1.06
JUL 26	.36	.70	.86	.95	1.04	1.11	1.13	1.13	1.13	1.13	1.13	1.13
SEP 13	.30	.40	.53	.74	.99	1.10	1.19	1.32	1.45	1.71	1.76	1.84
SIOUX FALLS												
MAY 22	.26	.36	.38	.42	.46	.60	.67	.73	.83	.86	.87	.87
JUL 27	.25	.39	.44	.55	.70	.81	.85	.87	.87	.87	.87	.87
AUG 20	.19	.24	.27	.37	.53	.70	.73	.75	.75	.81	.82	.83
SEP 11 T	M	M	M	M	M	M	M	M	M	M	M	M
TENNESSEE												
BRISTOL												
JUL 4	.19	.37	.43	.52	.55	.55	.55	.55	.55	.55	.55	.55
JUL 6	.15	.30	.35	.36	.36	.50	.59	.65	.71	.75	.76	.76
JUL 13	.27	.34	.48	.51	.57	.61	.65	.67	.74	.74	.75	.76
JUL 17	.14	.27	.31	.42	.56	.61	.62	.62	.62	.62	.70	.86
JUL 19	.21	.36	.37	.38	.40	.42	.42	.42	.42	.42	.42	.42
AUG 8	.26	.51	.60	.77	1.14	1.23	1.26	1.28	1.28	1.28	1.28	1.28
AUG 9	.26	.32	.35	.44	.64	.65	.65	.65	.65	.65	.65	.65
CHATTANOOGA												
JUL 15	.17	.34	.48	.51	.52	.52	.55	.58	.60	.61	.75	.76
AUG 14	.29	.35	.36	.36	.36	.36	.38	.39	.40	.43	.47	.47
KNOXVILLE												
APR 13	.23	.31	.31	.36	.39	.42	.48	.48	.48	.48	.48	.48
JUN 16	.40	.80	.85	.89	.90	.93	.99	1.00	1.04	1.10	1.23	1.29
JUL 7	.25	.40	.51	.71	.72	.72	.72	.73	.78	.79	.81	.82
JUL 15	.35	.41	.45	.50	.55	.60	.60	.60	.62	.64	.65	.66
JUL 29	.40	.72	.80	.80	.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AUG 11	.40	.68	.70	.72	.73	.80	.92	1.08	1.18	1.22	1.30	1.30
AUG 19	.25	.45	.47	.47	.47	.47	.47	.47	.47	.47	.47	.47
AUG 22	.21	.42	.47	.53	.67	.71	.73	.76	.77	.79	.82	.82
SEP 15	.18	.33	.35	.36	.41	.45	.50	.51	.53	.53	.53	.53
MEMPHIS												
JAN 2	.14	.23	.31	.42	.57	.61	.67	.71	.77	.80	.81	.84
MAR 3	.19	.34	.42	.45	.76	.91	.98	1.20	1.27	1.29	1.29	1.29
APR 26	.24	.34	.38	.43	.44	.45	.46	.47	.48	.52	.54	.56
MAY 13	.24	.37	.46	.51	.59	.64	.66	.67	.73	.76	.77	.77
MAY 16	.27	.43	.55	.63	.68	.72	.76	.77	.78	.78	.79	.79
MAY 18	.42	.76	.95	1.03	1.06	1.08	1.11	1.16	1.21	1.25	1.28	1.29
JUL 29	.34	.63	.85	1.01	1.20	1.46	1.50	1.52	1.54	1.56	1.59	1.61
AUG 12	.18	.26	.33	.40	.46	.50	.53	.56	.56	.56	.56	.56
AUG 13	.32	.36	.37	.38	.40	.40	.40	.40	.40	.40	.40	.40
AUG 21	.32	.48	.51	.66	.80	.81	.83	.85	.87	.88	.89	.90
SEP 27	.26	.34	.36	.36	.40	.55	.71	.77	.78	.78	1.07	1.14
SEP 30	.21	.37	.50	.64	.70	.84	.91	1.01	1.04	1.09	1.17	1.26
NASHVILLE												
APR 12	.28	.40	.41	.42	.42	.42	.42	.42	.43	.43	.43	.43
APR 26	.25	.42	.52	.56	.59	.60	.62	.63	.64	.64	.64	.66
MAY 1	.35	.60	.68	.70	.75	.78	.79	.79	.79	.79	.79	.79
MAY 21	.25	.40	.47	.50	.50	.50	.51	.52	.52	.52	.52	.52
JUL 15	.26	.45	.71	.89	.94	.95	.95	.95	.95	.95	.95	.95
AUG 2	.20	.35	.45	.65	.80	.98	1.00	1.03	1.08	1.17	1.23	1.25
AUG 14	.30	.45	.55	.75	.77	1.05	1.36	1.38	1.40	1.43	1.44	1.45
SEP 30	.22	.33	.34	.34	.35	.43	.52	.63	.73	.82	.87	.90
OCT 15	.25	.36	.39	.40	.50	.55	.55	.55	.55	.55	.57	.58

T CLOCK MALFUNCTION
M NO RECORD

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
TEXAS												
ABILENE												
APR 23	.19	.36	.38	.40	.41	.42	.46	.49	.68	.83	.86	.98
APR 25	.26	.46	.54	.66	.86	1.12	1.24	1.26	1.26	1.26	1.26	1.26
APR 29	.30	.58	.64	.78	.94	1.08	1.15	1.39	1.40	1.47	1.48	1.50
JUN 17	.30	.50	.60	.68	.80	.85	.89	.93	.97	.97	.98	.98
AUG 5	.20	.30	.32	.37	.45	.46	.46	.46	.46	.46	.46	.46
AUG 7	.22	.39	.46	.58	.74	.86	.90	1.02	1.06	1.08	1.09	1.13
AUG 13	.22	.40	.58	.72	.75	.76	.76	.76	.76	.76	.77	.77
SEP [illegible]	.24	.34	.35	.45	.52	.63	.77	.87	.91	.95	1.00	1.37
SEP 17	.40	.61	.67	.76	.90	.91	.91	.91	.91	.91	.91	.91
OCT 4	.33	.44	.68	.76	.79	.99	1.15	1.16	1.20	1.20	1.25	1.26
AMARILLO												
JUN 17	.40	.54	.71	.90	1.28	1.34	1.38	1.44	1.48	1.68	2.04	.36
AUG 1	.20	.38	.48	.58	.80	.80	.80	.80	.80	.80	.80	.80
SEP 17	.38	.54	.62	.64	.64	.64	.64	.64	.64	.64	.64	.64
AUSTIN												
APR 17	.21	.39	.47	.51	.59	.67	.73	.75	.79	.82	.86	.87
APR 24	.15	.25	.31	.36	.54	.66	.77	.81	.89	.91	.92	.92
MAY 24	.18	.30	.39	.44	.49	.53	.53	.53	.53	.53	.53	.53
JUN 13	.28	.48	.63	.71	.79	.83	.83	.83	.83	.83	.83	.83
AUG 3	.13	.23	.35	.46	.65	.95	1.21	1.61	1.78	2.01	2.18	2.20
AUG 11	.32	.48	.63	.80	.97	1.56	1.74	2.07	2.28	2.46	2.60	2.65
AUG 12	.27	.43	.55	.55	.55	.56	.56	.56	.56	.56	.56	.56
OCT 4	.19	.32	.36	.36	.36	.36	.36	.36	.36	.36	.36	.37
BROWNSVILLE												
MAY 3	.20	.33	.41	.48	.59	.69	.71	.72	.72	.72	.72	.73
MAY 4	.13	.21	.32	.37	.43	.58	.82	.93	1.04	1.08	1.24	1.39
JUL 5	.31	.46	.51	.55	.58	.61	.63	.64	.65	.65	.78	.92
JUL 24	.28	.38	.42	.42	.42	.42	.42	.42	.42	.42	.42	.42
AUG 24	.27	.47	.55	.57	.57	.57	.57	.57	.57	.57	.57	.57
OCT 15	.54	.89	1.17	1.36	1.88	2.53	3.12	3.85	4.25	4.63	4.98	5.15
CORPUS CHRISTI												
APR 21	.21	.37	.48	.58	.66	.77	.80	.83	.83	.83	.83	.83
APR 25	.51	.80	.94	1.08	1.52	2.00	2.31	2.50	2.61	2.62	2.63	2.92
MAY 29	.27	.48	.62	.78	1.03	1.43	1.60	1.67	1.71	1.76	1.85	1.86
JUN 12	.25	.33	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
JUN 18	.30	.60	.89	1.11	1.71	1.96	2.01	2.04	2.05	2.05	2.05	2.05
JUN 20	.19	.31	.42	.45	.73	.89	.89	1.15	1.20	1.20	1.20	1.20
JUL 13	.19	.30	.39	.44	.45	.45	.45	.45	.45	.45	.45	.45
AUG 25	.33	.65	.78	.95	1.02	1.04	1.04	1.05	1.41	1.88	1.94	1.97
AUG 27	.23	.41	.51	.56	.64	.74	.74	.85	.89	.89	.89	.89
SEP 17	.23	.35	.40	.43	.44	.46	.54	.67	.70	.71	.71	.71
SEP 27	.24	.46	.62	.69	.79	.91	.97	.98	.98	.98	.98	.98
DALLAS												
JAN 1	.31	.38	.39	.39	.40	.41	.41	.41	.41	.41	.41	.42
FEB 9	.27	.42	.49	.63	.95	1.07	1.14	1.18	1.24	1.27	1.46	1.61
MAR 28	.23	.35	.45	.55	.63	.90	1.02	1.16	1.22	1.27	1.41	1.56
APR 14	.28	.45	.54	.56	.58	.73	1.00	1.01	1.07	1.12	1.27	1.29
APR 17	.33	.42	.47	.52	.72	.81	.86	1.01	1.16	1.23	1.32	1.36
APR 23	.17	.30	.33	.38	.56	.72	.83	.91	.94	.99	1.24	1.26
APR 24	.25	.38	.40	.55	.56	.62	.67	.75	.90	.98	1.08	1.11
APR 28	.75	1.14	1.26	1.43	1.78	2.12	2.51	2.70	3.07	3.36	3.43	3.45
APR 29	.32	.49	.51	.54	.56	.57	.70	.85	.91	.95	.97	.99
APR 29	.37	.38	.38	.40	.51	.53	.55	.60	.62	.66	.67	.72
APR 30	.27	.47	.48	.53	.58	.61	.63	.63	.72	.82	.88	.90
MAY 12	.23	.33	.35	.37	.52	.53	.59	.63	.63	.82	.90	.90
MAY 21	.25	.39	.43	.50	.55	.55	.58	.58	.58	.58	.58	.58
JUN 12	.52	1.00	1.08	1.30	1.60	1.84	1.90	1.96	2.00	2.00	2.00	2.00
JUN 17	.30	.49	.57	.66	.77	.96	1.14	1.16	1.23	1.28	1.34	1.43
AUG 28	.33	.35	.35	.35	.36	.36	.37	.38	.38	.39	.39	.39
AUG 29	.49	.77	.95	1.06	1.12	1.15	1.15	1.15	1.15	1.15	1.15	1.15
OCT 4	.30	.58	.72	.77	.82	.89	.92	.94	.96	.99	1.10	1.19
DEL RIO												
APR 23	.42	.50	.56	.65	.80	.97	.98	.98	.98	.98	.98	.98
APR 24	.41	.69	.82	1.07	1.60	1.95	2.07	2.10	2.15	2.15	2.15	2.15
MAY 19	.23	.34	.42	.47	.50	.58	.58	.58	.58	.58	.58	.58
MAY 24	.47	.75	.90	.95	1.07	1.10	1.10	1.10	1.10	1.10	1.10	1.10
JUN 12	.25	.45	.50	.68	.85	1.25	1.55	2.00	2.25	2.42	2.50	2.55
AUG 13	.20	.30	.32	.35	.42	.45	.49	.51	.51	.51	.52	.52
SEP 18	.20	.35	.35	.42	.55	.57	.57	.57	.60	.61	.61	.62
EL PASO												
JUL 13	.18	.34	.50	.58	.61	.61	.62	.62	.62	.62	.62	.62
FORT WORTH												
FEB 9	.40	.45	.50	.50	.61	.72	.80	.87	.95	.95	1.00	1.10
APR 17	.29	.39	.46	.51	.61	.83	1.00	1.09	1.16	1.21	1.29	1.30
APR 29	.35	.37	.38	.42	.50	.55	.64	.70	.76	.76	.86	.86
APR 29	.30	.60	.66	.74	.79	.96	1.05	1.37	1.40	1.44	1.45	1.74
APR 30	.25	.35	.42	.48	.55	.61	.62	.65	.72	.90	.95	.96
MAY 1	.12	.24	.30	.42	.56	.66	.72	.88	.98	1.03	1.12	1.16
MAY 20	.37	.55	.59	.66	.77	.79	.91	.93	.94	.95	.97	.97
MAY 21	.15	.30	.33	.37	.43	.47	.54	.58	.60	.60	.60	.60
JUN 12	.35	.63	.81	1.05	1.53	1.95	2.50	2.62	2.65	2.68	2.71	2.71
JUL 7	.29	.58	.64	.75	.96	1.04	1.06	1.07	1.07	1.07	1.08	1.09
JUL 25	.27	.54	.65	.83	1.15	1.36	1.45	1.53	1.55	1.55	1.55	1.60
AUG 24	.15	.27	.31	.39	.62	.87	1.05	1.19	1.24	1.30	1.37	1.42
SEP 1	.20	.35	.39	.55	.66	.69	.70	.70	.70	.70	.70	.70
SEP 27	.20	.34	.39	.48	.51	.63	.63	.68	.74	.89	.89	.89
GALVESTON U												
APR 14	.39	.73	1.01	1.06	1.60	1.69	1.78	2.17	2.25	2.34	2.35	2.39
MAY 2	.23	.40	.54	.63	.92	1.08	1.16	1.28	1.48	1.59	1.78	1.91
MAY 4	.20	.32	.38	.46	.48	.55	.90	.97	.98	.99	1.03	1.05
MAY 13	.59	.98	1.28	1.60	*2.22	2.48	2.49	2.51	2.52	2.52	2.52	2.53
MAY 20	.20	.33	.40	.42	.73	.79	.83	.87	.87	.87	.87	.87
MAY 21	.21	.34	.43	.46	.48	.50	.50	.50	.50	.50	.50	.50
JUN 13	.34	.51	.67	.73	.84	.92	.98	1.00	1.01	1.03	1.03	1.06
JUN 17	.25	.49	.65	.79	.90	.98	.99	1.03	1.03	1.19	1.49	1.52
JUL 5	.18	.31	.40	.45	.69	.79	.81	.86	.89	.91	.93	.95

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
TEXAS												
GALVESTON U												
AUG 20	.13	.21	.31	.41	.57	.74	.76	.92	1.17	1.34	1.74	2.09
AUG 20	.25	.32	.47	.54	.60	.68	.78	.86	.94	.98	1.15	1.68
SEP 5	.18	.26	.31	.34	.53	.62	.65	.67	.68	.68	.69	.71
SEP 9	.28	.53	.79	.93	1.29	1.45	1.75	2.36	2.47	2.53	2.60	2.60
SEP 9	.29	.55	.77	.98	1.50	2.04	2.35	2.49	2.50	2.50	2.50	2.52
SEP 18	.23	.40	.44	.46	.46	.46	.46	.46	.46	.46	.46	.46
OCT 10	.34	.64	.87	1.02	1.18	1.26	1.31	1.65	2.13	2.39	2.69	2.72
DEC 16	.17	.29	.35	.43	.54	.60	.63	.70	.72	.72	.75	.75
HOUSTON U												
JAN 2	.18	.26	.35	.38	.49	.77	.85	.87	.87	.87	.87	.87
FEB 9	.15	.26	.37	.49	.61	.72	.78	.79	.82	.82	.88	.92
FEB 10	.27	.42	.53	.54	.57	.69	.77	.78	.85	.92	.93	.94
MAR 28	.32	.53	.70	.82	1.04	1.58	1.69	1.70	1.70	1.70	1.70	1.70
APR 14	.30	.52	.70	.80	1.07	1.30	1.38	1.39	1.39	1.39	1.46	2.04
APR 18	.27	.36	.43	.48	.53	.62	.68	.75	.84	.91	.95	.96
MAY 13	.41	.76	.96	1.02	1.18	1.28	1.45	2.01	2.36	2.60	2.73	2.74
MAY 18	.20	.32	.37	.43	.60	.91	1.06	1.15	1.20	1.24	1.31	1.36
JUN 13	.24	.39	.45	.48	.51	.51	.53	.69	.74	.76	.77	.79
JUN 19	.34	.64	.92	1.15	1.52	1.81	1.89	1.92	1.94	1.94	1.94	1.95
JUL 2	.34	.49	.63	.72	.74	.76	.77	.77	.77	.78	.78	.79
JUL 21	.14	.26	.36	.45	.55	.59	.59	.59	.59	.59	.59	.59
JUL 31	.23	.33	.38	.44	.54	.57	.57	.57	.57	.57	.63	.66
AUG 29	.40	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
SEP 6	.33	.54	.80	.93	1.01	1.06	1.06	1.06	1.06	1.06	1.06	1.07
OCT 4	.37	.64	.90	1.17	1.59	1.93	2.26	2.52	2.61	2.68	2.71	2.75
OCT 14	.27	.49	.63	.68	.68	.68	.68	.68	.68	.68	.68	.68
LUBBOCK												
JUN 10	*.42	*.56	.59	.63	.67	.67	.67	.67	.67	.67	.67	.67
JUN 17	.33	.47	.59	.61	.69	.75	.79	.79	.81	.82	.86	.89
JUL 16	.27	.30	.30	.31	.32	.32	.32	.32	.32	.32	.32	.32
AUG 13	.22	.40	.50	.58	.64	.76	.82	.83	.87	.90	.96	1.02
AUG 23	.18	.32	.46	.58	.72	.89	.98	1.30	1.59	1.76	1.87	1.89
SEP 2	*.45	*.80	*.93	1.08	*1.25	1.26	1.27	1.27	1.27	1.27	1.27	1.27
MIDLAND												
APR 23	.20	.38	.51	.54	.77	.90	.92	.96	1.08	1.11	1.11	1.11
MAY 26	.46	.87	1.10	1.44	1.90	1.94	2.08	2.15	2.18	2.21	2.32	2.39
JUN 11	.44	.86	1.12	1.17	1.19	1.24	1.26	1.35	1.36	1.37	1.40	1.50
JUN 18	.26	.48	.58	.65	.74	.84	.86	.88	.94	.97	.97	.97
AUG 28	.32	.60	.74	.94	1.36	1.63	1.64	1.64	1.64	1.64	1.64	1.64
SEP 1	.17	.25	.33	.41	.62	.79	.83	1.04	1.11	1.13	1.14	1.14
PORT ARTHUR												
FEB 10	.18	.30	.41	.52	.77	1.01	1.30	1.37	1.38	1.39	1.41	1.58
APR 14	.15	.26	.35	.42	.51	.60	.67	.74	.85	.99	1.13	1.24
APR 18	.38	.55	.59	.61	.66	.71	.75	.80	.87	.91	.93	.93
APR 21	.37	.47	.61	.93	.98	1.07	1.08	1.12	1.16	1.17	1.24	1.29
MAY 13	.17	.26	.35	.45	.53	.69	.81	.85	1.00	1.22	1.38	1.38
MAY 13	*.73	*1.23	*1.62	1.94	2.28	2.49	2.63	2.72	3.01	3.18	3.59	3.81
MAY 20	.49	.65	.76	.82	.94	1.02	1.06	1.10	1.11	1.12	1.16	1.16
JUN 13	.30	.38	.46	.50	.53	.53	.53	.55	.55	.55	.55	.55
JUN 14	.18	.29	.36	.39	.40	.40	.40	.40	.40	.40	.40	.40
JUN 16	.23	.39	.57	.75	1.08	1.41	1.65	1.65	1.65	1.72	1.76	1.76
JUL 5	.26	.30	.33	.43	.43	.48	.48	.74	.89	.91	.93	.94
JUL 22	.37	.63	.77	.82	.86	.86	.87	.87	.89	.89	.90	.90
AUG 6	.38	.57	.71	.93	1.19	1.55	2.04	2.29	2.62	2.69	2.77	2.77
AUG 10	.24	.34	.44	.48	.50	.52	.52	.52	.52	.54	.61	.65
AUG 11	.66	1.21	*1.75	2.22	*3.05	3.82	*4.36	4.68	5.06	5.34	5.98	6.39
AUG 19	.25	.31	.36	.53	.65	.65	.66	.68	.69	.69	.71	.75
AUG 19	.22	.37	.46	.49	.49	.50	.51	.51	.51	.51	.51	.51
AUG 20	.49	.71	.75	.84	.91	.97	1.04	1.07	1.10	1.11	1.29	1.41
SEP 5	.25	.29	.29	.29	.29	.29	.30	.45	.52	.52	.53	.54
SEP 7	.15	.28	.37	.41	.46	.47	.47	.47	.47	.47	.47	.47
SEP 9	.32	.48	.53	.59	.64	.65	.66	.66	.67	.67	.67	.67
SEP 30	.39	.59	.64	.64	.73	.81	.82	.82	.83	.83	.83	.83
OCT 12	.42	.62	.85	1.14	1.31	1.58	1.72	1.94	2.23	2.41	2.84	3.22
NOV 11	.22	.33	.35	.36	.37	.54	.55	.58	.68	.85	1.15	1.34
NOV 11	.32	.55	.65	.71	.80	.96	1.07	1.49	1.69	1.78	1.99	2.45
DEC 16	.24	.41	.55	.63	.70	.73	.77	.81	.83	.83	.84	.85
DEC 30	.25	.29	.29	.29	.30	.30	.32	.33	.36	.41	.43	.45
SAN ANGELO												
JUN 18	.20	.34	.39	.45	.56	.58	.59	.63	.68	.71	.73	.73
AUG 24	.25	.41	.44	.52	.67	.82	1.02	1.14	1.40	1.53	1.79	2.22
SEP 3	.34	.51	.56	.60	.63	.64	.64	.64	.64	.64	.65	.66
SAN ANTONIO												
FEB 9	.19	.32	.37	.39	.39	.39	.39	.39	.39	.39	.39	.39
FEB 9	.28	.30	.30	.30	.32	.32	.32	.32	.34	.34	.34	.34
MAR 12	.24	.42	.46	.52	.70	.70	.70	.70	.70	.70	.70	.70
APR 17	.34	.48	.64	.70	.74	.77	.80	.83	.83	.83	.84	.84
APR 24	.28	.53	.65	.80	1.15	1.52	1.63	1.67	1.70	1.73	1.79	1.87
MAY 23	.22	.37	.47	.55	.57	.58	.58	.58	.58	.58	.58	.58
JUN 18	.35	.54	.67	.77	.83	.94	1.00	1.06	1.11	1.16	1.20	1.22
AUG 27	.17	.23	.30	.41	.46	.47	.48	.48	.48	.48	.48	.48
OCT 4	.21	.33	.46	.49	.77	.96	.98	.99	1.00	1.00	1.00	1.00
VICTORIA												
APR 17	.30	.55	.60	.64	.67	.70	.75	.80	.85	.97	1.00	1.00
APR 25	.32	.58	.88	.99	1.31	1.67	1.90	2.08	2.12	2.12	2.16	2.18
MAY 4	.17	.33	.41	.52	.62	.68	.88	.94	1.04	1.10	1.29	1.51
JUN 12	.35	.65	.75	.85	.95	1.05	1.10	1.10	1.10	1.10	1.12	1.12
JUN 17	.22	.31	.37	.44	.52	.59	.63	.68	.73	.73	.73	.73
JUL 5	.31	.57	.71	.85	1.06	1.30	1.55	1.80	2.37	2.82	3.05	3.23
JUL 25	.28	.35	.40	.55	.60	.60	.60	.60	.60	.60	.60	.60
AUG 3	.30	.60	.75	.89	.90	.91	.91	.91	.91	.91	.91	.91
AUG 20	.33	.60	.70	.80	1.18	1.34	2.00	2.64	2.80	2.88	2.90	3.06
AUG 27	.20	.28	.37	.39	.42	.43	.44	.46	.47	.48	.50	.52
SEP 30	.28	.50	.52	.57	.62	.62	.62	.62	.62	.62	.62	.62
DEC 16	.28	.38	.45	.52	.60	.65	.68	.73	.79	.80	.82	.83

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
TEXAS												
WACO												
APR 17	.55	1.05	1.20	1.40	1.50	1.60	1.68	1.68	1.69	1.69	1.70	1.73
APR 22	.35	.46	.51	.61	.79	.88	.93	.97	1.00	1.02	1.06	1.06
APR 24	.25	.37	.41	.46	.55	.72	.78	.87	1.30	1.48	1.52	1.60
APR 24	.28	.44	.48	.61	.82	.84	.85	.90	.93	.94	.95	.98
MAY 20	.42	.68	.97	1.26	1.60	1.70	1.75	1.75	1.80	1.81	1.81	1.82
JUN 18	.15	.25	.35	.42	.53	.60	.62	.65	.65	.65	.66	.72
AUG 11	.27	.53	.61	.70	.80	.85	.86	.90	.95	.96	.97	.98
SEP 18	.26	.47	.58	.68	.88	1.05	1.06	1.07	1.07	1.07	1.07	1.07
SEP 27	*.75	1.16	1.26	1.46	1.50	1.55	1.56	1.56	1.57	1.58	1.65	1.65
WICHITA FALLS												
FEB 8	.29	.42	.47	.51	.53	.53	.53	.53	.53	.53	.53	.53
MAR 12	.25	.46	.64	.73	1.04	1.16	1.29	1.39	1.45	1.54	1.61	1.61
APR 22	.38	.50	.62	.65	.76	.85	.89	.98	1.06	1.11	1.19	1.32
APR 25	.28	.48	.70	.88	1.24	1.33	1.53	1.57	1.67	1.67	1.67	1.92
APR 26	.14	.26	.37	.43	.54	.63	.66	.69	.70	.71	.72	.77
JUL 10	.26	.35	.50	.62	.72	1.10	1.26	1.59	2.00	2.38	2.48	2.58
AUG 24	.14	.20	.32	.40	.58	.82	.92	1.02	1.30	1.51	1.69	2.01
SEP 8 T	M	M	M	M	M	M	M	M	M	M	M	M
SEP 15	.20	.32	.44	.55	.72	1.06	1.23	1.30	1.36	1.40	1.50	1.58
SEP 17	.26	.48	.60	.72	1.02	1.30	1.32	1.33	1.34	1.34	1.74	1.80
UTAH												
MILFORD						NONE						
SALT LAKE CITY						NONE						
WENDOVER						NONE						
VERMONT												
BURLINGTON												
JUN 5	.26	.42	.47	.47	.48	.49	.61	.65	.65	.67	.73	.73
JUL 26	.26	.38	.41	.41	.41	.43	.43	.43	.43	.43	.44	.45
AUG 11	.30	.52	.60	.69	.83	.84	.84	.84	.84	.84	.84	.84
AUG 16	.29	.41	.50	.58	.64	.69	.71	.73	.76	.76	.76	.76
VIRGINIA												
LYNCHBURG												
JUN 10	.29	.49	.62	.72	.78	.79	.82	.82	.82	.82	.82	.82
JUL 28	.25	.32	.34	.35	.38	.38	.38	.38	.38	.38	.38	.38
AUG 11	.30	.45	.45	.45	.45	.46	.54	.55	.82	.90	.95	1.00
SEP 14	.18	.28	.37	.51	.72	.92	.97	1.01	1.17	1.18	1.29	1.58
OCT 1	.19	.30	.39	.45	.56	.70	.95	1.05	1.16	1.23	1.29	1.35
NORFOLK												
FEB 13	.33	.37	.38	.38	.41	.43	.45	.45	.45	.45	.45	.45
MAY 1	.21	.29	.36	.39	.43	.44	.45	.46	.47	.50	.50	.50
MAY 19	.32	.58	.88	1.07	1.23	1.25	1.25	1.25	1.25	1.25	1.25	1.25
JUL 15	.25	.36	.46	.47	.48	.53	.56	.56	.56	.56	.56	.56
JUL 30	.29	.42	.59	.63	.67	.69	.79	.90	1.04	1.25	1.25	1.45
AUG 5	.19	.34	.41	.46	.62	.77	.86	.98	1.06	1.11	1.21	1.39
SEP 29	.20	.27	.35	.38	.40	.42	.43	.43	.43	.43	.43	.43
RICHMOND												
MAY 28	.14	.23	.32	.40	.57	.70	.77	.83	.84	.85	.86	.89
JUN 8	.22	.36	.39	.39	.40	.41	.52	.52	.52	.52	.53	.64
JUL 5	.16	.24	.28	.37	.51	.61	.66	.66	.66	.67	.76	.76
JUL 15	.14	.22	.32	.40	.54	.70	.72	.76	.81	.85	.85	.85
SEP 21	.22	.31	.44	.56	.66	.78	.88	1.08	1.22	1.37	1.56	1.64
ROANOKE												
JUN 16	.36	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41	.41
AUG 9	.40	.48	.59	.67	.69	.70	.71	.73	.75	.78	.87	.87
SEP 28	.28	.40	.53	.53	.53	.53	.53	.53	.53	.53	.53	.53
WASH NATL AP												
JUN 28	.22	.38	.46	.52	.73	.78	.83	.95	1.00	1.02	1.03	1.03
AUG 11	.39	.51	.53	.59	.75	1.09	1.18	1.21	1.21	1.21	1.21	1.21
SEP 14	.15	.26	.35	.50	.66	.89	1.23	1.41	1.56	1.69	1.83	2.07
WASHINGTON												
OLYMPIA												
JUL 15	*.22	.30	.31	.33	.34	.35	.35	.36	.37	.37	.37	.37
QUILLAYUTE S						NONE						
SEATTLE TACOMA						NONE						
SPOKANE						NONE						
STAMPEDE PASS						NONE						
TATOOSH ISLAND R C						NONE						
WALLA WALLA U						NONE						
YAKIMA						NONE						
WEST INDIES												
SAN JUAN P.R.												
MAR 18	.25	.45	.66	.78	1.09	1.39	1.77	2.07	2.16	2.26	2.55	2.62
APR 12	.23	.42	.52	.62	.66	.70	.70	.73	.73	.75	.76	.76
APR 19	.21	.38	.47	.54	.70	.82	.85	.87	.88	.88	.91	.91
APR 19	.35	.43	.54	.63	.65	.65	.65	.70	.73	.79	.84	.84
SEP 6	.23	.35	.36	.37	.37	.37	.37	.37	.37	.37	.37	.37

T	CLOCK MALFUNCTION
M	NO RECORD
S	RECORD BEGAN AUGUST 1.
C	RECORD ENDED JULY 31.

EXCESSIVE SHORT DURATION RAINFALL

Station and date	Maximum precipitation in inches (5 to 180 minutes)											
	5	10	15	20	30	45	60	80	100	120	150	180
WEST INDIES												
SAN JUAN P.R.												
SEP 9	.27	.42	.54	.68	.83	.93	1.05	1.20	1.22	1.22	1.24	1.24
SEP 11	.17	.33	.39	.48	.67	.74	.75	.89	.89	1.07	1.33	1.64
OCT 6	.37	.60	.69	.73	.89	1.14	1.24	1.39	1.40	1.40	1.40	1.40
OCT 6	.12	.24	.35	.42	.45	.45	.45	.45	.45	.45	.45	.56
OCT 20	.18	.35	.41	.43	.45	.45	.45	.48	.45	.48	.48	.48
OCT 21	.30	.49	.54	.55	.56	.56	.56	.56	.56	.56	.60	.60
OCT 28	.22	.37	.48	.60	.60	.66	.71	.87	.88	1.39	1.57	1.86
NOV 10	.26	.49	.68	.84	.92	.94	.96	1.28	1.30	1.31	1.31	1.32
NOV 22	.27	.39	.47	.49	.49	.49	.49	.49	.50	.50	.65	.69
NOV 22	.26	.41	.51	.69	.80	.86	.91	1.20	1.24	1.31	1.31	1.31
NOV 22	.20	.26	.37	.46	.51	.58	.58	.60	.61	.70	.78	.78
NOV 23	.24	.41	.49	.56	.59	.59	.59	.59	.59	.59	.59	.59
DEC 24	.27	.40	.48	.53	.55	.64	.81	.85	.85	.85	.85	.90
WEST VIRGINIA												
BECKLEY												
APR 28	.30	.51	.61	.64	.75	.80	.84	.85	.88	.89	.90	.91
JUL 19	.25	.47	.49	.51	.55	.75	.94	1.17	1.33	1.34	1.37	1.37
AUG 11	.17	.30	.32	.35	.39	.40	.42	.44	.44	.44	.44	.44
SEP 21	*.45	*.75	*.95	1.15	*1.42	1.57	*1.64	1.66	1.66	*1.66	1.66	1.66
CHARLESTON												
AUG 22	.35	.45	.46	.61	.64	.66	.67	.67	.67	.67	.67	.67
NOV 2	.25	.29	.32	.40	.45	.58	.63	.68	.70	.71	.71	.73
ELKINS												
APR 30	.15	.30	.35	.41	.60	.80	.98	1.06	1.10	1.11	1.13	1.13
JUN 28	.26	.42	.43	.46	.47	.47	.47	.47	.47	.47	.47	.47
JUL 19	.42	.58	.60	.68	.74	.74	.74	.74	.74	.74	.74	.74
JUL 19	.13	.23	.27	.29	.50	.59	.69	.70	.70	.70	.71	.71
AUG 7	.32	.56	.63	.71	.74	.75	.78	.83	.90	.91	.92	.92
AUG 8	.33	.55	.58	.62	.65	.66	.66	.66	.66	.66	.66	.66
AUG 11	.34	.35	.35	.35	.36	.36	.36	.37	.41	.43	.44	.45
AUG 16	.25	.26	.27	.28	.29	.30	.30	.30	.30	.30	.30	.30
SEP 21	.15	.30	.35	.38	.43	.50	.60	.65	.67	.67	.67	.67
HUNTINGTON												
APR 28	.27	.53	.64	.76	.83	.85	.90	.95	.98	1.03	1.13	1.16
JUL 10	.28	.50	.55	.67	.87	1.10	1.20	1.22	1.24	1.25	1.49	1.51
JUL 12	.40	.70	.81	.81	.84	.83	.89	.90	.91	.92	.94	.94
JUL 13	.43	.65	.84	.95	1.15	1.25	1.35	1.36	1.38	1.40	1.45	1.50
JUL 14	.23	.37	.38	.41	.43	.43	.43	.47	.49	.50	.54	.54
AUG 8	.31	.50	.51	.52	.53	.55	.96	.97	.97	.97	.97	.97
AUG 22	.37	.57	.59	.61	.67	.69	.72	.73	.83	.88	.90	.90
SEP 27	.30	.40	.45	.55	.60	.77	.89	.92	.92	.93	.93	1.10
PARKERSBURG U												
JUL 10	.18	.30	.42	.50	.55	.57	.64	.67	.71	.75	.80	1.04
JUL 14	.25	.45	.66	.73	.76	1.19	1.20	1.20	1.20	1.20	1.20	1.20
WISCONSIN												
GREEN BAY												
JUL 3	.41	.53	.54	.56	.58	.58	.58	.58	.59	.59	.59	.60
JUL 11	.20	.34	.38	.42	.49	.56	.73	.90	1.10	1.30	1.52	1.55
LA CROSSE												
MAY 17	.27	.36	.39	.40	.41	.41	.41	.41	.41	.41	.41	.41
JUN 4	.33	.39	.48	.55	.65	.68	.71	.72	.72	.74	.81	.99
JUN 4	.47	.57	.58	.59	.60	.60	.60	.60	.60	.60	.60	.60
JUL 4	.34	.57	.66	.78	.87	.88	.89	.89	.93	.94	1.15	1.18
JUL 10	.34	.60	.69	.82	.96	1.06	1.10	1.11	1.14	1.15	1.15	1.15
OCT 14	.23	.32	.35	.46	.52	.66	.86	1.01	1.04	1.10	1.13	1.26
OCT 14	.35	.46	.49	.53	.56	.56	.56	.56	.56	.56	.56	.56
MADISON												
MAY 23	.32	.51	.66	.77	.97	1.21	1.28	1.46	1.55	1.75	2.47	2.82
AUG 15	.35	.60	.75	.86	.96	1.01	1.24	1.45	1.45	1.48	1.50	1.50
OCT 14	.25	.41	.59	.61	.93	.99	1.06	1.08	1.10	1.11	1.13	1.13
MILWAUKEE												
MAR 21	.20	.39	.52	.59	.65	.71	.71	.72	.76	.88	.92	.92
MAY 23	.26	.38	.52	.56	.62	.65	.72	.77	.81	.82	.83	.83
JUL 11	.21	.35	.40	.52	.56	.62	.66	.67	.71	.72	.72	.72
JUL 26	.30	.52	.70	.78	1.00	1.05	1.08	1.11	1.12	1.13	1.14	1.15
AUG 1	.44	.55	.78	.84	.86	.93	1.06	1.11	1.14	1.14	1.14	1.32
AUG 15	.28	.38	.46	.54	.58	.62	.65	.65	.65	.65	.65	.65
WYOMING												
CASPER						NONE						
CHEYENNE												
JUL 22	.41	.50	.50	.50	.50	.68	.75	.81	.83	.83	.83	.83
JUL 31	.38	.54	.60	.86	.91	1.00	1.16	1.24	1.26	1.39	1.44	1.51
AUG 2	.34	.46	.54	.62	.74	.75	.76	.76	.76	.76	.76	.76
AUG 7	.30	.36	.44	.46	.46	.46	.46	.46	.46	.46	.46	.46
SEP 1	.30	.54	.65	.70	.72	.83	.86	.86	.87	.95	.97	1.01
LANDER						NONE						
SHERIDAN												
JUN 18	.34	.50	.51	.51	.51	.51	.51	.51	.51	.51	.51	.51

Data from airport unless otherwise specified.
U indicates Urban, R indicates Rural, sites.

* Maximum of record for this duration and station. Period of record is that compiled in Weather Bureau Technical Paper No. 2, revised, plus 1962 and 1963 data. New records are denoted only for 5, 10, 15, 30, 60, 120, and 180 minutes. The continuity of record at stations that have changed location is described on page 2 of the above reference.

SUNSHINE, AMOUNT AND PERCENT

YEAR 1966

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
ALABAMA																										
BIRMINGHAM	121	38	144	47	271	73	227	58	294	68	314	73	367	84	232	56	202	54	251	71	201	64	114	37	2738	62
MONTGOMERY	113	35	142	46	246	66	207	53	194	45	231	54	307	71	270	65	214	58	190	54	191	61	117	37	2424	55
ALASKA																										
ANCHORAGE	80	39	123	49	192	52	266	60	207	38	258	45	255	45	112	23	172	45	104	34	104	48	85	48	1957	43
JUNEAU	135	60	89	34	101	28	177	41	176	34	226	41	187	35	108	23	31	8	83	26	112	47	34	17	1459	32
NOME	76	45	41	17	199	54	218	48	277	48	246	39	183	30	163	32	98	25	65	21	27	14	49	38	1640	36
ARIZONA																										
PHOENIX	250	79	243	79	304	82	358	92	410	95	395	92	359	82	377	91	292	79	303	86	262	83	252	81	3805	86
TUCSON	272	85	242	78	349	94	364	93	400	94	365	86	348	80	332	80	293	79	306	87	263	83	248	79	3781	85
YUMA	257	80	265	86	329	89	374	96	409	95	403	94	346	79	386	94	329	89	303	86	278	88	241	77	3920	88
ARKANSAS																										
FORT SMITH	159	51	149	49	241	65	201	51	319	73	299	69	295	67	227	54	208	56	265	76	175	57	148	49	2686	60
LITTLE ROCK	121	39	131	43	261	70	186	47	298	69	317	73	312	71	228	55	224	60	263	75	189	61	125	41	2654	60
CALIFORNIA																										
EUREKA U	150	50	170	57	133	36	255	64	261	58	338	75	249	54	247	58	253	68	171	50	124	42	150	52	2500	56
FRESNO	215	69	242	80	318	86	362	92	379	86	403	92	418	94	414	99	343	92	321	92	207	67	87	29	3706	83
LOS ANGELES U	227	72	182	59	192	52	240	61	176	41	268	62	331	75	367	88	241	65	231	66	157	50	204	66	2816	63
RED BLUFF	167	56	191	64	257	69	360	91	397	89	389	87	437	96	405	95	350	94	314	91	127	43	116	40	3510	80
SACRAMENTO	193	63	210	70	307	83	363	92	395	89	414	93	435	96	415	98	363	97	329	95	184	61	102	35	3711	83
SAN DIEGO	273	86	259	84	265	71	257	66	172	40	263	61	325	74	347	84	274	74	258	73	227	72	233	75	3153	71
SAN FRANCISCO U	209	68	201	66	237	64	305	77	297	67	369	84	326	73	304	72	294	79	262	75	142	47	142	48	3088	69
COLORADO																										
DENVER	232	77	235	78	320	86	292	73	315	71	299	67	311	68	290	68	259	69	253	73	162	54	177	61	3146	71
GRAND JUNCTION	228	75	195	65	264	71	319	80	356	80	348	78	346	76	337	80	312	84	266	77	165	55	182	62	3318	75
PUEBLO	224	73	222	74	322	87	304	77	360	81	364	82	346	77	304	72	288	77	299	86	209	69	230	78	3473	78
CONNECTICUT																										
HARTFORD	196	66	181	61	240	65	197	49	220	49	283	62	373	81	291	68	232	62	210	61	151	51	147	52	2721	61
NEW HAVEN	179	60	185	62	228	62	203	51	235	52	308	68	381	83	286	67	223	60	245	71	178	60	173	60	2824	63
FLORIDA																										
APALACHICOLA U	138	42	139	45	262	71	280	72	183	43	263	62	276	64	256	63	201	54	157	44	277	86	140	44	2571	58
JACKSONVILLE	178	55	178	57	306	82	318	82	197	46	294	70	283	66	276	67	215	58	202	57	220	69	164	52	2829	64
KEY WEST	191	57	225	71	262	70	280	73	294	71	198	48	300	72	328	81	271	74	214	60	252	77	251	76	3064	69
LAKELAND U	187	57	231	74	318	85	300	78	288	69	247	59	240	56	257	63	219	59	220	62	262	81	203	63	2972	67
PENSACOLA	123	38	147	47	239	64	273	70	196	46	255	60	220	51	220	54	162	44	191	54	206	65	136	43	2367	53
TAMPA	191	58	210	67	294	79	284	74	306	73	258	62	271	64	291	72	211	57	238	67	224	69	159	49	2935	66
GEORGIA																										
ATLANTA	138	44	133	43	269	72	204	52	216	50	290	67	278	63	248	60	227	61	216	61	165	53	142	46	2527	57
MACON	153	48	150	49	274	74	235	60	201	47	303	71	326	75	306	74	226	61	210	60	188	60	189	61	2763	62
SAVANNAH	152	47	171	55	258	69	246	63	154	36	260	61	271	62	240	58	212	57	198	56	220	70	172	55	2553	57
HAWAII																										
HILO	85	25	68	21	116	31	99	26	141	35	112	28	118	29	97	24	103	28	86	24	74	22	125	37	1224	28
HONOLULU	241	71	149	46	300	80	313	83	347	85	310	77	291	71	301	76	270	73	180	50	168	50	165	49	3035	68
KAHULUI	239	70	162	50	285	77	246	65	260	64	282	70	292	71	256	64	265	72	243	67	240	72	212	63	2982	67
LIHUE	204	60	124	39	236	63	264	69	302	74	296	73	286	69	283	71	231	63	183	51	160	48	152	45	2720	61
IDAHO																										
BOISE	135	46	148	50	283	76	359	89	399	87	410	89	446	95	393	91	338	90	286	84	139	48	156	56	3491	78
POCATELLO	138	47	165	56	260	70	267	66	332	73	320	70	377	81	348	81	260	69	251	73	126	43	104	37	2946	66
ILLINOIS																										
CAIRO U	152	49	109	36	245	66	203	51	312	71	327	74	313	70	272	65	175	47	249	71	164	54	117	39	2637	59
CHICAGO MIDWAY	168	57	113	38	198	53	153	38	305	68	307	68	389	84	322	75	238	64	250	73	70	24	92	32	2605	58
MOLINE	190	64	160	54	145	39	172	43	296	66	328	72	359	78	338	79	249	66	240	70	113	38	119	41	2707	61
PEORIA	155	52	173	58	187	50	177	44	323	72	316	70	346	76	294	69	240	64	248	72	121	41	111	38	2689	60
SPRINGFIELD	162	54	165	55	192	52	161	40	309	69	297	66	357	79	306	72	266	71	253	73	145	48	114	39	2725	61
INDIANA																										
EVANSVILLE	155	51	104	35	226	61	179	45	285	65	329	74	337	75	298	71	200	54	231	66	134	44	115	39	2594	58
FORT WAYNE	124	42	144	48	215	58	167	42	291	65	322	71	342	75	282	66	255	68	248	72	108	36	91	32	2589	58
INDIANAPOLIS	142	47	120	40	192	52	141	35	296	66	305	68	316	70	258	61	226	60	222	64	85	28	66	23	2368	53
IOWA																										
DES MOINES	187	63	206	69	231	62	187	47	299	66	304	67	362	79	354	83	259	69	246	72	136	46	141	49	2912	65
SIOUX CITY	195	66	212	72	288	78	195	48	344	76	347	76	362	78	315	73	244	65	247	72	168	57	148	52	3063	69
KANSAS																										
CONCORDIA	210	70	216	72	278	75	190	48	344	77	297	66	324	71	290	68	248	66	288	83	182	60	175	60	3042	68
DODGE CITY	210	68	217	72	310	84	254	64	337	77	320	72	397	89	356	84	294	79	287	82	182	60	178	60	3341	75
TOPEKA	185	61	203	67	271	73	210	53	329	74	266	60	359	79	302	71	236	63	281	81	180	59	172	59	2993	67
WICHITA	164	53	195	64	308	83	216	55	335	76	304	69	298	66	270	64	236	63	270	78	180	59	183	61	2958	66
KENTUCKY																										
LOUISVILLE	170	55	132	44	256	69	170	43	329	75	354	80	361	80	296	70	208	56	234	67	129	42	104	35	2742	62
LOUISIANA																										
SHREVEPORT	128	40	164	51	248	67	182	47	218	51	287	67	309	71	228	55	221	60	253	72	198	63	135	43	2570	58
MAINE																										
PORTLAND	164	57	209	71	252	68	220	55	265	58	240	52	286	61	285	66	260	69	219	64	119	41	116	41	2634	59
MARYLAND																										
BALTIMORE	152	50	144	48	254	68	137	34	256	58	310	69	349	77	276	65	167	45	237	69	170	56	142	48	2593	58
MASSACHUSETTS																										
BLUE HILL OBS R	136	48	139	48	205	57	193	50	241	55	264	60	326	73	274	66	230	64	222	67	147	52	150	55	2527	59
BOSTON	157	53	165	56	226	61	218	54	287	63	292	64	356	77	291	68	239	64	238	69	168	57	167	59	2804	63
NANTUCKET	163	55	169	57	229	62	250	62	248	55	290	64	305	66	256	60	211	56	234	68	97	33	87	30	2538	57
MICHIGAN																										
ALPENA	101	35	101	35	153	41	204	50	317	69	343	73	352	75	229	53	205	55	169	50	58	20	57	21	2288	51
DETROIT M WAYNE CO	129	44	102	34	185	50	181	45	293	65	372	81	304	66	286	67	228	61	230	67	66	22	68	24	2444	52
GRAND RAPIDS	138	47	118	40	187	50	182	45	309	68	328	72	312	67	273	63	232	62	208	61	51	17	73	26	2410	54
LANSING	156	53	141	48	177	48	176	44	309	68	325	71	331	71	291	67	231	62	197	58	61	21	99	35	2494	56
MARQUETTE U	117	42	141	49	154	42	237	58	316	68	342	72	356	75	219	50	246	65	144	42	63	22	66	25	2401	54
SAULT STE MARIE	111	40	111	38	174	47	233	57	324	70	334	71	362	76	213	49	214	57	125	37	24	8	86	32	2309	51
MINNESOTA																										
DULUTH	161	58	176	61	183	50	220	54	320	69	272	57	320	67	207	47	249	66	163	48	89	31	104	39	2464	55
MINNEAPOLIS	175	61	192	66	175	47	165	41	321	70	304	65	368	78	273	63	264	70	203	60	113	39	125	46	2678	60

SUNSHINE, AMOUNT AND PERCENT

YEAR 1966

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
MISSISSIPPI																										
JACKSON	126	39	148	48	271	73	222	57	254	59	303	71	311	71	259	63	207	56	259	74	172	55	82	26	2613	59
VICKSBURG U	136	43	147	48	311	84	247	63	272	63	342	80	355	82	325	79	172	46	256	72	221	70	121	39	2905	65
MISSOURI																										
COLUMBIA	207	68	208	69	290	78	244	61	345	78	340	76	374	83	367	87	258	69	263	76	172	57	145	49	3214	72
KANSAS CITY	200	66	215	71	231	62	199	50	335	75	278	62	346	77	319	75	230	62	253	73	179	59	152	52	2937	66
ST LOUIS	152	50	159	53	215	58	182	46	310	70	318	71	346	77	271	64	203	56	255	73	170	56	152	51	2733	61
SPRINGFIELD	177	57	155	51	233	63	187	47	307	70	262	59	323	72	261	62	209	56	257	74	179	59	170	57	2719	61
MONTANA																										
BILLINGS	131	46	186	64	269	73	207	51	334	72	345	74	407	86	372	85	296	79	205	61	187	66	162	60	3101	69
GREAT FALLS	134	48	185	64	309	84	220	54	389	83	365	77	419	87	374	85	295	78	193	57	133	47	105	40	3122	70
HAVRE	144	53	210	74	253	68	230	56	352	74	316	66	412	85	342	77	294	78	181	54	133	48	93	36	2958	66
HELENA	103	37	150	52	252	68	228	56	353	76	305	64	405	85	345	79	265	70	198	59	106	38	95	36	2806	63
MISSOULA	78	28	104	36	225	61	245	60	363	78	287	61	408	85	322	73	259	69	164	49	85	30	54	20	2593	58
NEBRASKA																										
LINCOLN U	190	64	209	70	269	73	184	46	333	74	290	64	319	70	302	71	220	59	267	77	152	51	131	45	2866	64
NORTH PLATTE	142	48	142	48	290	78	234	59	353	79	322	71	317	69	307	72	270	72	285	83	160	54	144	50	2966	66
OMAHA	204	69	224	75	255	69	215	54	349	78	323	71	342	74	364	85	253	67	266	77	169	57	134	47	3096	69
VALENTINE	204	70	188	64	286	77	226	56	373	82	355	77	359	77	327	76	237	63	252	74	183	62	151	54	3142	70
NEVADA																										
ELY	248	82	206	69	276	75	329	83	378	85	373	84	392	87	334	79	313	84	296	86	207	69	165	56	3518	79
LAS VEGAS	264	85	246	81	306	82	371	94	401	92	387	89	395	89	398	95	323	87	299	86	230	74	225	74	3843	86
RENO	224	74	188	62	333	90	387	98	417	94	400	89	433	95	401	95	341	91	328	95	201	67	145	50	3798	85
WINNEMUCCA	129	43	119	40	231	62	279	70	288	64	330	73	413	90	355	83	296	79	262	76	80	27	92	32	2871	64
NEW HAMPSHIRE																										
CONCORD	167	57	196	66	240	65	225	56	281	62	287	62	354	76	297	69	226	60	213	62	126	43	138	49	2749	62
MT WASHINGTON OBS	80	27	99	33	119	32	130	32	170	37	140	30	169	36	126	29	123	32	149	43	89	30	104	37	1498	33
NEW JERSEY																										
ATLANTIC CITY	184	61	168	56	221	60	109	27	220	49	265	59	320	71	266	63	187	50	210	61	163	54	137	47	2449	55
TRENTON U	174	58	182	61	256	69	182	46	241	54	314	70	348	76	278	65	183	49	223	65	156	52	134	46	2669	60
NEW MEXICO																										
ALBUQUERQUE	249	79	233	76	333	90	345	88	366	84	327	75	367	83	331	79	292	78	297	85	241	78	236	77	3617	81
ROSWELL	196	62	212	69	207	56	299	77	305	71	256	59	308	73	-	-	242	65	284	81	202	64	247	80	-	-
NEW YORK																										
ALBANY	144	49	125	42	184	50	166	41	212	47	249	54	348	75	252	59	223	60	206	60	90	31	126	44	2324	52
BINGHAMTON	108	37	138	47	199	54	173	43	251	55	358	78	375	81	306	71	182	49	168	49	74	25	85	30	2416	54
BUFFALO	91	31	98	33	183	49	155	39	301	66	355	77	327	70	294	68	215	57	189	55	76	26	65	23	2348	53
NEW YORK U	151	51	149	50	224	61	172	43	246	55	325	72	373	81	294	69	197	53	218	63	159	53	131	45	2640	59
ROCHESTER	80	27	117	40	191	52	187	46	257	57	342	74	333	72	275	64	207	55	183	54	78	27	72	26	2320	52
SYRACUSE	87	30	104	35	215	58	213	53	249	55	358	78	348	75	262	61	197	53	165	48	74	25	69	25	2340	52
NORTH CAROLINA																										
ASHEVILLE	157	50	128	42	294	79	211	54	246	56	290	67	298	67	208	50	187	50	221	63	153	49	167	55	2560	58
CAPE HATTERAS R	125	40	126	41	264	71	247	63	236	54	292	67	326	74	254	61	280	75	242	69	206	66	144	47	2741	62
CHARLOTTE	196	63	156	51	320	86	252	64	270	62	377	87	333	75	300	72	251	67	226	64	209	68	194	64	3081	69
GREENSBORO	161	52	143	47	278	75	153	39	227	52	277	63	303	68	203	48	186	50	216	62	193	62	167	55	2506	56
RALEIGH	170	54	148	48	300	81	187	48	226	52	293	67	289	65	187	45	224	60	216	62	193	62	161	53	2593	58
WILMINGTON	174	55	153	50	298	80	294	75	218	50	298	69	301	68	273	66	257	69	229	65	221	71	173	56	2889	65
NORTH DAKOTA																										
BISMARCK	155	55	165	57	271	73	213	52	333	71	313	66	323	67	287	65	259	69	211	62	95	34	152	57	2778	62
FARGO	172	62	208	72	183	50	143	35	301	65	328	69	331	69	251	57	284	75	196	58	155	55	138	52	2690	60
WILLISTON	136	49	160	56	251	68	214	52	305	65	274	57	311	64	318	72	271	72	204	61	100	36	102	39	2643	59
OHIO																										
CINCINNATI OBS	130	43	103	34	188	51	96	24	268	60	290	65	309	68	260	61	179	48	207	60	125	41	83	28	2236	50
CLEVELAND	98	33	112	38	135	36	149	37	265	59	388	85	322	70	239	56	281	75	221	64	78	26	60	21	2348	53
COLUMBUS	145	48	98	33	197	53	155	39	293	66	321	72	299	66	251	59	223	60	215	62	93	31	94	32	2385	54
DAYTON	151	50	111	37	235	63	146	37	301	67	358	80	348	77	309	73	215	58	204	59	116	39	118	40	2611	58
TOLEDO	163	55	133	45	205	55	167	42	297	66	303	67	326	71	284	66	232	62	230	67	64	22	68	24	2472	55
OKLAHOMA																										
OKLAHOMA CITY	187	60	170	56	302	81	245	62	330	76	307	71	293	66	248	60	220	59	277	79	239	77	199	65	3018	68
TULSA	185	59	198	65	284	76	230	58	339	78	346	79	280	63	214	51	166	45	272	78	207	67	181	60	2900	65
OREGON																										
PORTLAND	54	19	119	41	182	49	247	61	278	60	227	48	280	59	303	70	204	54	128	38	54	19	23	9	2099	47
PACIFIC AREA																										
TAGUAC GUAM R	236	67	221	67	253	68	206	55	283	72	206	53	223	56	181	46	142	39	194	53	183	53	183	52	2510	57
JOHNSTON	224	64	166	51	288	77	248	66	216	54	282	72	256	63	282	72	256	70	139	38	114	34	209	61	2681	61
KOROR R	181	50	222	67	260	69	231	63	240	62	204	54	210	54	210	55	227	62	215	58	196	55	187	52	2582	58
MAJURO	229	63	225	68	221	59	177	48	247	64	204	54	243	63	269	70	216	59	218	59	154	43	130	36	2532	57
MARCUS ISLAND	207	62	217	68	294	79	278	73	319	77	329	81	252	64	251	62	256	69	183	53	218	66	198	60	3004	68
PONAPE R	151	41	179	54	197	53	217	59	189	49	236	63	202	52	209	55	301	83	183	49	175	49	165	45	2404	54
TRUK MOEN ISLAND	224	62	262	79	298	80	292	79	267	69	280	74	277	71	312	82	294	81	299	81	272	77	264	73	3343	76
YAP R	174	48	168	51	183	49	139	37	112	29	186	49	177	45	151	39	204	56	218	59	187	53	139	39	2037	46
PENNSYLVANIA																										
HARRISBURG	165	55	154	52	265	71	173	43	273	61	344	76	378	83	312	73	192	51	216	62	195	65	136	47	2802	63
PHILADELPHIA	155	52	166	55	237	64	168	42	234	52	303	68	314	69	298	70	205	55	225	65	160	53	151	52	2615	56
PITTSBURGH	84	28	91	30	197	53	116	29	191	43	287	64	279	61	229	54	198	53	189	55	86	29	59	20	2007	45
PITTSBURGH WB CITY	75	25	87	29	202	55	144	36	203	45	265	59	256	56	212	50	183	49	178	52	81	27	57	20	1942	44
READING U	132	44	145	49	220	59	147	37	244	55	320	71	340	74	292	69	184	49	204	59	142	48	136	47	2506	56
SCRANTON	144	48	140	47	211	57	183	46	248	55	331	73	344	75	283	66	179	48	226	66	126	42	98	34	2510	56
RHODE ISLAND																										
PROVIDENCE	177	60	167	56	217	59	176	44	225	50	263	58	335	73	250	58	222	59	226	66	162	55	164	58	2584	58
SOUTH CAROLINA																										
CHARLESTON	171	54	172	56	279	75	197	51	191	44	273	64	285	65	279	67	250	67	218	62	227	72	99	32	2641	59
COLUMBIA	153	49	156	51	298	80	203	52	184	43	271	63	270	61	289	70	252	68	244	69	224	72	171	55	2714	61
GNVLE SPARTANBURG	149	47	138	45	273	74	202	52	211	49	312	72	297	67	253	61	241	65	216	62	183	59	158	52	2632	59
SOUTH DAKOTA																										
HURON	198	69	196	67	257	69	219	54	355	77	365	79	382	81	322	74	279	74	228	67	171	59	160	58	3130	70
RAPID CITY	129	45	150	51	259	70	194	48	318	70	291	63	325	69	275	64	262	70	231	68	149	52	148	53	2733	61
TENNESSEE																										
CHATTANOOGA	107	34	116	38	231	62	185	47	261	60	301	69	298	67	248	60	201	54	227	65	130	42	128	42	2434	55
KNOXVILLE	106	34	118	39	243	66	143	36	214	49	305	70	291	66	276	66	211	57	228	65	94	30	72	24	2301	52
MEMPHIS	146	47	155	51	304	82	225	57	334	77	331	76	314	71	253	61	226	61	273	78	183	59	113	37	2857	64
NASHVILLE	133	43	118	39	251	68	165	42	301	69	347	79	319	72	258	62	202	54	248	71	130	42	130	43	2602	58

SUNSHINE, AMOUNT AND PERCENT

YEAR 1966

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible	Hours	Percent of possible
TEXAS																										
ABILENE	184	58	225	73	293	79	274	70	314	73	330	77	332	76	261	63	203	55	275	78	233	74	220	71	3144	71
AMARILLO	207	66	221	72	319	86	273	70	310	71	311	72	329	74	246	59	248	67	283	81	204	66	219	72	3170	71
AUSTIN	154	47	195	63	193	52	155	40	171	40	269	64	319	74	238	58	227	61	244	69	211	66	168	53	2542	57
BROWNSVILLE	167	50	127	40	210	56	220	57	259	62	291	71	354	84	353	87	319	86	252	70	231	71	171	52	2952	67
CORPUS CHRISTI	103	31	101	32	154	41	99	26	152	36	191	46	303	71	321	79	272	74	232	65	201	62	162	50	2290	52
DALLAS	160	50	176	57	242	65	205	53	245	57	305	71	307	70	244	59	212	57	249	71	198	63	140	45	2683	60
EL PASO	271	84	265	86	353	95	349	90	370	87	325	76	411	95	288	70	294	79	304	86	269	85	268	86	3768	85
GALVESTON U	126	39	171	55	235	63	174	45	163	39	282	67	298	70	226	55	246	67	224	63	220	68	153	48	2518	57
HOUSTON	121	37	174	56	230	62	168	43	182	43	313	74	310	72	225	55	267	72	250	71	200	63	138	43	2578	58
PORT ARTHUR	120	37	178	57	215	58	180	46	234	55	274	65	314	73	239	58	232	63	266	75	194	61	124	39	2568	58
SAN ANTONIO	160	49	187	58	216	58	235	61	174	41	270	64	334	78	270	66	255	69	252	71	218	68	194	61	2765	62
UTAH																										
SALT LAKE CITY	197	66	195	65	302	81	346	87	390	87	385	85	404	88	386	91	312	83	276	80	156	52	65	23	3413	77
VERMONT																										
BURLINGTON	121	42	174	59	207	56	243	60	278	61	329	71	387	82	301	69	225	60	216	63	95	33	134	49	2711	61
VIRGINIA																										
LYNCHBURG	177	58	147	49	281	76	188	48	289	66	336	76	328	73	259	62	220	59	240	69	173	57	141	47	2778	62
NORFOLK	141	46	123	41	265	71	206	52	246	56	294	67	335	75	223	53	223	60	227	65	188	61	168	56	2638	59
RICHMOND	177	58	152	50	275	74	198	50	272	62	331	75	316	71	240	57	206	55	214	61	178	58	157	53	2715	61
WASH NATL AP	152	50	133	44	230	62	118	30	250	56	306	69	311	69	266	63	168	45	228	66	171	50	135	46	2466	55
WASHINGTON																										
SEATTLE TACOMA	30	11	100	35	181	49	206	50	293	62	285	60	287	60	318	72	189	50	121	36	54	19	18	7	2082	47
SPOKANE	43	15	109	38	203	55	287	70	318	68	243	51	377	78	333	76	277	73	166	49	66	24	36	14	2459	55
WALLA WALLA U	48	17	81	28	205	56	285	70	333	72	325	69	395	83	364	83	287	76	186	55	81	29	19	7	2611	58
WEST INDIES																										
SAN JUAN P.R.	212	61	161	50	259	69	292	77	220	55	308	78	287	71	302	76	271	74	226	62	208	61	193	56	2937	66
WEST VIRGINIA																										
PARKERSBURG U	107	35	80	27	208	56	94	24	272	61	288	64	277	61	223	53	177	47	193	56	120	40	92	31	2130	48
WISCONSIN																										
GREEN BAY	184	64	146	50	150	41	180	45	289	63	303	65	329	70	242	56	224	60	180	53	71	25	121	44	2418	54
MADISON	216	74	168	57	201	54	174	43	309	68	356	77	374	80	335	78	273	73	219	64	111	38	141	50	2877	65
MILWAUKEE	189	65	141	48	234	63	220	55	328	72	348	76	367	79	324	75	257	69	232	68	67	23	129	46	2836	63
WYOMING																										
CHEYENNE	179	60	195	65	285	77	260	65	310	69	279	62	305	66	308	72	250	67	258	75	154	52	187	65	2968	67
LANDER	206	70	234	79	309	83	284	71	350	77	273	60	316	68	304	71	240	64	268	78	212	72	188	67	3183	71
SHERIDAN	107	37	155	53	273	74	211	52	332	72	293	63	363	77	315	72	282	75	224	66	149	52	160	58	2864	64

Data from airport unless otherwise specified.
"U" indicates Urban, "R" indicates Rural, sites.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Snow, Sleet: Total	Snow, Sleet: Greatest in 24 hours	Snow, Sleet: Date (s)	Relative humidity: 100am EST	Relative humidity: 700am EST	Relative humidity: 100p.m. EST	Relative humidity: 700p.m. EST	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile: Speed	Wind: Fastest mile: Direction	Wind: Fastest mile: Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-03	Number of days: Sunrise to sunset: Partly cloudy, 04-07	Number of days: Sunrise to sunset: Cloudy, 0.8-1.0	Number of days: Precipitation .01 inch or more	Number of days: Snow, Sleet 1.0 inch or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max temp: 90 °F and above	Number of days: Max temp: 32 °F and below	Number of days: Min temp: 32 °F and below	Number of days: Min temp: 0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In		%	%	%	%	M.p.h.	M.p.h.		M.p.h			%	Tenths											
ALABAMA																																					
BIRMINGHAM	71.4	49.4	60.4	10[illegible]	JUL 15	-4	JAN 30	3117	56.[illegible]6	5.[illegible]8	APR 26-27	1.2	1.2	JAN 29	82	85	59	65	5.8	0.1	34	36	SE	FEB 10	62	6.1	98	101	166	119	1	44	14	31	1	62	1
HUNTSVILLE	71.4	50.0	60.7	104	JUL 14	-11	JAN 30	3331	46.41	2.92	AUG 17	12.7	7.3	JAN 28-29	77	81	57	60	7.[illegible]	0.4	12	35	16	FEB 10		6.0	101	105	159	113	2	45	10	53	4	56	3
MOBILE	76.4	58.0	67.2	9[illegible]	JUL 8	15	JAN 30	17[illegible]2	52.[illegible]	3.21	FEB 27-28	T	T	NOV 2 +	80	85	60	69	9.2	1.5	8	31	15	APR 18+		6.2	87	114	164	135	0	62	38	72	1	18	0
MONTGOMERY	74.[illegible]	53.8	64.1	10[illegible]	JUL 14	5	JAN 30	238[illegible]	51.18	3.75	OCT 4	T	T	NOV 2 +	82	87	58	63	7.4	0.4	2	37	N	FEB 13+	55	6.2	93	95	177	115	0	53	14	6[illegible]	1	36	0
ALASKA																																					
ANCHORAGE [illegible]	40.4	2[illegible].7	[illegible]	74	JUL 2[illegible]	-2[illegible]	DEC 10+	11472	[illegible]	.42	SEP 1[illegible]-12	41.8	[illegible]	DEC 15 +																111	17			B 8	131	1[illegible]	47
ANCHORAGE	40.0	25.[illegible]	[illegible]	[illegible]	JUL [illegible]+	-21	DEC 1[illegible]	[illegible]	12.[illegible]5	1.[illegible]4	SEP 11-12	60.[illegible]	4.9	APR 14-15	71	75	73	64	5.8	0.1	[illegible]	40	[illegible]	OCT 31	4[illegible]	7.[illegible]	[illegible]	58	[illegible]	1[illegible]	[illegible]	[illegible]	[illegible]	1[illegible]	138	19[illegible]	57
ANNETTE	5[illegible].8	[illegible]	[illegible]	84	JUL 2[illegible]	[illegible]	JAN 4+	7144	110.57	4.[illegible]2	MAR 28-29	[illegible]5.4	7.0	MAR 20-21	79	82	76	71	[illegible]	3.7	14	40	15	OCT 18+		8.3	37	55	273	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	94	[illegible]
BARROW	1[illegible].5	[illegible]	[illegible]	[illegible]	JUL 1[illegible]	-48	MAR 1[illegible]	[illegible]	5.47	[illegible]	JUL 31	2[illegible].8	.7	APR 10-11	84	85	84	8[illegible]	11.8	4.2	[illegible]	54	[illegible]	NOV 17			V58	V[illegible]	V191	81	[illegible]	[illegible]	[illegible]	[illegible]	155	3[illegible]4	[illegible]
BARTER ISLAND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-47	FEB 21	[illegible]	[illegible]	.84	AUG 29-3[illegible]	[illegible]	6.2	OCT 23-24	79	8[illegible]	79	71	13.4	0.8	12	67	2[illegible]	NOV 30			X66	X51	X193	45	22	0	86	[illegible]	24[illegible]	3[illegible]7	17[illegible]
BETHEL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	MAR 21	[illegible]	12.17	1.[illegible]2	[illegible]	4[illegible].4	3.9	NOV 9	80	86	84	74	13.0	[illegible]	1	44	[illegible]	FEB 11		7.6	59	64	24[illegible]	1[illegible]6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
COLD BAY	40.[illegible]	3[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	MAR 21	[illegible]	[illegible]	1.42	5-6	[illegible].7	[illegible]	JAN 4-5	85	87	87	8[illegible]	1[illegible]	2.4	[illegible]	[illegible]	[illegible]	FEB 24		[illegible]	11	57	317	244	[illegible]	[illegible]	14	[illegible]	0	177	[illegible]
FAIRBANKS	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.[illegible]7	.97	FEB 11-12	[illegible]	[illegible]	FEB 11-12	64	73	72	5[illegible]	5.4	0.8	34	28	[illegible]	AUG 15+		[illegible].7	75	95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
JUNEAU	44.7	[illegible]	[illegible]	81	JUL 2[illegible]+	[illegible]	JAN 28	[illegible]	5[illegible]	2.11	JAN 15	166.8	[illegible]	MAR 9-10	88	92	87	7[illegible]	[illegible]	[illegible]	[illegible]	45	1[illegible]	OCT 15	32	[illegible]	[illegible]	44	265	2[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	73	178	[illegible]
KING SALMON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]+	[illegible]	MAR 17+	12491	14.12	[illegible]	AUG 7-8	45.[illegible]	[illegible].9	FEB 1-2	79	86	85	7[illegible]	11.6	[illegible]	[illegible]	[illegible]	[illegible]	JUL 1		7.[illegible]	52	77	236	1[illegible]4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
KOTZEBUE	[illegible]	[illegible]	[illegible]9.0	[illegible]	[illegible]	-4[illegible]	MAR 17+	16[illegible]	5.47	.4[illegible]	SEP 21-22	[illegible]	2.8	NOV 19-20	77	80	78	75	12.2	[illegible]	[illegible]	[illegible]	11	NOV [illegible]		6.7	[illegible]	64	[illegible]	1.2	[illegible]	[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]
McGRATH	31.[illegible]	[illegible]	[illegible]	[illegible]	JUL 18	-5[illegible]	MAR 17	[illegible]	7.[illegible]	.47	AUG [illegible]-21	55.1	4.3	JAN 7-8	64	7[illegible]	71	58	5.5	0.8	[illegible]	41	1[illegible]	OCT 1[illegible]+		7.1	73	74	221	[illegible]	[illegible]	7	14	[illegible]	[illegible]	[illegible]	[illegible]
NOME	41.[illegible]	[illegible]	[illegible].8	[illegible]	[illegible]	-4[illegible]	MAR 15	14[illegible]	14.[illegible]	.[illegible]8	OCT 4-5	40.0	[illegible]	OCT 25-26	79	82	81	75	10.8	3.[illegible]	[illegible]	48	4	JAN 30	[illegible]	5.7	87	78	[illegible]	1[illegible]7	14	1	37	[illegible]	[illegible]	[illegible]	[illegible]
ST. PAUL ISLAND	[illegible]	[illegible]	[illegible]	[illegible]	AUG 1[illegible]+	[illegible]	MAR [illegible]1	[illegible]	24.81	1.2[illegible]	NOV 4-[illegible]	71.7	[illegible]	APR 2	86	87	87	8[illegible]	17.5	[illegible]	[illegible]	62	28	FEB 25		9.0	8	4[illegible]	311	224	17	[illegible]	84	[illegible]	71	1[illegible]8	0
SHEMYA	41.[illegible]	34.1	38.0	[illegible]	AUG 24	17	FEB 2[illegible]	9734	2[illegible].17	1.17	NOV 15	42.[illegible]	4.3	DEC 17-18	87	89	8[illegible]	84	20.0	3.4	22	69	24	FEB 8		8.9	5	55	304	2[illegible]7	6	[illegible]	8[illegible]	[illegible]	24	14[illegible]	[illegible]
YAKUTAT	42.[illegible]	27.2	34.7	78	AUG 27	-1[illegible]	JAN 8	1099[illegible]	11[illegible].13	[illegible]	AUG [illegible]2-2[illegible]	24[illegible]	11.4	MAR 21-22	89	93	87	7[illegible]	7.4	[illegible]	11	36	14	MAY 2[illegible]		8.2	40	41	284	2[illegible]	[illegible]	4	45	[illegible]	2	8[illegible]	[illegible]
ARIZONA																																					
FLAGSTAFF	[illegible]	[illegible]	[illegible]	85	JUL [illegible]	-16	MAR 4	[illegible]	[illegible]	3.[illegible]4	DEC 5-6	62.5	11.3	NOV 8-9	65	73	40	4[illegible]	[illegible]	1.[illegible]	[illegible]	31	[illegible]	MAR [illegible]		4.6	144	127	[illegible]	73	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PHOENIX	[illegible]	[illegible]	[illegible]	11[illegible]	[illegible]	[illegible]	DEC 31+	[illegible]	7.[illegible]	1.[illegible]4	DEC 12-13	0.0	0.0		49	63	[illegible]	[illegible]	5.6	[illegible]	13	[illegible]	[illegible]	AUG 14	86	3.3	22[illegible]	73	72	33	[illegible]	26	[illegible]	17[illegible]	[illegible]	[illegible]	[illegible]
TUCSON	[illegible]	[illegible]	67.4	10[illegible]	[illegible]+	[illegible]	DEC [illegible]+	17[illegible]	14.41	[illegible]	SEP 11-1[illegible]	[illegible]	.2	DEC 3 +	48	54	[illegible]	[illegible]	[illegible]	[illegible]	16	47	[illegible]	AUG 8	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WINSLOW	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN 2	4851	7.[illegible]	.75	NOV 8-9	[illegible]	4.8	NOV 8-9	[illegible]4	65	[illegible]	[illegible]	8.3	[illegible]	21	[illegible]	[illegible]	SE [illegible]+		4.[illegible]	173	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
YUMA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DEC 3[illegible]	[illegible]	[illegible]	.[illegible]7	JAN 17-18	[illegible]	[illegible]		41	[illegible]	41	2[illegible]	7.9	0.7	[illegible]	[illegible]	[illegible]	JUN 17	88	[illegible]	2[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ARKANSAS																																					
FORT SMITH	[illegible]	47.[illegible]	[illegible]	[illegible]	JUL 1[illegible]	[illegible]	JAN 30	3474	31.[illegible]	3.9[illegible]	FEB 8-9	[illegible].7	3.5	JAN 29	75	84	[illegible]	[illegible]	7.2	[illegible]	[illegible]	[illegible]	[illegible]	AUG [illegible]	60	5.[illegible]	12[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
LITTLE ROCK	7[illegible].8	5[illegible]	[illegible]	10[illegible]	JUL 15	2	JAN 30	32[illegible]	47.[illegible]	7.[illegible]2	AUG 1[illegible]-1[illegible]	[illegible]1.8	[illegible].6	FEB 22-23	78	8[illegible]	[illegible]7	[illegible]0	7.4	[illegible].1	1[illegible]	35	[illegible]	MAR [illegible]	60	[illegible].7	1[illegible]1	[illegible]	[illegible]	[illegible]	7	4[illegible]	[illegible]	52	4	[illegible]	[illegible]
TEXARKANA	7[illegible].4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN [illegible]	[illegible]	54.[illegible]	5.11	APR [illegible]-2[illegible]	[illegible]3.4	7.0	FEB 22-23	78	86	61	62	7.4	1.6	1[illegible]					[illegible].6	1[illegible]	55	[illegible]	[illegible]	[illegible]	51	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CALIFORNIA																																					
BAKERSFIELD	[illegible]	[illegible]	[illegible]	[illegible]	AUG [illegible]	2[illegible]	DEC 1[illegible]	21[illegible]	4.52	.34	FEB 5-6	0.0	0.0		52	53	4[illegible]	3[illegible]	[illegible].7	2.[illegible]	3[illegible]	[illegible]	35	DEC [illegible]+		[illegible].0	2[illegible]1	6[illegible]	8[illegible]	[illegible]	[illegible]	[illegible]	27	45	[illegible]	[illegible]	[illegible]
BISHOP	7[illegible].4	[illegible]	[illegible]	10[illegible]	AUG [illegible]	[illegible]	MAR 4+	39[illegible]	[illegible]	[illegible]	DEC 5-6	T	T	FEB 1[illegible] +			26													.5	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
BLUE CANYON	[illegible]	[illegible]	[illegible]	[illegible]	SEP 2[illegible]+	14	MAR [illegible]	5[illegible]74	49.41	[illegible]	NOV 19-2[illegible]	149.[illegible]	15.3	JAN 29-30			43					40	1	DEC 2		4.[illegible]	1[illegible]	[illegible]	12[illegible]	[illegible]	31				[illegible]	[illegible]4	[illegible]
EUREKA	[illegible]	[illegible]	[illegible]	[illegible]	APR [illegible]	[illegible]1	MAR [illegible]	4[illegible]52	4[illegible].[illegible]1	[illegible]	NOV 14-15	1.0	1.0	MAR 1-2								4[illegible]	[illegible]	DEC 4+	5[illegible]	[illegible].8	7[illegible]	[illegible]	1[illegible]5	1[illegible]5	[illegible]					[illegible]	[illegible]

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00a.m. E S T	7:00a.m. E S T	1:00p.m. E S T	7:00p.m. E.S.T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In.	In.		In	In.		%	%	%	%	M.p.h	M.p.h		M.p.h.			%	Tenths											
CALIFORNIA																																					
FRESNO	77.6	48.8	63.2	108	JUL 23+	25	JAN 25+	2405	6.07	1.40	DEC 5-6	.0	.0		64	79	57	38	6.3	2.6	30	30	NW	DEC 6	83	3.6	207	71	87	34	0	4	35	109	0	36	0
LONG BEACH	74.5	54.2	64.4	101	NOV 1	34	DEC 27	1361	9.04	1.64	DEC 3	.0	.0		73	77	59	52	6.0	2.1	25	28	9	JAN 16		4.5	163	117	85	19	0	3	33	27	0	0	0
LOS ANGELES	70.5	55.4	63.0	101	NOV 1	37	JAN 21	1396	9.36	2.44	NOV 7	.0	.0		74	74	59	64	8.6	4.0	26	43Y	W	MAR 2+		4.7	150	118	97	24	0	4	22	6	0	0	0
LOS ANGELES U	75.3	56.7	66.0	100	NOV 1	39	JAN 23+	976	12.91	3.85	NOV 7	.0	.0									27	N	DEC 26	63	3.9	186	117	62	21	0			24	0	0	0
MT SHASTA R	63.3	37.5	50.4	97	AUG 15+	6	JAN 1	5533	35.43	3.40	JAN 3-4	116.1	34.9	JAN 3-4			57													83	21			25	4	124	0
OAKLAND	64.9	52.0	58.5	92	SEP 27+	34	DEC 28	2461	13.11	1.38	JAN 29-30	.0	.0		76	79	71	65	8.1	4.4	28	35	15	DEC 2		4.8	156	97	112	48	0	0	9	3	0	0	0
RED BLUFF	76.3	51.0	63.7	110	AUG 6+	24	JAN 21	2420	20.04	2.66	NOV 19-20	.0	.0		54	61	47	35	8.3	0.4	24	45	SE	DEC 4	80	4.6	172	71	122	55	0	7	15	99	0	27	0
SACRAMENTO	74.6	48.1	61.4	107	AUG 6+	28	DEC 27+	2496	13.78	1.57	NOV 19-20	.0	.0		71	81	60	43	7.7	3.1	21	36	SW	APR 17	83	4.0	199	64	102	46	0	2	27	77	0	18	0
SANDBERG R	64.6	47.4	56.0	96	AUG 5	21	MAR 2+	4133	9.59	4.95	NOV 6-7	12.1	7.0	JAN 30			38					58	33	JUN 11		3.5	214	70	81	19	3			18	6	54	0
SAN DIEGO	69.7	56.3	63.0	97	NOV 1	38	DEC 29+	1332	7.18	1.73	DEC 4-5	.0	.0		78	79	65	65	7.0	3.0	28	33	S	NOV 7	71	4.6	169	102	94	26	0	5	29	2	0	0	0
SAN FRANCISCO	64.7	47.8	56.3	95	JUN 13	30	JAN 2	3178	15.98	1.59	JAN 29-30	.0	.0		78	84	69	60	9.5	5.9	29	48	S	DEC 2		4.6	166	92	107	51	0	1	7	4	0	6	0
SAN FRANCISCO U	62.8	50.8	56.8	95	SEP 28	39	MAR 1	3021	16.45	1.58	JAN 4-5	.0	.0									36	SW	DEC 2	69					57	0			3	0	0	0
SANTA CATALINA	68.2	54.5	61.4	94	AUG 26	40	MAR 2	2024	10.02	3.15	DEC 4-5	.0	.0													4.2	176	93	96	35	0	4	178	13	0	0	0
SANTA MARIA	68.7	45.0	56.9	98	SEP 28	23	DEC 28	2971	7.48	1.41	DEC 5-6	.0	.0				62	62								4.2	193	85	87	36	0			10	0	31	0
STOCKTON	75.1	48.8	62.0	108	JUN 14	26	JAN 21	2459	11.69	1.53	DEC 4-5	.0	.0		66	76	59	42	8.9	4.4	29	39	35	FEB 12		4.0	200	58	107	45	0	3	35	85	0	32	0
COLORADO																																					
ALAMOSA	59.6	23.7	41.7	90	JUL 6	-28	DEC 29	8508	4.96	.90	AUG 1-2	27.4	4.8	OCT 16-17		78	42	38								4.2	159	143	63	60	10			1	43	224	47
COLORADO SPRINGS	62.2	34.7	48.5	96	JUL 4	-10	JAN 21	6422	12.91	1.53	JUN 17	32.1	5.8	FEB 9	58	63	36	37	9.8	2.2	4	48	36	MAR 22		5.5	113	126	126	91	12	63	13	19	32	169	7
DENVER	65.6	35.3	50.5	98	JUL 16+	-13	JAN 21	5898	10.81	.80	OCT 13-14	43.5	6.9	OCT 13-14	60	68	38	37	7.5	1.3	18	45	NW	APR 2	71	5.7	99	143	123	85	13	39	18	37	20	168	8
GRAND JUNCTION	67.3	40.8	54.1	101	JUL 6	- 5	JAN 21	5181	7.52	.98	DEC 5-6	30.4	5.7	JAN 31	50	57	38	34	7.0	1.4	12	65	NW	MAY 11	75	4.7	157	106	102	69	8	30	9	65	15	120	6
PUEBLO	69.0	35.7	52.4	102	JUL 5+	-13	JAN 22	5540	6.27	1.11	AUG 1	17.6	6.6	JAN 20-21	54	64	37	33	9.3	1.0	5	56	N	MAR 22+	78	5.0	134	125	106	56	5	30	9	60	15	168	13
CONNECTICUT																																					
BRIDGEPORT	59.1	43.1	51.1	100	JUL 2	2	FEB 20	5871	33.68	3.00	SEP 21	34.6	7.8	DEC 24-25	77	76	61	67	12.6	3.5	30	61	29	JAN 30		6.1	96	121	148	113	9	16	24	13	25	116	0
HARTFORD	61.2	40.6	50.9	102	JUL 3	- 2	FEB 8+	5895	41.27	2.67	SEP 21-22	68.1	14.8	FEB 24-25	77	78	52	62	8.8	2.6	30	36	NW	JUL 19	61	6.6	73	114	178	118	14	16	25	32	27	124	2
NEW HAVEN	58.9	41.8	50.4	97	JUL 3	5	FEB 20	5878	32.06	2.76	FEB 13	36.3	7.1	DEC 24-25		80	60					45	S	JAN 30	63	6.2	86	126	153	121	11			6	16	113	0
DELAWARE																																					
WILMINGTON	62.8	43.4	53.1	102	JUL 4+	5	FEB 6+	5323	39.51	3.88	OCT 18-19	48.7	12.4	DEC 24	77	78	53	65	9.3	2.7	29	32	22	AUG 11+		6.0	104	111	150	104	11	26	28	29	23	108	0
DIST.OF COLUMBIA																																					
WASH NATL AP	66.3	47.3	56.8	101	JUL 3	9	JAN 31+	4412	36.02	4.15	SEP 13-14	44.3	13.8	JAN 29-30	71	73	51	58	9.0	1.8	29	38	W	MAR 1	55	6.1	102	104	159	112	8	18	5	59	9	80	0
FLORIDA																																					
APALACHICOLA U	74.2	60.7	67.5	95	AUG 23	14	JAN 30	1506	67.87	7.53	SEP 18	.0	.0									42	N	JUN 9	58	5.5	128	96	141	107	0	55	24	20	0	9	0
DAYTONA BEACH	78.8	60.8	69.8	94	JUL 15+	24	JAN 31	909	60.25	6.28	JUN 30-1	.0	.0		82	84	59	73	9.2	1.1	7	37	10	JUN 9		6.4	79	124	162	123	0	65	14	42	0	6	0
FORT MYERS	82.8	64.2	73.5	93	SEP 4+	28	JAN 31	384	44.99	2.61	JUN 6-7	.0	.0		91	93	59	75	8.9	2.3	7	46	12	JUN 8		5.8	90	157	118	126	0	78	14	98	0	1	0
JACKSONVILLE	77.2	57.9	67.6	98	AUG 23	20	JAN 31+	1460	55.30	10.09	JUL 30-1	.0	.0		85	88	58	73	9.1	0.6	36	48	E	JUN 9	64	6.1	85	125	155	117	0	51	26	51	0	16	0
KEY WEST	80.8	71.8	76.3	91	AUG 27+	47	JAN 31	64	53.62	4.07	OCT 4-5	.0	.0		78	79	69	74	11.8	6.0	9	84	SE	OCT 5	69	5.9	85	150	130	125	0	63	1	10	0	0	0
LAKELAND U	79.9	52.1	71.0	95	AUG 23	26	JAN 31	725	45.47	2.62	SEP 10	.0	.0												67	5.8	86	150	129	126	0			56	0	3	0

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp.	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 a.m. EST	7:00 a.m. EST	1:00 p.m. EST	7:00 p.m. EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In.		%	%	%	%	M.p.h	M.p.h		M.p.h			%	Tenths											
FLORIDA																																					
MIAMI	81.3	67.3	74.3	94	JUL 19+	35	JAN 31	195	82.05	7.63	JUN 8-9	.0	.0		85	88	65	75	9.7	3.7	9	46	4	MAR 29		6.7	53	152	160	157	0	90	3	26	0	0	0
ORLANDO	80.6	62.3	71.5	93	SEP 4+	24	JAN 31	655	55.39	3.87	JUN 30	.0	.0			88	56	69	9.4	0.8	5	52	10	JUN 8+		6.2	79	136	150	117	0	76	16	65	0	2	0
PENSACOLA	74.9	57.9	66.4	97	JUL 8	11	JAN 30	1773	52.79	3.16	FEB 27-28	.0	.0		82	84	61	72	8.0	0.9	8	57	SE	APR 18	53					131	0			38	1	20	0
TALLAHASSEE	77.7	55.7	66.7	100	JUL 9	12	JAN 30	1722	75.06	6.75	JUN 9-10	.0	.0		87	89	55	68	7.1	1.0	3	44	3	JUN 9		6.0	94	119	152	118	0	62	46	71	1	30	0
TAMPA	80.5	61.3	70.9	95	SEP 1+	24	JAN 31	840	36.05	3.33	JUN 8-9	.0	.0		83	87	56	69	8.7	1.6	6	46	12	JUN 9	65	6.0	94	131	140	93	0	67	17	75	0	6	0
WEST PALM BEACH	81.7	66.0	[illegible]	[illegible]	JUL 21	32	JAN 31	313	79.75	4.81	JUN 29-30	.0	.0		82	83	52	74	9.8	3.3	10	44	17	JUL 1		6.8	62	122	181	150	0	80	3	32	0	1	0
GEORGIA																																					
ATHENS	70.9	49.7	60.3	[illegible]	JUL 14	-1	JAN 30	3149	58.34	3.74	MAR 3-4	5.6	1.6	JAN 26	82	86	57	66	6.8	0.9	31	42	18	FEB 13		5.8	115	95	155	[illegible]	4	49	36	42	1	55	1
ATLANTA	69.6	49.8	59.7	[illegible]	JUL 12	[illegible]	JAN 30	3356	56.34	1.95	FEB 12-13	.7	.5	JAN 25-26	79	83	60	65	8.0	0.8	33	52	N	JUL 15	57	6.0	114	86	165	116	0	40	35	18	2	61	1
AUGUSTA	74.1	49.3	61.7	[illegible]	JUL 21	[illegible]	JAN 30	2816	45.02	2.92	MAR 3-4	.4	.4	JAN 26-27	84	86	53	68	6.7	0.7	28	35	32	MAY 27+		5.8	117	92	156	115	0	39	25	53	1	67	0
COLUMBUS	[illegible]	[illegible]	[illegible]	[illegible]	JUL 14	[illegible]	JAN 30	2464	[illegible]	[illegible]	MAR 3-4	T	T	FEB 2 +	83	88	57	67	5.7	0.9	3	35	18	JUN 30+		[illegible]	98	99	168	111	0			59	1	42	0
MACON	74.4	51.1	[illegible]	[illegible]	JUL [illegible]	[illegible]	JAN 30	2614	52.13	4.53	OCT 9-10	T	T	DEC 30 +	82	86	54	64	7.6	1.0	35	56	SW	FEB 13	62	5.9	112	[illegible]	[illegible]	122	0	42	15	[illegible]	1	53	0
ROME	71.0	46.4	58.7	[illegible]	JUL 15+	-4	JAN 31+	3595	54.73	4.24	MAY 12-13	1.9	1.7	JAN 29		86														123	1			44	2	[illegible]	[illegible]
SAVANNAH	[illegible]	[illegible]	64.4	[illegible]	[illegible] 22+	[illegible]	JAN 30	2181	45.39	3.04	JUL 1-2	T	T	JAN 27 +	85	88	55	71	7.7	0.2	21	40	SW	FEB 13	57	5.5	112	[illegible]	147	[illegible]	0	57	35	42	0	40	0
HAWAII																																					
HILO	81.5	67.0	74.3	94	MAY 20	[illegible]	APR 21+	0	124.01	7.15	NOV 4-5	.0	.0		85	87	81	[illegible]	7.4	0.3	23	35	16	FEB 28	28	7.7	18	127	[illegible]	277	0	41	0	1	0	0	0
HONOLULU	84.8	[illegible]	[illegible]	[illegible]	SEP 25+	57	FEB 21	0	23.18	[illegible]	NOV 5-6	.0	.0		68	74	70	55	10.8	7.8	[illegible]	35	NE	DEC 27	68	5.7	88	174	[illegible]	88	0	7	0	53	0	0	0
KAHULUI	83.0	67.8	75.4	[illegible]	[illegible] 25	[illegible]	JAN 14+	0	18.49	1.43	NOV 4-5	.0	.0		69		72	55	12.2	9.4	5	34	NE	JUL 16	67	5.7	89	175	101	[illegible]	0	5	0	11	0	0	0
LIHUE	79.7	68.3	74.0	87	OCT 3+	[illegible]	FEB 21	1	40.68	7.85	OCT 10	.0	.0		81	85	72	70	11.5	[illegible]	[illegible]	42	NE	DEC 28	61	6.5	43	171	151	[illegible]	0	6	0	0	0	0	0
IDAHO																																					
BOISE	[illegible]	[illegible]	51.6	[illegible]	AUG 2	2	DEC 27	5554	6.64	.53	NOV 5-6	20.1	4.4	FEB 9	58	68	51	[illegible]	[illegible]	[illegible]	19	45	[illegible]	NOV 15	78	[illegible]	128	57	[illegible]	72	[illegible]	7	[illegible]	[illegible]	14	[illegible]	0
IDAHO FALLS [illegible]	[illegible]	[illegible]	42.1	[illegible]	JUL [illegible]	[illegible]	DEC 30	8544	5.22	.84	MAY 10-11																			54				[illegible]	65	[illegible]	36
IDAHO FALLS [illegible]	58.6	26.8	42.7	[illegible]	JUL 30	-14	JAN 1	8247	[illegible]	.73	MAY 10-11	17.9	3.6	FEB 5-6																54	4			24	54	[illegible]	[illegible]
LEWISTON	[illegible]	42.4	53.6	[illegible]	AUG 24	16	JAN 20	4817	9.98	[illegible]	NOV 15-16	23.1	12.8	JAN 2-3		73	58	47								6.5	93	51	[illegible]	[illegible]	[illegible]			42	2	73	[illegible]
POCATELLO	61.2	[illegible]	46.7	[illegible]	JUL 30	[illegible]	JAN 25	7014	5.34	.75	MAY 9-10	25.4	3.5	FEB 12	55	68	47	[illegible]	9.9	5.7	22	54	SW	OCT 20+	66	5.9	107	107	[illegible]	77	6	22	[illegible]	[illegible]	36	[illegible]	7
ILLINOIS																																					
CAIRO	[illegible]	[illegible]	[illegible]	[illegible]	JUL 14+	[illegible]	JAN 30	4112	51.28	4.82	MAY 23-24	6.2	1.9	FEB 23								45		JUN 7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			37	18	73	[illegible]
CHICAGO MIDWAY	[illegible]	[illegible]	[illegible]	98	JUL [illegible]	-16	JAN [illegible]	6306	36.76	5.39	JUL 25-27	27.3	4.2	DEC 28	69	73	55	58	10.7	2.4	25	39	W	JUL 18	58	6.1	[illegible]	[illegible]	157	117	11	25	5	[illegible]	[illegible]	[illegible]	5
MOLINE	[illegible]	38.4	48.8	[illegible]	JUL 18	-19	JAN 29	6672	37.58	3.13	JUL 26	14.8	5.6	DEC 27-28	77	80	57	61	9.1	1.8	25	[illegible]	NE	MAY 7	61	5.8	[illegible]	[illegible]	[illegible]	[illegible]	3	42	22	20	56	[illegible]	[illegible]
PEORIA	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	-14	JAN [illegible]	6777	33.14	2.59	JUL 28	7.3	2.8	DEC 27-28	75	79	57	60	9.9	1.1	25	45	W	MAR 23	60	6.0	111	92	[illegible]	98	3	45	21	24	54	[illegible]	[illegible]
ROCKFORD	[illegible]	[illegible]	[illegible]	98	JUL 18+	-20	JAN 29	7220	[illegible]	2.55	MAY 11-12	21.1	9.3	JAN 12-13	79	82	56	61	9.7	1.8	27	37	31	MAY 18		5.7	[illegible]	[illegible]	138	[illegible]	4	35	23	[illegible]	[illegible]	[illegible]	[illegible]
SPRINGFIELD	61.5	41.2	51.4	[illegible]	JUL [illegible]	-11	JAN 29	5878	[illegible]	1.91	APR 19-[illegible]	14.8	5.1	FEB 1	78	[illegible]	[illegible]	[illegible]	10.8	1.6	23	42	W	MAR 23	61	[illegible]	115	96	154	[illegible]	3	47	19	[illegible]	[illegible]	[illegible]	[illegible]
INDIANA																																					
EVANSVILLE	[illegible]	[illegible]	[illegible]	104	JUL [illegible]	-12	FEB 5	5042	36.53	[illegible]	JAN 1-2	17.3	8.7	FEB 31-1	78	82	59	61	[illegible]	1.1	26	42	[illegible]	JUL 5	58	5.1	[illegible]	85	[illegible]	[illegible]	4	[illegible]	16	48	27	[illegible]	[illegible]
FORT WAYNE	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	-8	JAN 30	6735	[illegible]	[illegible]	JUL 9	30.7	5.6	NOV 2-3	78	[illegible]	61	64	[illegible]	[illegible]	[illegible]	[illegible]	N	JUL 12	58	6.5	87	[illegible]	[illegible]	132	[illegible]	[illegible]	15	[illegible]	[illegible]	136	6
INDIANAPOLIS	62.2	41.8	[illegible]	[illegible]	JUL 13+	-11	JAN 30	5693	32.72	[illegible]	SEP 19-20	21.2	8.2	NOV 2-3	71	[illegible]	[illegible]	[illegible]	9.1	[illegible]	[illegible]	42	NW	JUL 11+	53	6.4	[illegible]	94	176	[illegible]	4	27	15	37	43	[illegible]	5

See reference notes at end of table

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State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp.	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00a.m. E.S.T.	7:00a.m. E.S.T.	1:00p.m. E.S.T.	7:00p.m. E.S.T.	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In.	In		%	%	%	%	M.p.h	M.p.h.		M.p.h.			%	Tenths											
INDIANA																																					
SOUTH BEND	57.0	39.7	48.4	94	JUL 12+	-13	JAN 30	6546	39.28	3.70	AUG 21-22	89.4	6.9	JAN 7-8	74	77	58	61	10.3	2.8	26	36	28	FEB 16		6.5	89	103	173	152	26	39	10	7	49	130	6
IOWA																																					
BURLINGTON	60.0	40.1	50.1	101	JUL 18+	-19	JAN 29	6249	29.45			6.5			75	80	60	61	9.8	1.8	30	35	21	MAY 23+		5.7	115	107	143	84	3	47	15	21	47	129	10
DES MOINES	58.9	38.1	48.5	100	JUL 10	-23	JAN 29	6816	21.85	2.02	MAY 10-11	13.0	6.5	DEC 27-28	75	81	61	59	10.0	0.3	27	54	NW	JUL 5	65	5.7	122	101	142	83	3	44	20	20	56	142	15
DUBUQUE	56.0	35.6	45.8	93	JUL 11+	-24	JAN 29	7482	39.23	3.60	JUN 8-9	30.3	9.9	DEC 27-28		82	58	64								6.0	107	99	159	103	6			11	61	153	26
SIOUX CITY	58.7	36.7	47.7	97	JUL 10	-22	JAN 29	7096	21.45	1.82	AUG 20	32.3	8.5	MAR 22-23	77	83	61	60	10.6	0.3	18	49	NW	MAR 31	69	5.7	116	105	144	86	8	46	24	23	58	153	20
WATERLOO	57.1	34.6	45.9	99	JUL 11	-26	JAN 29	7595	40.65	5.28	AUG 20-21	17.5	6.0	DEC 27-28	80	83	59	63	9.9	1.0	27	40	36	JUL 5+		5.6	118	106	141	92	6	36	21	15	60	167	29
KANSAS																																					
CONCORDIA	65.3	40.4	52.9	103	JUL 18	-11	JAN 29	5676	15.16	1.69	JUN 7-8	20.6	12.5	DEC 27-28	71	80	53	51	12.4	2.0	16	49	NW	MAR 22	68	5.0	149	97	119	60	5	54	16	48	37	135	6
DODGE CITY	66.8	41.5	54.2	105	JUL 5	-10	JAN 22	5309	14.14	1.69	AUG 17	14.2	6.1	DEC 26-27	69	78	49	48	13.2	2.3	18	60	NW	MAR 22	75	5.4	124	112	129	58	3	35	12	59	34	130	8
GOODLAND	64.7	36.4	50.6	103	JUL 26+	-14	JAN 21	6198	11.40	1.09	AUG 6-7	37.6	8.4	OCT 14	71	79	50	46	12.2	2.1	21	55	32	MAR 4		5.1	139	117	109	68	10	45	16	59	36	163	15
TOPEKA	66.1	41.5	53.8	105	JUL 18	- 9	JAN 29	5267	19.30	3.39	JUN 12-13	9.4	7.1	DEC 27	72	79	54	52	9.3	0.8	20	72	SW	JUN 8	67	5.5	123	100	142	70	2	51	11	38	30	133	5
WICHITA	68.1	44.3	56.2	104	JUL 18+	- 3	JAN 29	4711	12.15	1.29	JUN 7	10.5	3.4	DEC 26-27	69	79	52	50	12.2	2.3	16	54	NW	MAR 5	66	5.2	127	117	121	62	2	41	14	56	29	115	3
KENTUCKY																																					
COVINGTON	62.2	42.9	52.6	97	JUL 13+	-12	JAN 30	5589	38.67	2.18	AUG 14	31.3	9.3	FEB 1	75	79	58	62	8.9	1.7	25	35	32	JUL 14+		6.8	79	88	198	117	6	30	19	37	35	117	6
LEXINGTON	62.6	43.8	53.2	98	JUL 13	-10	JAN 30	5183	46.36	2.22	SEP 18-19	28.8	9.4	JAN 22	76	79	59	62	8.9	1.7	20	37	29	JUL 14		6.6	85	80	200	119	4	34	18	23	34	97	5
LOUISVILLE	64.1	45.4	54.8	101	JUL 13	- 9	JAN 30	4892	44.92	2.78	JAN 31-1	33.8	13.0	NOV 2-3	73	79	58	58	8.3	1.0	26	60	NW	JUL 6	62	6.5	88	94	183	116	3	29	14	37	31	93	3
LOUISIANA																																					
ALEXANDRIA	75.1	53.2	64.2	100	JUL 20	13	JAN 30	2365	58.84	5.18	FEB 9-10	T	T	JAN 29 +	91	92	61	71	6.1	0.8	6	35	32	DEC 28		6.2	88	119	158	104	0	49	51	65	0	41	0
BATON ROUGE	76.2	56.6	66.4	96	JUN 29	15	JAN 30	1847	63.62	3.98	FEB 11-12	T	T	JAN 29 +	81	85	60	65	7.2	1.2	7	30	18	DEC 28+		6.5	78	111	176	123	0	63	38	67	0	24	0
LAKE CHARLES	77.2	59.0	68.1	97	JUL 15	22	JAN 30	1570	59.65	4.09	JUN 13-14	T	T	MAR 4	87	89	63	71	9.3	2.0	10	44	15	APR 21		6.1	98	113	154	109	0	69	50	75	0	16	0
NEW ORLEANS	76.1	57.6	65.9	97	JUL 29+	18	JAN 30	1712	68.08	4.30	JUL 30-31	.0	.0		86	88	66	72	8.2	1.6	5	39	15	FEB 12		6.1	100	97	168	123	0	59	28	60	1	22	0
SHREVEPORT	75.0	54.7	64.9	101	JUL 15	13	JAN 30	2346	33.86	2.30	FEB 9-10	1.5	1.3	FEB 23	78	87	59	60	9.7	1.5	14	37	33	MAR 23	58	5.8	108	112	145	96	1	45	25	78	1	43	0
MAINE																																					
CARIBOU	49.5	31.1	40.3	88	MAY 24	-31	FEB 20	8983	27.92	2.05	OCT 19-20	104.6	9.8	FEB 13-14		82	62	72								7.3	46	108	211	148	33			0	85	182	23
PORTLAND	54.7	34.6	44.7	93	JUL 13+	-12	FEB 20	7546	40.04	2.95	NOV 2-3	79.7	15.8	FEB 25-26	82	79	59	71	7.8	2.4	27	40	NE	JAN 30	59	6.2	101	103	161	128	17	15	54	3	42	164	7
MARYLAND																																					
BALTIMORE	64.2	43.3	53.8	102	JUL 3	1	JAN 29	5232	42.38	3.84	SEP 13-14	53.2	12.1	JAN 29-30	71	74	50	58	8.6	2.6	29	47	W	JAN 30	58	5.9	110	107	149	112	12	20	23	50	25	116	0
MASSACHUSETTS																																					
BLUE HILL OBS P	57.4	39.9	48.7	95	JUL 3	- 4	FEB 20	6388	41.14	2.11	JUL 7	85.1	17.6	JAN 23-24	78	78	57	68				68	S	DEC 29	59					119	18			8	40	129	3
BOSTON	58.8	44.1	51.5	97	JUL 3	3	FEB 20	5593	36.01	1.94	JAN 23-24	51.7	9.2	FEB 24-25	69	68	55	62	12.5	3.9	28	47	NE	DEC 24	63	6.0	106	92	167	122	13	20	18	10	22	90	0
NANTUCKET	55.5	40.2	47.9	88	JUL 4	9	FEB 20	6335	40.88	4.95	NOV 2-3	20.9	5.2	DEC 21	86	82	69	84	12.3	2.9	26	55	S	DEC 25	57	6.5	94	85	186	122	6	19	86	0	14	124	0
PITTSFIELD	55.4	33.4	44.4	95	JUL 3	-12	FEB 20	7689	38.35	2.56	JUL 19	96.7	17.0	DEC 24-25																158	22			4	52	173	12
WORCESTER	55.4	37.9	46.7	93	JUL 3	- 8	FEB 20	7022	40.94	2.36	NOV 2-3	84.6	15.0	FEB 24-25	74	73	54	64	10.1	5.2	28	46	29	MAR 2		6.0	98	110	157	125	17	18	82	3	49	145	5
MICHIGAN																																					
ALPENA	53.5	31.6	42.6	98	JUL 2	-15	JAN 15	8370	27.32	1.93	NOV 28-29	87.1	16.1	NOV 28-29	77	78	56	64	7.5	1.9	27	38	E	APR 27	51	6.8	65	119	181	156	25	38	25	16	65	192	20

See reference notes at end of table.

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YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp.	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	100am E.S.T	700am E.S.T	100p.m. E.S.T	700p.m. E.S.T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-03	Partly cloudy, 04-07	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In.	In.		In.	In.		%	%	%	%	M.p.h.	M.p h		M.p.h.			%	Tenths											
MICHIGAN																																					
DETROIT	57.8	41.1	49.5	99	JUL 3	- 5	JAN 28	6419							69	73	55	58	10.2	3.5	27	46	W	MAR 1								26	5	22	52	126	3
DETROIT M WAYNE CO	57.7	38.2	48.0	98	JUL 3	- 8	JAN 28	6737	34.45	3.19	JUL 12	43.3	5.7	DEC 19-20	78	82	60	65	9.7	3.1	26				52	6.3	92	109	164	121	14	26	12	9	54	147	6
DETROIT WILLOW RUN	56.8	36.6	46.7	98	JUL 3	- 6	JAN 29+	7118	29.31	2.67	JUL 12	41.7	8.5	NOV 2-3	73	78	56	59	11.1	3.8	26	44	25	MAR 18		6.3	92	106	167	109	13	23	16	13	56	157	5
FLINT	55.1	36.0	45.6	94	JUL 3+	-11	JAN 29	7406	20.54	1.61	JUN 9	48.4	7.0	NOV 2-3	76	78	59	63	10.1	3.9	25	40	33	JUL 12		6.7	73	112	180	122	14	29	10	7	53	151	10
GRAND RAPIDS	58.0	37.4	47.7	97	JUL 3+	-16	JAN 29	6821	37.13	2.66	NOV 9-10	82.5	10.6	JAN 12-13	80	82	59	65	9.9	3.0	26	42	SW	MAR 18	54	6.5	83	105	177	132	23	30	27	18	54	152	8
HOUGHTON LAKE	52.8	32.3	42.6	96	JUL 2	-18	JAN 16	8383	23.74	1.81	NOV 27-28	73.7	7.0	NOV 2-3	82	84	61	66	9.0	3.0	26	32	32	JUL 25		6.7	81	92	192	143	23	31	23	10	75	194	21
LANSING	57.0	35.3	46.2	99	JUL 3	-19	FEB 20	7368	25.37	2.00	JUN 9	50.1	9.0	NOV 2-3	79	80	59	64	9.3	3.6	25	45	W	OCT 10	56	6.6	76	116	173	129	13	29	17	17	66	166	15
MARQUETTE U	49.9	35.4	42.7	94	JUN 30	-13	FEB 18	8420	30.04	2.10	OCT 14-15	139.5	12.5	NOV 27-28								38	NW	NOV 28+	54	7.0	71	87	207	170	38			7	86	175	11
MUSKEGON	55.8	38.0	46.9	95	JUL 2	-12	JAN 29	7021	29.42	2.06	NOV 27-28	151.6	10.7	JAN 12-13	77	80	62	66	10.3	2.3	26	44	1	NOV 29		6.6	92	76	197	158	49	29	23	6	60	153	7
SAULT STE MARIE	48.5	31.6	40.1	94	JUL 2+	-20	FEB 18	9179	32.80	1.28	OCT 14-15	105.3	9.2	JAN 27	83	84	66	71	10.4	1.9	31	42	NW	MAY 3+	51	7.3	62	87	216	185	35	31	49	3	50	185	27
MINNESOTA																																					
DULUTH	46.7	27.9	37.3	90	JUL 12	-37	JAN 28	10237	34.15	1.94	OCT 14-15	83.6	9.1	MAR 4	76	79	62	63	11.1	2.0	29	57	NE	MAR 3	55	6.5	91	88	186	125	23	26	50	1	[illegible]	196	55
INTERNATIONAL FALLS	45.5	23.9	34.7	96	JUN 30	-44	FEB 20+	11247	25.56	4.87	JUL 2-3	70.9	17.0	MAR 3-4	80	83	62	62	9.4	1.6	27	38	12	APR 27		6.4	89	108	168	106	21	22	11	6	117	214	77
MINNEAPOLIS	53.3	33.5	43.4	94	JUL 11+	-28	JAN 29	8491	24.34	2.95	OCT 14-15	49.0	13.6	MAR 22-23	74	79	58	59	9.9	1.1	29	56	NE	JUL 10	60	5.9	111	89	165	100	12	38	19	23	58	165	42
ROCHESTER	52.2	32.6	42.4	94	JUL 11	-30	JAN 29	8537	24.02	2.81	OCT 14	43.6	11.3	MAR 22-23	78	80	61	64	12.0	2.6	25	40	27	JUN 25		5.8	109	104	152	97	9	32	35	[illegible]	94	167	42
ST CLOUD	51.0	30.2	40.6	97	JUL 10	-31	JAN 28	9333	22.28	2.19	AUG 20-21	34.3	5.3	JAN 1-2	78	81	58	59								6.1	112	86	167	95	13			10	97	150	54
MISSISSIPPI																																					
JACKSON	74.3	51.1	62.7	101	JUL 15	7	JAN 30	2710	58.07	3.45	AUG 9-10	T	T	DEC 26 +	87	90	59	68	8.1	1.1	10	45	NW	MAR 3	59	5.9	108	113	144	120	0	49	32	61	1	48	0
MERIDIAN	74.6	50.7	62.7	102	JUL 15	6	JAN 30	2636	58.40	3.37	MAY 18-19	T	T	DEC 23 +	86	89	58	66	6.0	0.5	1	30	26	JUL 2		6.2	92	110	163	107	0	61	32	58	1	55	0
VICKSBURG U	72.6	55.3	64.0	98	JUL 15	9	JAN 30	2405	59.90	8.62	FEB 9-10	T	T	DEC 23 +								46	SE	FEB 4	65	5.5	134	77	154	115	0			46	1	27	0
MISSOURI																																					
COLUMBIA	64.5	44.0	54.3	102	JUL 14	- 9	JAN 29	5046	27.10	1.85	SEP 2-3	13.7	5.9	FEB 31-1	70	77	54	54	10.3	0.9	19	45	N	JUL 29+	72	5.8	117	95	153	93	5	44	16	25	34	105	3
KANSAS CITY	66.4	45.7	56.1	102	JUL 18	- 7	JAN 29	4614	27.21	3.55	JUN 12-13	14.4	6.3	DEC 27-28	68	75	54	51	9.6	0.5	18	42	NE	AUG 17	66	5.6	125	98	142	82	3	45	12	43	25	100	1
SAINT JOSEPH	67.6	41.2	54.4	100	JUL 18	-13	JAN 29	5036	20.74	2.58	JUN 26	9.4	5.0	DEC 27	74	79	53	54	8.6	0.4	22	44	32	MAR 23		5.9	147	94	124	75	2	4	13	48	27	128	7
ST LOUIS	64.4	43.8	54.1	106	JUL 13+	- 8	JAN 29	5154	32.34	2.28	FEB 9	10.6	8.3	FEB 31-1	74	82	55	57	9.4	1.2	24	48	NW	AUG 15	61	6.2	103	98	164	90	2	44	10	39	13	111	1
SPRINGFIELD	66.6	42.4	54.5	101	JUL 11	- 8	DEC 24	4843	38.01	3.73	FEB 8-9	17.0	7.5	DEC 22-23	78	82	56	61	8.9	1.4	17	38	N	MAY 17	61	5.5	120	113	132	96	4	50	11	46	21	111	-
MONTANA																																					
BILLINGS	58.3	34.8	46.6	104	JUL 16	-19	JAN 20	7312	13.35	2.19	SEP 13	52.0	9.7	MAR 2-3	58	67	52	44	10.8	3.7	27	48	NW	AUG 4	69	6.1	88	131	146	90	15	25	12	36	44	156	13
GLASGOW	51.6	28.6	40.1	100	JUL 16	-29	JAN 20	9382	12.58	2.23	AUG 19-20	27.2	2.8	JAN 5-6	67	76	57	52								6.6	74	117	174	[illegible]	14			21	99	182	54
GREAT FALLS	56.4	33.1	44.8	97	AUG 2	-23	JAN 20	7689	14.10	.97	MAY 10	64.8	7.4	JAN 2-3	61	70	51	45	10.1	5.6	24	51	SW	NOV 25	70	6.7	77	98	190	97	25	29	7	22	53	160	29
HAVRE	53.4	28.1	40.8	98	JUL 19	-29	JAN 20	9139	8.23	.72	JUL 12	37.8	4.6	MAR 2-3		77	56					43	W	MAY 16	68	6.5	82	107	176	81	13			22	53	191	[illegible]
HELENA	59.4	32.4	45.9	100	AUG 2	-10	JAN 25+	7260	6.46	.40	OCT 2	30.8	4.9	NOV 6	59	68	49	41	7.9	4.4	28	34	SW	JAN 9	63	6.6	78	91	196	84	10	31	5	24	42	185	15
KALISPELL	54.9	30.8	42.9	92	AUG 25+	-16	MAR 4	8040	17.11	2.35	JUN 3-4	71.2	6.3	JAN 3-4	79	85	66	57	8.1	1.1	17	37	[illegible]	JAN 19		7.4	65	[illegible]	[illegible]	132	24	30	35	6	54	145	10
MILES CITY	56.4	31.7	44.1	108	JUL 16	-25	JAN 21	8411	11.58			30.7			65	74	54	50	9.7	1.5	32									94	15	26	18	48	77	177	45
MISSOULA	58.2	33.6	45.9	100	AUG 2	0	JAN 25	7160	11.10	.65	AUG 26-27	62.4	9.0	JAN 2-3	69	79	60	50	6.2	1.9	31	40	W	MAY 22	58	6.4	84	[illegible]	[illegible]	[illegible]	15	31	25	[illegible]	44	186	[illegible]

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA

ENGLISH UNITS

YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00am EST	7:00am EST	1:00p.m. EST	7:00p.m. EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0–0.3	Partly cloudy, 0.4–0.7	Cloudy, 0.8–1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
NEBRASKA	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In.		%	%	%	%	M.p.h	M.p.h		M.p.h			%	Tenths											
GRAND ISLAND	62.8	36.5	49.7	105	JUL 12+	-16	JAN 29	6550	13.77	1.54	JUN 8	17.7	6.8	DEC 27-28	75	83	54	53	11.3	1.1	22	52	35	MAR 22		5.5	128	92	145	77	3	42	21	46	47	153	21
LINCOLN U	61.6	40.4	51.0	105	JUL 12	-18	JAN 29	6165	19.70	2.73	JUN 27-28	17.1	7.4	DEC 27-28								42	S	JUN 22+	64	5.5	123	102	140	86	5			31	50	133	10
NORFOLK	58.8	35.3	47.1	105	JUL 10	-26	JAN 29	7313	21.03	2.59	JUN 8-9	26.6	9.7	MAR 22-23		77	52	51								5.7	115	107	143	75	7			28	57	168	28
NORTH PLATTE	61.4	33.0	47.2	100	JUL 10	-18	JAN 22	7158	17.57	2.71	JUN 22-23	37.4	8.9	MAR 22	75	82	55	52	9.8	0.5	10	52	NW	MAR 4	66	5.7	113	108	144	65	10	44	15	32	50	185	28
OMAHA	62.4	39.1	50.8	99	JUL 12	-17	JAN 29	6136	22.72	3.02	JUN 25-26	19.3	7.2	MAR 22-23	73	78	56	56	9.9	0.5	14	62	NW	OCT 15	69	5.6	120	113	132	86	5	40	18	26	45	142	10
SCOTTSBLUFF	62.8	33.2	48.0	101	JUL 11+	-25	JAN 21	6896	12.28	1.23	JUN 7-8	21.5	3.9	APR 18	72	80	50	47	10.8	1.8	1	54	32	MAR 3		5.4	130	103	132	76	10	43	12	53	40	185	23
VALENTINE	59.3	32.4	45.9	105	JUL 10	-23	JAN 29+	7705	18.82	2.30	AUG 11	27.1	5.8	APR 18-19								61	NW	JUN 4	70	5.6	117	113	135	73	8			46	61	185	33
NEVADA																																					
ELKO	63.7	28.5	46.1	100	JUL 29	-13	FEB 11	7194	6.50	.66	DEC 5-6	35.0	8.8	DEC 5-6	54	66	43	35	6.4	1.4	24	40	14	MAY 9		5.1	147	88	130	59	13	11	10	63	42	205	27
ELY	62.3	28.1	45.2	94	AUG 8	-15	JAN 20	7336	6.08	1.21	SEP 18-19	18.8	3.1	DEC 25-26	50	58	37	33	9.5	4.5	21	38	SW	SEP 11+	79	5.1	133	102	130	45	9	31	0	26	27	208	26
LAS VEGAS	80.3	53.2	66.8	111	AUG 8+	23	DEC 31+	2414	1.91	.43	DEC 6	T	T	DEC 30 +	32	39	26	20	8.2	3.3	23	52	SW	MAR 1	86	3.8	195	81	89	18	0	14	0	145	0	44	0
RENO	68.8	31.6	50.2	100	JUL 29	7	JAN 21+	5568	3.27	.84	DEC 5-6	7.6	5.0	DEC 6	52	70	43	29	6.8	1.6	26	48	SE	JAN 4	85	4.4	178	79	108	26	2	6	7	50	2	197	0
WINNEMUCCA	66.6	32.0	49.3	101	JUL 29	- 3	DEC 27	6087	4.51	.38	JUN 6-7	20.6	4.0	DEC 5-6	46	57	39	29	7.8	1.2	26	38	SW	OCT 20	64	5.1	141	92	132	47	8	9	4	59	4	188	3
NEW HAMPSHIRE																																					
CONCORD	59.0	33.4	46.2	102	JUL 3	-19	FEB 20	7279	32.60	2.25	SEP 21-22	69.7	14.2	JAN 23-24	81	80	53	65	6.4	2.5	30	38	NW	OCT 20+	62	6.1	100	113	152	122	18	13	48	25	35	166	20
MT WASHINGTON OBS	33.6	20.1	26.9	65	JUL 3	-36	FEB 21	13812	75.94	3.14	FEB 25-26	264.0	28.5	FEB 25-26	86	84	85	85				160Y	W	MAR 2	33	7.8	38	88	239	208	65	15	306	0	161	244	56
NEW JERSEY																																					
ATLANTIC CITY	62.4	41.6	52.0	104	JUL 3	0	FEB 20+	5528	45.29	6.40	AUG 23	31.6	7.5	JAN 26-27	81	80	54	70	10.4	2.5	27	40	27	JAN 30	55	6.0	96	117	152	113	9	26	49	24	21	114	3
NEWARK	62.6	45.7	54.2	105	JUL 3	7	FEB 20+	5096	37.86	4.71	SEP 21	31.4	8.2	DEC 24-25	71	71	52	59	11.1	3.2	28	43	24	JAN 31		6.0	94	133	138	117	8	19	15	33	16	86	0
TRENTON U	62.3	45.5	53.9	102	JUL 3	6	JAN 29	5116	39.57	3.46	OCT 18-19	37.6	11.7	DEC 24-25								36	NW	MAR 1	60	5.8	105	125	135	117	10			32	26	89	0
NEW MEXICO																																					
ALBUQUERQUE	69.5	41.3	55.4	99	AUG 1+	6	JAN 22	4654	6.81	1.11	JUL 15-16	6.4	4.6	JAN 18	46	59	36	27	8.9	0.2	2	54	SW	JUN 20+	81	4.0	183	113	69	44	2	38	2	68	5	122	0
CLAYTON	66.8	37.8	52.3	99	JUL 5	- 8	JAN 21	5271	15.43	2.48	JUN 17	12.1	2.9	JAN 20-21		69	37	37								4.6	161	107	97	56	5			26	17	142	4
RATON	66.1	32.3	49.2	96	JUL 5	-13	DEC 29	6024	12.92	1.63	JUL 6	17.9	4.0	OCT 16-17												5.1	131	125	109	71	6			14	13	180	17
ROSWELL	75.7	41.9	58.8	107	AUG 1	-16	JAN 22	3874	9.68	1.91	APR 24-25	5.2	4.7	JAN 20-21		65	38					48	NW	MAR 22		4.4	167	109	89	37	1	34	14	97	4	132	2
SILVER CITY	70.9	42.7	56.8	98	JUL 6	9	DEC 29	3946	8.18	1.33	JUN 28	7.9	4.8	JAN 18												3.8	186	133	46	60	3			47	0	100	0
NEW YORK																																					
ALBANY	57.8	35.8	46.8	98	JUL 2	-16	FEB 20	7041	33.37	2.56	SEP 4	93.3	18.3	DEC 24-25	79	78	56	67	9.4	3.5	27	44	NW	JUN 6	52	7.0	56	114	195	143	19	26	19	11	48	158	13
BINGHAMTON	53.7	37.1	45.4	95	JUL 3	- 8	JAN 28	7525	30.78	2.24	JUN 9-10	96.0	14.7	JAN 30-31	77	81	62	67	10.4	3.8	26	47	SW	JUN 9+	54	7.4	43	105	217	151	29	23	44	6	67	148	8
BUFFALO	54.9	38.5	46.7	94	JUL 2	- 6	JAN 28	7080	32.87	1.62	JAN 30-31	100.0	18.2	JAN 22-23	80	80	64	70	11.6	5.9	25	43	SW	NOV 3+	53	7.2	63	90	212	176	27	34	18	4	59	141	6
NEW YORK U	63.0	47.1	55.1	103	JUL 3	8	FEB 20+	4857	39.90	5.54	SEP 21	30.5	7.1	DEC 24-25	67	70	49	57	8.7	2.4	29	40	N	JAN 30	59	5.3	121	134	110	116	9	17		35	19	77	0
J.F. KENNEDY	61.0	45.2	53.1	104	JUL 3	7	JAN 28	5179	36.71	4.49	SEP 21	24.4	6.4	DEC 24	75	75	57	68	11.6	2.4	28	52	26	JAN 31		5.9	94	135	136	110	7	16	25	14	16	85	0
NEW YORK LA GUARDIA	61.3	48.6	55.0	107	JUL 3	10	JAN 28	4917	31.69	3.02	SEP 21	26.7	6.7	FEB 24-25	66	69	53	58	11.2	2.5	30	51	W	JAN 31		6.0	91	136	138	114	9	19	12	25	21	69	0
ROCHESTER	57.4	38.5	48.0	98	JUL 3	- 8	FEB 7	6683	26.11	2.07	JUL 27-28	105.7	18.2	JAN 23	76	76	57	64	9.5	5.1	25	50	SW	JAN 31	52	6.8	76	100	189	137	27	21	10	14	55	140	8
SYRACUSE	56.3	36.8	46.6	96	JUL 3	-26	JAN 26	7137	33.14	2.09	SEP 3-4	140.2	24.5	JAN 30-31	76	76	57	66	10.4	3.5	27	55	W	JAN 31	52	6.8	76	97	192	164	33	23	5	8	58	150	16

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature: Averages: Daily maximum	Daily minimum	Annual	Extremes: Highest	Date	Lowest	Date	Heating degree days	Precipitation: Total	Greatest in 24 hours	Date (s)	Snow, Sleet: Total	Greatest in 24 hours	Date (s)	Relative humidity: 1:00a.m. E.S.T.	7:00a.m. E.S.T.	1:00p.m. E.S.T.	7:00p.m. E.S.T.	Wind: Average speed	Resultant speed	Resultant direction	Fastest mile: Speed	Direction	Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0–0.3	Partly cloudy, 0.4–0.7	Cloudy, 0.8–1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	Max temp: 90 °F and above	32 °F and below	Min temp: 32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In.	In.		In.	In.		%	%	%	%	M.p.h.	M.p.h.		M.p.h.			%	Tenths											
NORTH CAROLINA																																					
ASHEVILLE	63.3	41.0	52.2	90	JUL 14	- 7	JAN 30	5034	51.75	3.17	FEB 12-13	26.1	7.6	JAN 15-16	92	94	62	75	8.1	2.2	35	43	35	JUL 19	58	6.2	99	93	173	134	7	46	76	1	15	131	1
CAPE HATTERAS R	67.8	53.0	60.4	92	JUL 5	17	JAN 30	3023	56.18	4.98	JUN 11-12	T	T	DEC 24 +	83	81	66	79	11.6	2.1	32	58	SSW	FEB 13	62	6.1	104	94	167	115	0	38	21	2	0	37	0
CHARLOTTE	69.4	48.3	58.9	99	JUL 28+	4	JAN 31+	3639	35.13	2.79	SEP 18-19	10.7	4.4	JAN 25-26	76	84	53	60	6.6	0.6	31	37	SW	FEB 13	69	5.6	122	99	144	113	4	32	28	43	2	69	0
GREENSBORO	68.5	46.6	57.6	100	JUL 14	3	JAN 31	4002	36.28	1.88	SEP 19-20	28.6	8.2	JAN 25-26	82	86	55	66	7.0	1.1	28	40	SW	FEB 13	56	5.9	109	96	160	107	7	30	29	39	[illegible]	89	0
RALEIGH	69.6	47.7	58.7	97	JUL 14+	3	JAN 31	3708	39.60	1.83	SEP 19-20	13.3	9.0	JAN 25-26	76	82	50	63	8.3	0.8	27	40	34	OCT 1+	58	5.6	120	113	132	106	4	33	27	42	3	75	0
WILMINGTON	73.4	52.9	63.2	96	JUL 5	17	JAN 31	2548	65.63	7.73	JUN 10-11	T	T	DEC 30 +	81	91	54	71	8.2	0.7	28	47	SW	FEB 13	65	5.6	117	109	139	114	0	44	23	47	[illegible]	47	0
NORTH DAKOTA																																					
BISMARCK	52.7	26.9	[illegible]	95	JUL 30+	-39	JAN 29+	9634	16.73	1.40	JUL 31	45.0	15.0	MAR 3	74	77	55	54	9.8	1.1	1	52	NW	MAR 4	62	6.3	83	122	[illegible]	85	[illegible]	37	8	21	[illegible]	194	54
FARGO	49.4	27.4	38.4	[illegible]	JUN [illegible]	-33	JAN 24+	[illegible]	18.97	1.94	JUL 31-1	32.4	8.0	MAR 2-3	75	78	60	60	11.4	[illegible]	33	45	N	OCT 22	60	6.2	91	[illegible]	164	87	[illegible]	38	17	16	[illegible]	177	[illegible]
WILLISTON	52.5	27.1	[illegible]	107	JUL 16	-40	JAN [illegible]	9556	9.46	[illegible]	AUG [illegible]-21	23.5	4.1	APR 26-27		78	54	52				54	SW	JUL 1	59	6.2	91	117	157	73	7			25	[illegible]	173	[illegible]
OHIO																																					
AKRON	58.4	[illegible]	[illegible]	[illegible]	JUL 3+	[illegible]	JAN 29	6453	29.64	[illegible]	AUG [illegible]-11	[illegible]	[illegible]	JAN [illegible]	79	[illegible]	61	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	MAR [illegible]		[illegible]	67	[illegible]	[illegible]	147	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CINCINNATI OBS	62.0	43.8	53.2	[illegible]	JUL [illegible]	[illegible]	JAN 30	5315	35.18	[illegible]	JAN 1-2	24.5	8.0	NOV 2-3								44	[illegible]	APR 1	[illegible]					124	4			38	[illegible]	[illegible]	[illegible]
CLEVELAND	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	[illegible]	JAN 29	[illegible]	[illegible]	1.93	JUL 24	[illegible]	7.5	NOV 28-29	77	80	[illegible]	67	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	MAR [illegible]	[illegible]	7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
COLUMBUS	60.1	[illegible]	[illegible]	[illegible]	JUL 3+	- 9	JAN 24	[illegible]	38.34	[illegible]	JUL 9-10	[illegible]	[illegible]	JAN 22-23	77	79	58	64	9.9	1.5	[illegible]	47	NW	JUN [illegible]	54	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DAYTON	[illegible]	41.7	[illegible]	[illegible]	JUL 2	[illegible]	JAN 30	5978	42.27	[illegible]	JUL 12-13	35.4	7.2	FEB 1	77	80	58	[illegible]	[illegible]	[illegible]	24	[illegible]	[illegible]	JUN [illegible]	[illegible]	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MANSFIELD	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	[illegible]	JAN [illegible]	[illegible]	31.17	2.51	AUG [illegible]	[illegible]	5.4	JAN 22-23		81	62									[illegible]	78	[illegible]	141	[illegible]	[illegible]	[illegible]	26	[illegible]	[illegible]	[illegible]	[illegible]
TOLEDO	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	[illegible]	JAN 28	6717	[illegible]	[illegible]	DEC 7-8	50.3	8.5	NOV 2-3	76	80	57	62	9.1	[illegible]	[illegible]	35	[illegible]	JAN [illegible]	[illegible]	[illegible]	86	[illegible]	[illegible]	[illegible]	12	[illegible]	11	[illegible]	[illegible]	144	[illegible]
YOUNGSTOWN	57.0	[illegible]	[illegible]	[illegible]	JUL [illegible]	- 7	JAN 29	[illegible]	[illegible]	1.57	AUG [illegible]-11	68.7	[illegible]	JAN 22-23	79	81	61	65	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	APR 1+		7.[illegible]	[illegible]	[illegible]	[illegible]	164	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
OKLAHOMA																																					
OKLAHOMA CITY	[illegible]	48.2	[illegible]	[illegible]	JUL 19	[illegible]	JAN [illegible]	[illegible]	[illegible]	[illegible]	AUG 18-19	8.7	3.8	JAN 19	71	79	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	AUG [illegible]	[illegible]	[illegible]	147	[illegible]	[illegible]	[illegible]	4	47	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TULSA	[illegible]	[illegible]	[illegible]	[illegible]	JUL [illegible]	1	JAN [illegible]	[illegible]	[illegible]	[illegible]	SEP 2-3	[illegible]	2.7	DEC 22-23	72	81	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	OCT [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7	[illegible]	[illegible]	[illegible]	[illegible]	47	[illegible]
OREGON																																					
ASTORIA	58.4	[illegible]	[illegible]	[illegible]	JUN [illegible]	[illegible]	JAN [illegible]	[illegible]	[illegible]	[illegible]	DEC 3-4	7.4	3.2	MAR 1-2	88	90	[illegible]	74	8.4	[illegible]	[illegible]	[illegible]	[illegible]	JAN 2		7.7	53	[illegible]	244	[illegible]	[illegible]	[illegible]	41	1		[illegible]	[illegible]
BURNS	[illegible]	[illegible]	[illegible]	[illegible]	AUG 2	- 1	FEB [illegible]	[illegible]	[illegible]	[illegible]	SEP [illegible]-14	54.7	[illegible]	DEC 24-25	60	70	54	41	[illegible]	[illegible]	[illegible]					[illegible]	119	[illegible]	[illegible]	[illegible]	17			13	[illegible]	[illegible]	[illegible]
EUGENE	[illegible]	[illegible]	[illegible]	[illegible]	JUN 15	[illegible]	JAN 17	4287	41.29	[illegible]	JAN 3-4	[illegible]	2.8	MAR 28-1	82	90	[illegible]	[illegible]	7.8	[illegible]	[illegible]	[illegible]	[illegible]	MAR 14		7.[illegible]	[illegible]	81	[illegible]	[illegible]	1	[illegible]	[illegible]	14	1	[illegible]	
MEACHAM	52.3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]-13	145.6	[illegible]	FEB 13-14			62									7.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
MEDFORD	[illegible]	[illegible]	[illegible]	[illegible]	JUN 15	18	JAN 21	[illegible]	[illegible]	[illegible]	JAN 5-6	5.4	[illegible]	JAN 22	69	82	[illegible]	45	4.4	1.5	[illegible]	[illegible]	12	MAY 4		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
PENDLETON	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	JAN [illegible]	[illegible]	[illegible]	[illegible]	JAN 2-3	[illegible]	[illegible]	JAN 2-3	[illegible]	57	[illegible]	[illegible]	8.8	[illegible]	[illegible]	[illegible]	[illegible]	MAR 21		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PORTLAND	[illegible]	[illegible]	53.7	[illegible]	JUN 15	[illegible]	JAN [illegible]	[illegible]	[illegible]	[illegible]	DEC 3-4	.6	.4	MAR 1	79	88	75	60	8.0	[illegible]	21	[illegible]	[illegible]	JAN 1	47	7.4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	44	[illegible]	[illegible]	[illegible]	[illegible]
SALEM	[illegible]	[illegible]	[illegible]	[illegible]	JUN 15	[illegible]	FEB 15+	4620	[illegible]	[illegible]	MAR 8-9	[illegible]	1.7	JAN 21	82	89	74	60	7.7	[illegible]	21	[illegible]	18	JAN 1		[illegible]	76	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37	[illegible]	[illegible]	[illegible]	[illegible]
SEXTON SUMMIT R	[illegible]	[illegible]	[illegible]	[illegible]	JUN 15	[illegible]	MAR [illegible]	[illegible]	[illegible]	[illegible]	NOV 14-15	77.9	[illegible]	NOV 20-21			68	57								5.6	[illegible]	[illegible]	[illegible]	[illegible]	21			[illegible]	[illegible]	[illegible]	[illegible]
PACIFIC [illegible]																																					
CANTON [illegible]	[illegible]	[illegible]	[illegible]	92	DEC 11	[illegible]	JAN [illegible]	[illegible]	[illegible]	[illegible]	JAN 21-22	[illegible]	[illegible]		75	79	79	65								6.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
ENIWETOK	[illegible]	[illegible]	[illegible]	[illegible]	SEP 21+	[illegible]	OCT 5	0	[illegible]	4.52	AUG 7-8	[illegible]	[illegible]		75	81	82	[illegible]	14.4	12.4	6									197	[illegible]		[illegible]	66		[illegible]	[illegible]
[illegible] GUAM R	[illegible]	[illegible]	[illegible]	[illegible]	JUL 28+	61	DEC [illegible]	0	74.46	[illegible]	SEP 7-8	[illegible]	[illegible]									[illegible]	[illegible]	FEB 26	57					[illegible]	[illegible]			[illegible]			[illegible]

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
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YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	100am EST	700am EST	100p.m. EST	700p.m. EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-03	Partly cloudy, 04-07	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In		%	%	%	%	M.p.h	M.p.h		M.p.h			%	Tenths											
PACIFIC AREA																																					
JOHNSTON	82.8	75.5	79.2	87	SEP 24+	68	FEB 22+	0	24.92	2.32	OCT 3-4	.0	.0		75	77	77	68	14.6	13.3	9	48	E	DEC 20	61	6.0	81	163	121	153	0	12	0	0	0	0	0
KOROR R	87.2	75.6	81.4	91	DEC 16+	72	NOV 22+	0	140.27	5.51	OCT 26-27	.0	.0		76	88	90	79	7.2	2.7	3	29	SW	OCT 26	58	9.9	0	3	362	272	0	31	0	57	0	0	0
KWAJALEIN	86.8	76.8	81.8	92	SEP 4	71	JAN 24	0	116.19	3.91	DEC 4-5	.0	.0		79	83	83	76	13.6	11.6	7	37	9	DEC 11+		8.6	8	82	275	250	0	8	0	11	0	0	0
MAJURO	85.6	77.3	81.5	89	NOV 9+	71	OCT 25	0	128.70	4.32	JUL 12-13	.0	.0		79	82	83	77	9.9	8.3	7	35	E	DEC 17	57	8.5	13	80	272	241	0	25	0	0	0	0	0
MARCUS ISLAND	83.2	72.7	78.0	92	AUG 13	60	MAR 6	0	38.51	4.87	OCT 13-14	.0	.0		72	80		71				113	N	OCT 14	68	5.9	100	128	137	130	0			41	0	0	0
PONAPE R	87.1	74.3	80.7	92	OCT 2+	69	NOV 30+	0	170.05	4.34	JAN 9-10	.0	.0		79	89	90	77	7.6	4.7	8	28	SW	OCT 31	54	8.9	7	51	307	283	0	25	0	46	0	0	0
TRUK MOEN ISLAND	86.2	76.2	81.2	91	OCT 5+	71	DEC 6	0	121.65	6.27	DEC 5-6	.0	.0		77	85	86	77	10.1	6.1	8	39	SW	NOV 2	76	8.9	3	57	305	263	0	16	0	11	0	0	0
WAKE	84.0	74.7	79.4	89	SEP 14+	66	JAN 18	0	23.91	1.45	MAY 13-14	.0	.0		72	78	78	68	12.9	10.8	5	35	4	OCT 30+		5.9	86	159	120	154	0	7	0	0	0	0	0
YAP R	86.8	75.6	81.2	91	NOV 3+	71	NOV 17+	0	92.18	5.54	JUN 22-23	.0	.0		76	87	89	78	7.8	4.8	5	29	SE	MAY 19	46	9.7	1	15	349	256	0	14	0	30	0	0	0
PENNSYLVANIA																																					
ALLENTOWN	60.7	39.9	50.3	105	JUL 3	- 1	JAN 29	6198	38.28	2.05	FEB 13	68.1	13.3	DEC 24-25	77	79	54	61	9.5	3.2	29	46	25	JAN 30		6.2	90	116	159	117	12	22	17	41	33	135	2
ERIE	56.1	40.5	48.3	92	JUL 3	- 6	JAN 29	6538	37.74	1.65	AUG 10-11	99.7	12.9	DEC 1-2	76	78	66	69	11.5	4.1	24	30	23	NOV 3+		6.7	80	96	189	163	30	38	11	2	52	125	4
HARRISBURG	63.6	43.5	53.6	107	JUL 3	0	JAN 29	5418	31.60	4.23	SEP 13-14	62.7	12.2	JAN 29-30	71	74	52	59	8.1	2.9	29	42	NW	MAR 1+	63	6.5	84	101	180	114	15	19	12	60	32	108	1
PHILADELPHIA	62.7	43.2	53.0	104	JUL 3	4	FEB 6+	5362	40.00	4.69	SEP 14	46.2	12.5	DEC 24-25	74	75	53	62	10.0	2.7	29	38	W	FEB 13+	56	6.1	90	116	159	108	10	18	17	33	25	104	0
PITTSBURGH	59.9	40.3	50.1	93	JUL 3	-10	JAN 29	6123	34.06	1.72	FEB 13	58.7	14.0	JAN 22-23	77	81	58	63	9.1	3.3	27	44	28	APR 1	45	7.3	52	103	210	146	17	28	13	23	47	126	2
PITTSBURG U	60.5	42.6	51.6	93	JUL 3+	- 2	JAN 29	5702	32.01	2.02	FEB 12-13	37.3	13.0	JAN 22-23											44					138	11			20	43	111	2
READING U	62.6	45.0	53.8	103	JUL 3	5	JAN 29	5195	35.05	2.82	SEP 13-14	62.1	11.7	JAN 29-30								63	W	JUN 14	56	5.9	100	123	142	118	13			40	25	91	0
SCRANTON	58.7	40.1	49.4	101	JUL 3	- 4	FEB 7	6355	28.43	3.18	AUG 16	61.0	12.5	FEB 24-25	76	80	57	62	7.9	2.0	26	34	S	NOV 10+	56	6.7	68	109	188	137	12	23	12	19	47	123	4
WILLIAMSPORT	59.1	38.2	48.7	100	JUL 3	- 3	FEB 6	6403	38.14	3.41	NOV 28-29	50.3	12.4	JAN 29-30	83	84	56	66	8.1	2.8	28	39	28	NOV 10		6.7	69	108	188	143	15	33	25	10	36	142	2
RHODE ISLAND																																					
BLOCK ISLAND	55.2	43.4	49.3	86	JUL 3	6	FEB 20	5971	30.28	2.12	SEP 14-15	18.3	4.0	JAN 23												5.9	113	105	147	108	7			0	19	93	0
PROVIDENCE	59.3	40.3	49.8	96	JUL 3	2	FEB 20	6034	38.68	2.59	FEB 13	40.5	8.1	MAR 12-13	76	75	54	65	10.5	3.3	27	40	24	JAN 31	58	6.0	105	108	152	113	11	24	27	7	21	124	0
SOUTH CAROLINA																																					
CHARLESTON	74.1	53.0	63.6	97	AUG 23	11	JAN 30	2374	53.58	5.08	JUL 1-2	.8	.8	JAN 27	83	84	54	69	8.6	0.4	26	59Y	NW	FEB 13	59	5.6	119	106	140	111	0	46	31	37	0	46	0
COLUMBIA	73.7	50.2	62.0	103	JUL 29	7	JAN 30	2891	42.31	2.32	JAN 14-15	1.0	1.0	JAN 26-27	82	86	50	64	7.9	0.7	29	40	20	FEB 13	61	5.6	123	105	137	103	0	31	17	63	1	65	0
GNVLE-SPARTANBURG	69.3	48.3	58.8	98	JUL 28	- 6	JAN 30	3465	48.94	4.22	SEP 13-14	12.5	3.7	JAN 29 +	78	82	55	65	7.3	0.9	33	52	NE	JUL 15	59	5.7	124	84	157	120	5	39	35	22	1	67	1
SOUTH DAKOTA																																					
ABERDEEN	53.9	28.8	41.4	110	JUL 10	-30	JAN 30+	9145	20.54	1.69	JUN 21-22	40.6	11.3	MAR 4-5	74	77	57	56	11.1	1.3	3	58	20	JUL 31		6.0	102	102	161	85	12	33	28	25	82	192	58
HURON	55.8	31.2	43.5	112	JUL 10	-34	JAN 29+	8478	22.55	2.83	OCT 13-14	42.3	11.1	MAR 4	78	84	59	58	11.7	0.4	15	54	NW	MAR 4	70	6.1	100	104	161	85	10	33	19	28	76	181	39
RAPID CITY	57.9	32.5	45.2	103	JUL 16+	-22	JAN 20	7771	20.41	2.13	SEP 13	56.3	7.9	MAR 21-22	67	71	51	50	11.2	2.8	34	59	NW	NOV 29	61	6.0	99	112	154	100	17	36	22	34	59	183	22
SIOUX FALLS	56.2	32.2	44.2	106	JUL 10	-29	JAN 29	8285	20.84	4.02	SEP 11	25.5	5.6	DEC 27-28	74	80	56	57	11.4	0.4	24	46	31	JUL 4		5.9	110	99	156	86	7	36	25	31	69	178	40
TENNESSEE																																					
BRISTOL	65.6	44.1	54.9	95	JUN 27	-15	JAN 31	4536	45.26	2.08	APR 12-13	30.1	8.8	JAN 29	81	85	58	66	5.4	1.1	28	33	24	FEB 13		6.5	82	105	178	137	8	46	47	15	16	102	2
CHATTANOOGA	68.2	46.9	57.6	98	JUL 15+	-10	JAN 31	3902	47.19	2.80	SEP 12-13	8.4	8.4	JAN 29	88	91	61	66	6.0	0.4	32	38	NE	JUL 15	55	6.3	90	101	174	119	1	52	51	25	6	81	2
KNOXVILLE	67.5	48.3	57.9	98	JUL 14	- 9	JAN 30	3823	45.87	2.40	JUL 29-30	17.8	9.9	JAN 29	80	86	60	64	6.8	1.3	30	49	W	APR 30	52	6.6	80	98	187	130	3	41	44	28	5	72	2

See reference notes at end of table.

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YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	100am E.S.T.	700am E.S.T.	100p.m. E.S.T.	700p.m. E.S.T.	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In.	In.		In.	In.		%	%	%	%	M.p.h.	M.p.h.		M.p.h			%	Tenths											
TENNESSEE																																					
MEMPHIS	69.7	50.3	60.0	102	JUL 15	2	JAN 30	3502	41.24	3.63	FEB 9-10	12.9	4.9	JAN 21-22	74	81	57	59	9.7	0.5	17	38	S	NOV 10	64	5.8	121	85	159	100	6	41	11	47	10	67	0
NASHVILLE	68.7	47.9	58.3	103	JUL 14+	- 6	JAN 30	3889	41.92	2.52	DEC 8-9	22.9	7.5	JAN 22	78	83	58	60	8.8	0.3	18	50	NW	JUL 7	58	6.3	95	93	177	107	4	50	16	40	15	76	3
OAK RIDGE R	66.9	46.2	56.6	100	JUL 13	- 9	JAN 30	4174	47.22	2.74	APR 12-13	15.3	6.8	JAN 29								40Y		MAR 19		6.5	101	69	195	126	4			25	8	80	2
TEXAS																																					
ABILENE	75.3	52.2	63.8	103	AUG 1+	7	JAN 30	2756	21.77	2.31	APR 23-24	8.1	3.7	JAN 21	65	75	50	44	11.3	3.8	17	41	NW	SEP 17+	71	5.1	147	99	119	61	4	36	6	97	5	56	0
AMARILLO	69.9	42.7	56.3	102	JUL 22+	- 5	JAN 29+	4468	14.91	2.70	JUN 17	9.5	5.1	JAN 20-21	64	75	45	41	14.5	4.5	20	46	NE	MAY 8	71	4.6	167	94	104	50	3	40	28	54	16	112	5
AUSTIN	77.7	56.6	67.2	[illegible]	JUL 31	14	JAN 30	1856	25.19	3.32	AUG 11-12	6.0	6.0	FEB 22-23	75	82	56	53	8.9	1.4	15	43	NW	JUN 13	57	5.6	109	125	131	82	2	39	23	98	0	32	0
BROWNSVILLE	80.2	62.9	71.6	97	AUG 17	[illegible]	DEC 12	[illegible]	24.67	5.53	OCT 15	T	T	DEC 23+	88	92	53	71	11.1	4.9	13	38	[illegible]	DEC 27+	67	5.6	119	126	120	[illegible]	0	17	29	91	0	2	0
CORPUS CHRISTI	[illegible]	60.9	70.3	[illegible]	AUG 17	[illegible]	JAN 30	1182	24.89	3.76	APR 25	.0	.0		88	91	63	69	11.2	5.0	12	45	[illegible]	APR 14	52	6.1	86	126	154	84	0	26	45	87	0	12	0
DALLAS	74.4	55.0	64.7	101	AUG 1+	[illegible]	JAN 30	2481	42.97	4.50	APR 28	5.3	2.3	JAN 21	72	82	54	54	10.9	[illegible]	15	50	N	JAN 1	[illegible]	5.4	129	94	142	73	2	45	[illegible]	[illegible]	4	42	0
DEL RIO	79.8	56.7	[illegible]	[illegible]	AUG 1+	[illegible]	DEC 13+	1640	17.39	3.42	APR 23-24	2.2	2.2	FEB 22	54	74	54	43	8.8	4.9	[illegible]	29	[illegible]	DEC 9+		5.2	133	[illegible]	132	51	1	28	12	[illegible]	[illegible]	17	0
EL PASO	76.1	49.4	[illegible]	[illegible]	JUL 4	14	DEC 29	2838	9.24	1.45	JUN 26-27	.4	.4	JAN 18	44	55	37	28	7.9	[illegible]	26	53	[illegible]	JUL 27	85	3.7	137	[illegible]	[illegible]	39	0	4	[illegible]	[illegible]	0	[illegible]	0
FORT WORTH	74.5	54.2	64.4	[illegible]	AUG [illegible]	[illegible]	JAN 23	[illegible]	[illegible]	4.11	JUN 12-13	7.3	2.9	FEB 21-22+	73	81	57	[illegible]	9.9	[illegible]	15	[illegible]	[illegible]	APR [illegible]		5.4	[illegible]	92	128	74	[illegible]	45	13	83	4	45	0
GALVESTON	73.4	64.0	68.7	[illegible]	AUG 17+	[illegible]	JAN 30	1291	[illegible]	[illegible]	SEP 9-10	T	T	JAN 30								41	N	APR 18	57					76	0			[illegible]	0	4	0
HOUSTON I	76.8	[illegible]	[illegible]	[illegible]	AUG 17+	21	JAN 30	1398	48.15	4.52	APR 14	.0	.0																	[illegible]	[illegible]			78	0	11	0
HOUSTON	77.8	[illegible]	68.7	97	JUL 31+	[illegible]	JAN 30	[illegible]	59.13	5.18	APR 14	.0	.0		83	85	61	66	9.6	2.0	12	38	16	APR 17	58	6.4	81	115	159	107	0	59	41	56	0	18	0
LUBBOCK	74.0	47.0	[illegible]	[illegible]	AUG 1	[illegible]	JAN [illegible]	[illegible]	13.42	1.78	AUG 23-24	[illegible]	3.8	JAN 21	57	67	43	[illegible]	11.8	2.7	14	45	[illegible]	JUN 10+		4.9	137	122	[illegible]	[illegible]	1	44	[illegible]	74	6	97	1
MIDLAND	[illegible]	48.8	[illegible]	[illegible]	AUG 1	[illegible]	JAN [illegible]	2451	14.34	[illegible]	MAY 26-27	3.5	3.1	JAN 21	64	77	46	38	10.1	2.9	[illegible]	38	24	JUN 11		4.6	159	[illegible]	[illegible]	51	1	33	[illegible]	[illegible]	3	65	0
PORT ARTHUR	77.4	58.8	68.1	97	JUL 31	[illegible]	JAN 30	[illegible]	[illegible]	8.45	AUG 11-12	.0	.0		88	90	64	74	9.7	1.9	11	50	NW	APR 18	58	6.2	85	127	[illegible]	[illegible]	0	57	46	88	0	11	0
SAN ANGELO	77.1	52.1	[illegible]	[illegible]	AUG 1+	[illegible]	DEC 29	[illegible]	[illegible]	2.81	AUG 23-24	[illegible]	4.1	FEB 21-22	67	79	50	44	9.5	3.3	18	41	18	APR 17		4.9	146	111	[illegible]	[illegible]	3	37	4	102	[illegible]	[illegible]	0
SAN ANTONIO	77.8	55.8	[illegible]	[illegible]	AUG [illegible]	[illegible]	JAN 30	[illegible]	21.44	2.11	APR 24-25	3.5	3.5	FEB 22-23	82	89	59	55	9.0	2.5	11	39	N	MAR 22	62	5.6	105	130	130	84	1	38	15	86	0	41	0
VICTORIA	78.5	59.7	[illegible]	[illegible]	JUL 31	[illegible]	JAN 30	[illegible]	[illegible]	3.28	JUL 5-6	.0	.0		86	89	61	65	9.7	2.9	11	49Y	NW	APR 17		6.3	76	120	168	95	0	43	38	94	0	17	0
WACO	76.5	55.8	[illegible]	[illegible]	JUL 31	[illegible]	JAN 30+	[illegible]	[illegible]	4.16	AUG 11-12	7.4	4.8	FEB 22-23	71	79	54	52	10.8	[illegible]	[illegible]	40	18	FEB 9+		5.2	139	97	129	63	2	39	[illegible]	[illegible]	[illegible]	37	0
WICHITA FALLS	75.6	50.0	62.8	[illegible]	AUG 1	[illegible]	JAN 23	[illegible]	29.62	3.24	APR 25-26	[illegible]	[illegible]	JAN 21-22	71	80	52	49	11.8	3.1	15	44	16	APR 10+		5.4	129	94	142	64	[illegible]	[illegible]	17	102	9	74	1
UTAH																																					
MILFORD	56.4	32.8	44.6	101	AUG 8+	[illegible]	DEC 28	[illegible]	7.43	.47	DEC 6-7	51.8	7.6	DEC 25-27			39	31								4.8	[illegible]	98	114	[illegible]	17			69	[illegible]	183	[illegible]
SALT LAKE CITY	[illegible]	[illegible]	[illegible]	[illegible]	JUL 19	[illegible]	FEB 13	[illegible]	8.99	.81	MAR 1-2	[illegible]	14.4	MAR 1-2	59	54	43	34	[illegible]	[illegible]	14	42	NW	AUG 11	77	5.6	[illegible]	[illegible]	147	[illegible]	[illegible]	33	7	74	[illegible]	142	1
WENDOVER	63.2	41.8	[illegible]	[illegible]	[illegible]	[illegible]	DEC 20+	5741	3.13	.51	OCT 5	8.7	3.2	DEC 6		49	38													42	2			[illegible]	[illegible]	125	[illegible]
VERMONT																																					
BURLINGTON	53.7	33.7	43.7	[illegible]	JUL 3	[illegible]	JAN 26	8027	28.54	1.32	FEB 25-26	[illegible]	16.5	FEB 25-26	81	78	[illegible]	67	[illegible]	[illegible]	21	38	N	JUN 29+	61	7.1	58	[illegible]	202	149	[illegible]	19	13	6	[illegible]	[illegible]	22
VIRGINIA																																					
LYNCHBURG	[illegible]	44.4	[illegible]	[illegible]	JUL 14	[illegible]	JAN 31+	[illegible]	[illegible]	[illegible]	SEP 13-14	[illegible]	[illegible]	JAN 29-30		76	50	61				34	N	APR 1+	62	5.7	114	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NORFOLK	65.6	48.6	57.1	97	JUL 13	[illegible]	JAN 31	4005	37.95	[illegible]	[illegible]	15.7	7.3	JAN 26-27	80	81	60	69	11.4	0.6	28	45	SW	FEB 13	59	6.1	105	97	[illegible]	104	4	27	[illegible]	[illegible]	5	70	0
RICHMOND	[illegible]	44.4	[illegible]	[illegible]	JUL 28	3	FEB 5	4510	[illegible]	[illegible]	OCT 18-19	41.5	13.2	JAN 26	82	85	53	68	7.6	0.7	28	40	SW	FEB 13	61	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	[illegible]	[illegible]	[illegible]	94	0
ROANOKE	65.0	44.1	54.6	100	JUL 14	[illegible]	JAN 30	4738	[illegible]	[illegible]	OCT 18-19	72.2	14.7	JAN 22-23	72	74	50	57	8.0	2.5	29	46	28	JUN 16+		5.9	99	122	144	[illegible]	[illegible]	[illegible]	[illegible]	29	16	98	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
ENGLISH UNITS

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile					Sunrise to sunset							Max temp		Min temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00a.m. E.S.T.	7:00a.m. E.S.T.	1:00p.m. E.S.T.	7:00p.m. E.S.T.	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .01 inch or more	Snow, Sleet 1.0 inch or more	Thunderstorms	Heavy fog	90 °F and above	32 °F and below	32 °F and below	0 °F and below
	°F	°F	°F	°F		°F		Base 65 °F	In	In		In	In		%	%	%	%	M.p.h.	M.p.h		M.p.h			%	Tenths											
WASHINGTON																																					
OLYMPIA	60.1	39.7	49.9	91	AUG 21	21	MAR 21	5417	51.33	2.51	DEC 12-13	30.0	9.1	MAR 19-20	83	90	76	64	7.2	3.6	21	32	24	NOV 11		7.6	49	77	239	161	8	7	86	1	0	74	0
SEATTLE-TACOMA	59.0	44.6	51.8	88	AUG 21	27	JAN 24	4791	38.23	2.13	DEC 12-13	9.6	2.5	MAR 3	77	84	75	64	6.8	2.3	20	38	21	MAR 15	47	7.7	49	69	247	154	4	7	36	0	0	22	0
SPOKANE	58.9	37.8	48.4	100	AUG 24	- 1	JAN 24	6330	14.13	.76	NOV 14-15	32.6	4.9	MAR 20-21	65	75	61	50	6.9	3.3	20	39	S	JAN 2	55	6.7	78	87	200	109	12	8	54	14	21	140	1
STAMPEDE PASS R	45.8	34.1	40.0	82	AUG 24	12	MAR 2+	9050	82.64	2.54	DEC 12-13	395.2	20.0	FEB 26-27		90	80	76								8.0	44	54	267	212	87			0	85	178	0
WALLA WALLA U	65.1	45.9	55.5	98	AUG 2+	24	JAN 25+	4165	15.04	1.01	DEC 12-13	16.2	8.7	JAN 2								49	W	JAN 2	58	6.6	91	75	199	97	2			27	5	53	0
YAKIMA	64.3	38.9	51.6	97	AUG 23+	5	JAN 1	5237	8.00	.73	NOV 13-14	21.9	10.6	JAN 3	65	74	54	44	7.1	3.5	28	35	31	MAY 10+		6.2	96	101	168	66	5	11	14	22	7	119	0
WEST INDIES																																					
SAN JUAN P.R.	84.8	73.7	79.3	92	JUL 1+	66	FEB 5	0	60.19	2.91	APR 19-20	.0	.0		84	81	69	79	9.4	7.0	8	35	NE	FEB 10	66	6.1	54	198	113	207	0	37	0	17	0	0	0
SWAN ISLAND	84.3	76.1	80.2	90	OCT 4+	69	NOV 29+	0	80.08	6.80	JUN 4-5	.0	.0													6.6	49	163	153	159	0			3	0	0	0
WEST VIRGINIA																																					
BECKLEY	59.6	40.0	49.8	90	JUL 14	- 5	JAN 30	5902	42.25	2.86	SEP 13-14	75.7	9.6	DEC 23-24	80	82	58	67	9.3	3.0	23	37	23	NOV 2		7.0	75	78	212	154	17	40	47	1	37	124	3
CHARLESTON	65.6	43.6	54.6	97	JUL 3+	3	JAN 30+	4830	32.43	1.49	APR 30	39.3	13.0	JAN 22-23	79	82	53	59	6.4	2.1	24	32	27	APR 28		7.0	59	113	193	134	9	21	107	37	30	104	0
ELKINS	60.7	36.0	48.4	93	JUL 2	-10	FEB 6	6298	39.08	2.02	APR 30-1	77.2	7.5	FEB 24-25	88	90	57	69	6.8	2.8	28	44	30	APR 28		7.3	56	96	213	164	26	26	76	5	35	153	9
HUNTINGTON	63.5	43.7	53.6	96	JUL 2	- 5	JAN 30	5045	41.21	2.99	JUL 12-13	24.5	8.2	JAN 22-23	79	85	58	63	6.3	1.8	23	35	23	NOV 10		6.9	66	107	192	133	6	32	54	23	34	106	2
PARKERSBURG U	63.0	43.2	53.1	98	JUL 3	- 2	JAN 30	5235	32.61	2.04	JUL 14	28.2	14.0	JAN 22-23								47	W	JUL 14	48					125	7			26	35	104	1
WISCONSIN																																					
GREEN BAY	53.5	32.8	43.2	97	JUL 3	-25	JAN 29	8310	21.64	2.00	JUL 10-11	35.9	4.7	DEC 19	78	80	58	63	10.0	2.8	28	40	SW	OCT 22	54	6.0	108	97	160	101	10	28	26	11	73	172	33
LA CROSSE	56.8	34.6	45.7	98	JUL 11+	-24	JAN 29	7664	24.19	2.17	OCT 14-15	30.4	9.1	DEC 27-28	79	82	56	60	8.4	1.2	23	46	36	JUL 10		5.6	130	93	142	95	8	33	19	27	62	151	35
MADISON	55.6	32.2	43.9	97	JUL 10	-23	JAN 29	8042	26.43	3.64	MAY 23	29.9	8.0	JAN 12-13	81	84	59	62	9.3	2.4	28	51	NW	APR 1	65	5.8	112	105	148	110	8	30	23	11	63	182	31
MILWAUKEE	54.1	36.0	45.1	97	JUL 3	-23	JAN 29	7710	27.13	1.89	AUG 1-2	48.4	12.1	JAN 12-13	78	81	63	67	10.2	2.4	28	40	SW	MAY 23	63	5.6	124	96	145	116	13	23	20	11	66	156	15
WYOMING																																					
CASPER	59.9	31.6	45.8	99	JUL 30+	-16	JAN 20	7423	8.14	.66	JUN 4-5	74.7	10.2	APR 18	58	65	41	39	13.0	7.4	25	54	27	MAR 16		5.9	104	111	150	85	25	23	5	38	47	191	25
CHEYENNE	60.5	33.6	47.1	95	JUL 16+	-19	JAN 21	6875	12.42	1.70	JUL 31	16.3	2.9	OCT 13-14	58	60	36	40	12.7	6.2	29	60	N	MAR 3	67	5.7	112	117	136	67	6	45	16	21	33	169	7
LANDER	59.0	32.0	45.5	96	JUL 16+	-14	JAN 21	7551	11.62	1.71	OCT 13	111.1	20.4	APR 17-18	54	61	46	41	7.3	2.7	25	66	SW	JAN 8	71	6.0	82	143	140	65	23	28	0	29	45	194	18
SHERIDAN	58.9	29.7	44.3	103	JUL 16	-18	JAN 25+	7843	11.01	.84	MAY 10-11	73.2	6.1	DEC 21-22	61	65	45	42	6.9	3.1	30	56	NW	APR 2	64	6.3	85	114	166	91	29	23	7	28	45	199	24

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

+ And also on an earlier date or dates.

B Number of days maximum 70°F. or above for Alaskan Stations.

Y Peak gust.

V Sun below horizon November 19 - January 23, inclusive.

X Sun below horizon November 24 - January 17, inclusive.

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max. temp.		Min. temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 am E S T	7:00 am E S T	1:00 p m E S T	7:00 p.m E S T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm. or more	Thunderstorms	Heavy fog	32.2 °C and above	0 °C and below	0 °C and below	-17.8 °C and below
	°C.	°C	°C.	°C		°C		Base 18.3 °C	Mm	Mm.		Mm.	Mm.		%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
ALABAMA																																					
BIRMINGHAM	21.8	9.8	15.8	38.9	JUL 15	-20.0	JAN 30	1732	1424	129	APR 26-27	30	30	JAN 29	82	85	59	65	2.6	*	34	16.1	SE	FEB 10	62	6.1	98	101	166	119	1	44	14	31	1	62	1
HUNTSVILLE	21.9	10.0	15.9	40.0	JUL 14	-23.9	JAN 30	1851	1192	74	AUG 17	323	185	JAN 28-29	77	81	57	60	3.3	.2	12	15.6	16	FEB 10		6.0	101	105	159	113	2	45	10	53	4	66	3
MOBILE	24.7	14.4	19.6	37.2	JUL 8	-10.6	JAN 30	946	1330	82	FEB 27-28	T	T	NOV 2 +	80	83	60	69	4.1	.7	8	13.9	15	APR 18+		6.2	87	114	164	136	0	62	38	72	1	18	0
MONTGOMERY	23.5	12.1	17.8	38.9	JUL 14	-15.0	JAN 30	1323	1305	95	OCT 9	T	T	NOV 2 +	82	87	58	63	3.3	.2	2	16.5	W	FEB 13+	55	6.2	93	95	177	115	0	53	14	61	1	36	0
ALASKA																																		8			
ANCHORAGE PPK STRIP	4.7	-2.9	.9	23.3	JUL 20	-28.9	DEC 10+	6318	276	23	SEP 11-12	1062	81	DEC 15 +																111	17			8	131	193	47
ANCHORAGE	4.4	-3.4	.5	23.9	JUL 24+	-29.4	DEC 10	6449	311	26	SEP 11-12	1537	124	APR 14-15	71	75	73	64	3.0	*	3	17.9	3	OCT 31	43	7.2	69	68	228	110	23	1	21	11	138	195	57
ANNETTE	10.4	4.2	7.3	28.9	JUL 23	-14.4	JAN 4+	3969	2811	102	MAR 28-29	1407	178	MAR 20-21	79	82	76	71	4.4	1.7	14	17.9	15	OCT 18+		8.3	37	55	273	220	20	0	11	20	14	84	0
BARROW	-10.2	-15.9	-13.1	15.0	JUL 15	-44.4	MAR 15	11435	139	17	JUL 31	757	69	APR 10-11	84	85	84	83	5.3	1.9	9	24.1	26	NOV 17			V58	V50	V191	81	9	0	53	0	266	334	169
BARTER ISLAND	-9.3	-16.0	-12.7	16.7	JUL 21	-43.9	FEB 21	11264	230	21	AUG 29-30	1435	157	OCT 23-24	79	80	79	77	6.0	.4	12	30.0	25	NOV 30			X66	X51	X193	95	22	0	86	0	240	317	171
BETHEL	1.3	-6.9	-2.8	28.3	JUL 24	-37.2	MAR 21	7670	309	31	JUL 25	1153	99	NOV 9	80	86	84	74	5.4	1.1	1	19.7	21	FEB 11		7.6	59	64	242	126	16	2	63	12	159	236	90
COLD BAY	4.8	.2	2.5	17.2	JUL 20	-17.8	MAR 21	5733	769	34	SEP 5-6	1618	79	JAN 4-5	85	87	87	82	7.6	1.1	23	28.2	26	FEB 24		9.0	11	37	317	244	26	0	14	0	81	177	1
FAIRBANKS	.2	-10.6	-5.2	29.4	AUG 8	-47.2	DEC 9	8558	180	25	FEB 11-12	2563	511	FEB 11-12	64	73	72	59	2.4	.4	34	12.5	23	AUG 16+		6.7	76	96	193	84	26	5	15	59	165	209	133
JUNEAU	7.1	-1.3	2.9	27.2	JUL 25+	-28.9	JAN 28	5577	1481	54	JAN 15	4237	584	MAR 9-10	88	92	87	79	4.2	2.5	10	20.1	12	OCT 15	32	8.0	55	44	266	210	38	0	30	15	73	178	27
KING SALMON	3.1	-4.6	-.8	25.6	JUL 25+	-33.9	MAR 17+	6939	613	26	AUG 7-8	1156	74	FEB 1-2	79	86	85	73	5.2	.5	9	21.9	8	JUL 1		7.5	52	77	236	164	18	1	35	6	129	213	53
KOTZEBUE	-3.6	-10.8	-7.2	24.4	JUL 26	-41.1	MAR 17+	9277	139	10	SEP 21-22	993	71	NOV 19-20	77	80	78	75	5.5	1.3	10	23.2	11	NOV 5		6.7	91	64	210	102	16	0	22	6	206	253	128
MC GRATH	-.1	-10.7	-5.4	27.2	JUL 24	-46.1	MAR 17	8623	178	12	AUG 20-21	2162	236	JAN 7-8	64	75	71	58	2.5	.4	31	13.9	19	JUL 12+		7.1	70	74	221	94	26	7	14	33	166	230	122
NOME	-.4	-8.8	-4.6	28.3	AUG 8	-41.1	MAR 15	8314	355	20	OCT 4-5	1184	152	OCT 25-26	79	82	81	75	4.8	1.6	6	21.5	4	JAN 30	36	6.7	87	78	200	117	14	1	37	4	194	243	102
ST. PAUL ISLAND	3.8	-.4	1.7	12.8	AUG 13+	-16.7	MAR 31	6030	630	32	NOV 4-5	1821	254	APR 2	86	87	87	83	7.8	.8	3	27.7	28	FEB 25		9.0	8	46	311	224	17	0	84	0	71	185	0
SHEMYA	5.5	1.2	3.3	13.3	AUG 29	-8.3	FEB 25	5408	644	30	NOV 15	1067	109	DEC 17-18	87	89	89	84	8.9	1.5	22	30.8	24	FEB 6		8.9	6	55	304	227	8	0	81	0	24	149	0
YAKUTAT	5.6	-2.7	1.5	22.2	AUG 27	-28.3	JAN 8	6105	3028	132	AUG 22-23	6111	290	MAR 21-22	89	93	87	79	3.3	1.7	11	16.1	14	MAY 22		8.2	40	41	284	226	60	4	45	2	81	216	29
ARIZONA																																					
FLAGSTAFF	16.4	-1.1	7.7	31.1	JUL 6	-26.7	MAR 4	3886	515	77	DEC 5-6	1588	287	NOV 8-9	65	73	40	39	2.8	.8	20	13.9	23	MAR 2		4.6	146	127	92	73	17	67	8	0	21	202	19
PHOENIX	29.8	12.9	21.4	45.0	JUL 6	-3.9	DEC 31+	911	185	47	SEP 12-13	0	0		49	63	35	25	3.0	.7	13	25.9Y	NE	AUG 18	[illegible]6	3.3	220	73	72	33	0	26	2	173	0	31	0
TUCSON	27.2	12.1	19.7	40.6	JUL 6+	-5.0	DEC 29+	961	366	46	SEP 11-12	30	30	DEC 30 +	48	58	32	26	4.1	1.4	16	21.0	SE	AUG 8	85	3.9	193	90	82	51	1	42	1	127	0	31	0
WINSLOW	21.5	3.8	12.7	39.4	JUL 6	-22.2	JAN 22	2695	185	19	NOV 8-9	582	122	NOV 8-9	54	65	39	31	3.7	1.6	21	23.2	22	DEC 6+		4.2	173	112	80	56	8	49	1	80	16	139	9
YUMA	30.6	15.5	23.1	45.0	JUL 6	-.6	DEC 31	593	26	9	JAN 17-18	0	0		41	53	31	22	3.5	.3	25	18.8	SW	JUN 19	88	3.0	236	69	60	16	0	9	1	186	0	3	0
ARKANSAS																																					
FORT SMITH	22.3	8.8	15.6	40.6	JUL 15	-17.8	JAN 30	1929	803	101	FEB 8-9	221	91	JAN 28	78	84	52	52	3.2	.4	6	20.1	W	APR 20	60	5.9	113	95	157	87	5	37	12	54	5	81	1
LITTLE ROCK	22.1	10.2	16.2	40.6	JUL 15	-16.7	JAN 30	1778	1210	186	AUG 12-13	554	244	FEB 22-23	78	83	57	60	3.5	*	19	16.1	NW	MAR 22	60	5.7	121	90	154	101	7	43	13	62	4	61	0
TEXARKANA	23.0	11.4	17.2	38.3	JUL 19	-12.8	JAN 30	1467	1376	130	APR 25-26	340	178	FEB 22-23	7[illegible]	86	61	62	3.3	.7	16					5.6	131	85	149	97	5	51	16	61	3	48	0
CALIFORNIA																																					
BAKERSFIELD	25.1	11.8	18.4	42.2	AUG 9	-1.7	DEC 28	1176	117	24	FEB 5-6	0	0		52	63	49	36	3.0	1.1	35	13.0	35	DEC 6+		3.6	211	65	89	20	0	1	27	95	0	14	0
BISHOP	24.1	3.6	13.9	41.1	AUG 6	-11.1	MAR 4+	2190	166	85	DEC 5-6	T	T	FEB 10 +			26													15	0			100	0	131	0
BLUE CANYON	15.4	6.1	10.7	30.6	SEP 29+	-10.0	MAR 3	2929	1255	76	NOV 19-20	3797	389	JAN 29-30			43					17.9	21	DEC 2		4.2	193	52	120	69	31			0	16	92	0
EUREKA U	14.1	8.1	11.1	25.6	APR 3	-.6	MAR 3	2584	1024	67	NOV 14-15	25	25	MAR 1-2								18.8	S	DEC 4+	56	6.8	72	98	195	106	0			0	0	7	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max temp.		Min. temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 a.m E S T	7:00 a.m. E S T	1:00 p.m E S T	7:00 p.m E S T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .25mm or more	Snow, Sleet 25.4mm. or more	Thunderstorms	Heavy fog	32.2 °C and above	0 °C and below	0 °C and below	-17.8 °C and below
	°C.	°C.	°C.	°C		°C		Base 18.3°C.	Mm.	Mm.		Mm.	Mm.		%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
CALIFORNIA																																					
FRESNO	25.3	9.3	17.3	42.2	JUL 23+	-3.9	JAN 25+	1336	154	36	DEC 5-6	0	0		64	79	57	38	2.8	1.2	30	13.4	NW	DEC 6	83	3.6	207	71	87	34	0	4	35	109	0	36	0
LONG BEACH	23.6	12.3	18.0	38.3	NOV 1	1.1	DEC 27	756	230	42	DEC 3	0	0		73	77	59	52	2.7	.9	25	12.5	9	JAN 16		4.5	163	117	85	19	0	3	33	27	0	0	0
LOS ANGELES	21.4	13.0	17.2	38.3	NOV 1	2.8	JAN 21	776	238	62	NOV 7	0	0		74	74	59	64	3.8	1.8	26	19.2Y	W	MAR 2+		4.7	150	118	97	24	0	4	22	6	0	0	0
LOS ANGELES U	24.1	13.7	18.9	37.8	NOV 1	3.9	JAN 23+	542	328	98	NOV 7	0	0									12.1	N	DEC 26	63	3.9	186	117	62	21	0			24	0	0	0
MT SHASTA R	17.4	3.1	10.2	36.1	AUG 15+	-14.4	JAN 1	3074	900	86	JAN 3-4	2949	886	JAN 3-4			57													83	21			25	4	124	0
OAKLAND	18.3	11.1	14.7	33.3	SEP 27+	1.1	DEC 28	1367	333	35	JAN 29-30	0	0		76	79	71	65	3.6	2.0	28	15.6	15	DEC 2		4.8	156	97	112	48	0	0	9	3	0	0	0
RED BLUFF	24.6	10.6	17.6	43.3	AUG 6+	-4.4	JAN 21	1344	509	68	NOV 19-20	0	0		54	61	47	35	3.7	.2	24	20.1	SE	DEC 4	80	4.6	172	71	122	55	0	7	15	99	0	27	0
SACRAMENTO	23.7	8.9	16.3	41.7	AUG 6+	-2.2	DEC 27+	1387	350	40	NOV 19-20	0	0		71	81	60	43	3.4	1.4	21	16.1	SW	APR 17	83	4.0	199	64	102	46	0	2	27	77	0	18	0
SANDBERG R	18.1	8.6	13.3	35.6	AUG 5	-6.1	MAR 2+	2296	244	126	NOV 6-7	307	178	JAN 30			38					25.9	33	JUN 11		3.5	214	70	81	19	3			18	6	54	0
SAN DIEGO	20.9	13.5	17.2	36.1	NOV 1	3.3	DEC 29+	740	182	44	DEC 4-5	0	0		78	79	65	65	3.1	1.3	28	14.8	S	NOV 7	71	4.6	169	102	94	26	0	5	29	2	0	0	0
SAN FRANCISCO	18.2	8.8	13.5	35.0	JUN 13	-1.1	JAN 2	1766	406	40	JAN 29-30	0	0		78	84	69	60	4.2	2.6	29	21.5	S	DEC 2		4.6	166	92	107	51	0	1	7	4	0	6	0
SAN FRANCISCO U	17.1	10.4	13.8	35.0	SEP 28	3.9	MAR 1	1678	418	40	JAN 4-5	0	0									16.1	SW	DEC 2	69					57	0			3	0	0	0
SANTA CATALINA	20.1	12.5	16.3	34.4	AUG 26	4.4	MAR 2	1124	255	80	DEC 4-5	0	0													4.2	176	93	96	35	0	4	178	13	0	0	0
SANTA MARIA	20.4	7.2	13.8	36.7	SEP 28	-5.0	DEC 28	1651	190	36	DEC 5-6	0	0				62	62								4.2	193	85	87	36	0			10	0	31	0
STOCKTON	23.9	9.3	16.7	42.2	JUN 14	-3.3	JAN 21	1366	297	39	DEC 4-5	0	0		66	76	59	42	4.0	2.0	29	17.4	35	FEB 12		4.0	200	58	107	45	0	3	35	85	0	32	0
COLORADO																																					
ALAMOSA	15.3	-4.6	5.4	32.2	JUL 6	-33.3	DEC 29	4727	126	23	AUG 1-2	696	122	OCT 16-17		78	42	38								4.2	159	143	63	60	10			1	43	224	47
COLORADO SPRINGS	16.8	1.5	9.2	35.6	JUL 4	-23.3	JAN 21	3568	328	39	JUN 17	815	147	FEB 9	58	63	36	37	4.4	1.0	4	21.5	36	MAR 22		5.5	113	126	126	91	12	63	13	19	32	169	7
DENVER	18.7	1.8	10.3	36.7	JUL 16+	-25.0	JAN 21	3277	275	20	OCT 13-14	1105	175	OCT 13-14	60	68	38	37	3.4	.6	18	20.1	NW	APR 2	71	5.7	99	143	123	85	13	39	18	37	20	168	8
GRAND JUNCTION	19.6	4.9	12.3	38.3	JUL 6	-20.6	JAN 21	2878	191	25	DEC 5-6	772	145	JAN 31	50	57	38	34	3.1	.6	12	29.1	NW	MAY 11	75	4.7	157	106	102	69	8	30	9	65	15	120	6
PUEBLO	20.6	2.1	11.3	38.9	JUL 5+	-25.0	JAN 22	3078	159	28	AUG 1	447	168	JAN 20-21	54	64	37	33	4.2	.4	5	25.0	N	MAR 22+	78	5.0	134	125	106	56	5	30	9	60	15	168	13
CONNECTICUT																																					
BRIDGEPORT	15.1	6.2	10.6	37.8	JUL 2	-16.7	FEB 20	3262	855	76	SEP 21	879	198	DEC 24-25	77	76	61	67	5.6	1.6	30	27.3	29	JAN 30		6.1	96	121	148	113	9	16	24	13	25	116	0
HARTFORD	16.2	4.8	10.5	38.9	JUL 3	-18.9	FEB 8+	3275	1048	68	SEP 21-22	1730	376	FEB 24-25	77	78	52	62	3.9	1.2	30	16.1	NW	JUL 19	61	6.6	73	114	178	118	14	16	25	32	27	124	2
NEW HAVEN	14.9	5.4	10.2	36.1	JUL 3	-15.0	FEB 20	3266	814	70	FEB 13	922	180	DEC 24-25		80	60					20.1	S	JAN 30	63	6.2	86	126	153	121	11			6	16	113	0
DELAWARE																																					
WILMINGTON	17.1	6.3	11.7	38.9	JUL 4+	-15.0	FEB 6+	2957	1004	99	OCT 18-19	1237	315	DEC 24	77	78	53	65	4.2	1.2	29	14.3	22	AUG 11+		6.0	104	111	150	104	11	26	28	29	23	108	0
DIST.OF COLUMBIA																																					
WASH NATL AP	19.1	8.5	13.8	38.3	JUL 3	-12.8	JAN 31+	2451	915	105	SEP 13-14	1125	351	JAN 29-30	71	73	51	58	4.0	.8	29	17.0	W	MAR 1	55	6.1	102	104	159	112	8	18	5	59	9	80	0
FLORIDA																																					
APALACHICOLA U	23.4	15.9	19.7	35.0	AUG 23	-10.0	JAN 30	837	1724	191	SEP 18	0	0									18.8	N	JUN 9	58	5.5	128	96	141	107	0	55	24	20	0	9	0
DAYTONA BEACH	26.0	16.0	21.0	34.4	JUL 15+	-4.4	JAN 31	505	1530	160	JUN 30-1	0	0		82	84	59	73	4.1	.5	7	16.5	10	JUN 9		6.4	79	124	162	123	0	65	14	42	0	6	0
FORT MYERS	28.2	17.9	23.1	33.9	SEP 4+	-2.2	JAN 31	213	1143	66	JUN 6-7	0	0		91	93	59	75	4.0	1.0	7	20.6	12	JUN 8		5.8	90	157	118	126	0	78	14	98	0	1	0
JACKSONVILLE	25.1	14.4	19.8	36.7	AUG 23	-6.7	JAN 31+	811	1405	256	JUL 30-1	0	0		85	88	58	73	4.1	.3	36	21.5	E	JUN 9	64	6.1	85	125	155	117	0	51	26	51	0	16	0
KEY WEST	27.1	22.1	24.6	32.8	AUG 27+	8.3	JAN 31	36	1362	103	OCT 4-5	0	0		78	79	69	74	5.3	2.7	9	37.6	SE	OCT 5	69	5.9	85	150	130	125	0	63	1	10	0	0	0
LAKELAND U	26.6	16.7	21.7	35.0	AUG 23	-3.3	JAN 31	403	1155	67	SEP 10	0	0												67	5.8	86	150	129	126	0			56	0	3	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

YEAR 1966

State and Station	Temperature, Averages, Daily maximum	Temperature, Averages, Daily minimum	Temperature, Averages, Annual	Temperature, Extremes, Highest	Temperature, Extremes, Date	Temperature, Extremes, Lowest	Temperature, Extremes, Date	Heating degree days	Precipitation, Total	Precipitation, Greatest in 24 hours	Precipitation, Date (s)	Precipitation, Snow, Sleet, Total	Precipitation, Snow, Sleet, Greatest in 24 hours	Precipitation, Snow, Sleet, Date (s)	Relative humidity, 1:00 am EST	Relative humidity, 7:00 am EST	Relative humidity, 1:00 pm EST	Relative humidity, 7:00 pm EST	Wind, Average speed	Wind, Resultant speed	Wind, Resultant direction	Wind, Fastest mile (1.6 kilometers), Speed	Wind, Fastest mile (1.6 kilometers), Direction	Wind, Fastest mile (1.6 kilometers), Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days, Sunrise to sunset, Clear, 0–0.3	Number of days, Sunrise to sunset, Partly cloudy, 0.4–0.7	Number of days, Sunrise to sunset, Cloudy, 0.8–1.0	Number of days, Precipitation 25mm or more	Number of days, Snow, Sleet 25.4mm. or more	Number of days, Thunderstorms	Number of days, Heavy fog	Number of days, Max. temp., 32.2 °C and above	Number of days, Max. temp., 0 °C and below	Number of days, Min. temp., 0 °C and below	Number of days, Min. temp., −17.8 °C. and below
	°C.	°C	°C.	°C		°C		Base 18.3°C.	Mm.	Mm		Mm.	Mm.		%	%	%	%	M.p.s	M.p.s		M.p.s.			%	Tenths											
FLORIDA																																					
MIAMI	27.4	19.6	23.5	34.4	JUL 19+	1.7	JAN 31	108	2084	194	JUN 8-9	0	0		85	88	65	75	4.3	1.7	9	20.6	4	MAR 29		6.7	53	152	160	157	0	90	3	26	0	0	0
ORLANDO	27.0	16.8	21.9	33.9	SEP 4+	- 4.4	JAN 31	364	1407	98	JUN 30	0	0			88	56	69	4.2	.4	5	14.3	10	JUN 8+		6.2	79	136	150	117	0	76	16	65	0	2	0
PENSACOLA	23.8	14.4	19.1	36.1	JUL 8	- 11.7	JAN 30	985	1341	79	FEB 27-28	0	0		82	84	61	72	3.6	.4	8	25.5	SE	APR 18	53					131	0			38	1	20	0
TALLAHASSEE	25.4	13.2	19.3	37.8	JUL 8	- 11.1	JAN 30	957	1907	171	JUN 9-10	0	0		87	89	55	68	3.2	.4	3	19.7	3	JUN 9		6.0	94	119	152	118	0	62	46	71	1	30	0
TAMPA	26.9	16.3	21.6	35.0	SEP 1+	- 4.4	JAN 31	467	916	85	JUN 8-9	0	0		83	87	56	69	3.9	.7	6	20.6	12	JUN 9	66	6.0	94	131	140	93	0	67	17	75	0	6	0
WEST PALM BEACH	27.6	18.9	23.3	33.9	JUL 21	.0	JAN 31	174	2026	122	JUN 29-30	0	0		82	83	62	74	4.4	1.5	10	19.7	17	JUL 1		6.8	62	122	181	150	0	80	3	32	0	1	0
GEORGIA																																					
ATHENS	21.6	9.8	15.7	38.3	JUL 14	- 18.3	JAN 30	1749	1482	95	MAR 3-4	142	41	JAN 26	82	86	57	66	3.0	.4	31	18.8	18	FEB 13		5.8	115	95	155	110	4	49	36	42	1	55	1
ATLANTA	20.3	9.9	15.1	35.6	JUL 12	- 19.4	JAN 30	1864	1431	100	FEB 12-13	18	13	JAN 25-26	79	83	60	65	3.6	.4	33	23.2	N	JUL 15	57	6.0	114	86	165	116	0	40	35	18	2	61	1
AUGUSTA	23.4	9.6	16.5	37.2	JUL 11	- 14.4	JAN 30	1564	1144	74	MAR 3-4	10	10	JAN 26-27	84	86	53	68	3.0	.3	28	15.6	32	MAY 27+		5.8	117	92	156	115	0	39	25	53	1	67	0
COLUMBUS	23.7	11.6	17.6	38.9	JUL 14	- 16.1	JAN 30	1369	1776	135	MAR 3-4	T	T	FEB 2 +	83	88	57	67	2.5	.4	3	15.6	18	JUN 30+		6.2	98	99	168	111	0			59	1	42	0
MACON	23.6	10.6	17.1	38.3	JUL 12	- 16.1	JAN 30	1452	1324	118	OCT 9-10	T	T	DEC 30 +	82	86	54	64	3.4	.4	35	25.0	SW	FEB 13	62	5.9	112	93	160	122	0	42	15	60	1	53	0
ROME	21.7	8.0	14.8	38.3	JUL 15+	- 20.0	JAN 31+	1997	1390	108	MAY 12-13	48	43	JAN 29		86														123	1			44	2	85	2
SAVANNAH	24.2	11.8	18.0	35.6	AUG 22+	- 12.8	JAN 30	1212	1153	77	JUL 1-2	T	T	JAN 27 +	86	88	56	71	3.4	.1	21	17.9	SW	FEB 13	57	5.8	112	106	147	112	0	57	35	42	0	48	0
HAWAII																																					
HILO	27.5	19.4	23.5	34.4	MAY 20	15.0	APR 21+	0	3150	182	NOV 4-5	0	0		83	87	81	69	3.3	.1	23	15.6	16	FEB 28	28	7.7	18	127	220	277	0	11	0	1	0	0	0
HONOLULU	29.3	21.3	25.3	33.9	SEP 25+	13.9	FEB 21	0	589	132	NOV 5-6	0	0		68	74	70	55	4.8	3.5	6	15.6	NE	DEC 27	68	5.7	88	174	103	88	0	7	0	53	0	0	0
KAHULUI	28.3	19.9	24.1	33.9	JUL 25	12.8	JAN 14+	0	317	36	NOV 4-5	0	0		69		72	55	5.5	4.2	6	15.2	NE	JUL 16	67	5.7	89	175	101	107	0	5	0	11	0	0	0
LIHUE	26.5	20.2	23.3	30.6	OCT 3+	13.3	FEB 21	1	1033	199	OCT 10	0	0		81	85	82	70	5.1	3.5	6	14.3	NE	DEC 28	61	6.5	43	191	131	192	0	6	0	0	0	0	0
IDAHO																																					
BOISE	17.9	3.9	10.9	39.4	AUG 2	- 16.7	DEC 27	3086	169	13	NOV 5-6	511	112	FEB 9	58	68	51	39	3.7	.3	19	20.1	SW	NOV 16	78	5.5	128	87	150	72	7	7	20	53	14	128	0
IDAHO FALLS 42NW R	15.1	- 3.9	5.6	37.2	JUL 30	- 28.9	DEC 30	4747	133	21	MAY 10-11																			54				40	66	233	36
IDAHO FALLS 46W R	14.8	- 2.9	5.9	36.1	JUL 30	- 25.6	JAN 1	4582	114	19	MAY 10-11	455	91	FEB 5-6																54	4			24	54	216	29
LEWISTON	18.2	5.8	12.0	41.1	AUG 24	- 8.9	JAN 20	2676	253	23	NOV 15-16	587	325	JAN 2-3		73	58	47								6.5	93	82	190	93	5			42	2	73	0
POCATELLO	16.2	.1	8.2	37.8	JUL 30	- 19.4	JAN 25	3897	136	19	MAY 9-10	645	89	FEB 12	56	68	47	39	4.4	2.5	22	24.1	SW	OCT 20+	66	5.9	107	107	151	77	6	22	12	40	36	193	7
ILLINOIS																																					
CAIRO U	19.1	9.5	14.3	39.4	JUL 14+	- 17.8	JAN 30	2284	1303	97	MAY 23-24	157	48	FEB 23								20.1	S	JUN 7	59	6.0	112	88	165	109	3			37	18	73	1
CHICAGO MIDWAY	14.8	5.3	10.1	35.7	JUL 10	- 26.7	JAN 29	3503	934	137	JUL 26-27	693	107	DEC 28	69	73	55	58	4.8	1.1	25	17.4	W	JUL 18	58	6.1	106	102	157	117	11	28	5	20	51	120	8
MOLINE	15.1	3.6	9.3	37.8	JUL 18	- 28.3	JAN 29	3707	957	80	JUL 26	376	142	DEC 27-28	77	80	57	61	4.1	.8	25	28.2	NE	MAY 7	61	5.8	113	102	150	107	3	42	22	26	56	141	16
PEORIA	15.6	4.3	9.9	38.9	JUL 13+	- 25.6	JAN 29	3487	842	68	JUL 28	185	71	DEC 27-28	75	79	57	60	4.4	.5	25	20.1	W	MAR 23	60	6.0	111	92	162	88	3	45	21	24	54	135	6
ROCKFORD	14.0	2.5	8.3	36.7	JUL 18+	- 28.9	JAN 29	4011	836	65	MAY 11-12	536	236	JAN 12-13	79	82	56	61	4.3	.8	27	15.6	31	MAY 18		5.7	116	111	138	91	4	35	23	19	55	153	21
SPRINGFIELD	16.4	5.1	10.8	41.1	JUL 13+	- 23.9	JAN 29	3266	780	49	APR 19-20	376	130	FEB 1	78	83	59	63	4.8	.7	23	18.8	W	MAR 23	61	5.9	115	96	154	100	3	47	19	35	45	125	7
INDIANA																																					
EVANSVILLE	18.6	6.2	12.4	40.0	JUL 13	- 24.4	FEB 5	2801	928	51	JAN 1-2	439	221	FEB 31-1	78	82	58	61	3.5	.5	26	18.8	E	JUL 6	58	6.1	104	88	173	110	4	31	16	48	27	120	6
FORT WAYNE	14.1	3.7	8.9	34.4	JUL 3+	- 22.2	JAN 30	3742	861	66	JUL 9	780	142	NOV 2-3	78	82	61	64	4.2	1.2	26	19.2	N	JUL 12	58	6.5	87	90	188	132	10	31	15	9	50	138	6
INDIANAPOLIS	16.8	5.4	11.1	37.2	JUL 13+	- 23.9	JAN 30	3163	831	65	SEP 19-20	538	208	NOV 2-3	71	75	55	58	3.6	.7	25	18.8	NW	JUL 11+	53	6.4	95	94	176	108	4	27	15	37	43	114	5

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max. temp.		Min. temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 am EST	7:00 am EST	1:00 pm EST	7:00 pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation .25mm or more	Snow, Sleet 25.4mm. or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C. and below
	°C	°C.	°C.	°C.		°C		Base 18.3°C.	Mm.	Mm.		Mm.	Mm.		%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
INDIANA																																					
SOUTH BEND	13.9	4.3	9.1	34.4	JUL 12+	- 25.0	JAN 30	3637	998	94	AUG 21-22	2271	175	JAN 7-8	74	77	58	61	4.6	1.3	26	16.1	28	FEB 16		6.5	89	103	173	152	26	39	10	7	49	130	6
IOWA																																					
BURLINGTON	15.6	4.5	10.1	38.3	JUL 18+	- 28.3	JAN 29	3472	748	3669		165	3665		75	80	60	61	4.4	.8	30	15.6	21	MAY 23+		5.7	115	107	143	84	3	47	15	21	47	129	10
DES MOINES	14.9	3.4	9.2	37.8	JUL 10	- 30.6	JAN 29	3787	555	51	MAY 10-11	330	165	DEC 27-28	75	81	61	59	4.5	.1	27	24.1	NW	JUL 5	65	5.7	122	101	142	83	3	44	20	20	56	142	15
DUBUQUE	13.3	2.0	7.7	33.9	JUL 11+	- 31.1	JAN 29	4157	996	91	JUN 8-9	770	251	DEC 27-28		82	58	64								6.0	107	99	159	103	6			11	61	153	26
SIOUX CITY	14.8	2.6	8.7	36.1	JUL 10	- 30.0	JAN 29	3942	545	46	AUG 20	820	216	MAR 22-23	77	83	61	60	4.7	.1	18	21.9	NW	MAR 31	69	5.7	116	105	144	86	8	46	24	23	58	153	20
WATERLOO	13.9	1.4	7.7	37.2	JUL 11	- 32.2	JAN 29	4219	1033	134	AUG 20-21	445	152	DEC 27-28	80	83	59	63	4.4	.4	27	17.9	36	JUL 5+		5.6	118	106	141	92	6	36	21	15	60	167	29
KANSAS																																					
CONCORDIA	18.5	4.7	11.6	42.2	JUL 18	- 23.9	JAN 29	3153	385	43	JUN 7-8	523	318	DEC 27-28	71	80	53	51	5.5	.9	16	21.9	NW	MAR 22	68	5.0	149	97	119	60	5	54	16	48	37	135	6
DODGE CITY	19.3	5.3	12.3	40.6	JUL 5	- 23.3	JAN 22	2949	359	43	AUG 17	361	155	DEC 26-27	69	78	49	48	5.9	1.0	18	26.8	NW	MAR 22	75	5.4	124	112	129	58	3	35	12	59	34	130	8
GOODLAND	18.2	2.4	10.3	39.4	JUL 26+	- 25.6	JAN 21	3443	290	28	AUG 6-7	955	213	OCT 14	71	79	50	46	5.5	.9	21	24.6	32	MAR 4		5.1	139	117	109	68	10	45	16	59	36	163	15
TOPEKA	18.9	5.3	12.1	40.6	JUL 18	- 22.8	JAN 29	2926	490	86	JUN 12-13	239	180	DEC 27	72	79	54	52	4.2	.4	20	32.2	SW	JUN 8	67	5.5	123	100	142	70	2	51	11	38	30	133	5
WICHITA	20.1	6.8	13.4	40.0	JUL 18+	- 19.4	JAN 29	2617	309	33	JUN 7	267	86	DEC 26-27	69	79	52	50	5.5	1.0	16	24.1	NW	MAR 5	66	5.2	127	117	121	62	2	41	14	56	29	115	3
KENTUCKY																																					
COVINGTON	16.8	6.1	11.4	36.1	JUL 13+	- 24.4	JAN 30	3105	982	55	AUG 14	795	236	FEB 1	75	79	58	62	4.0	.8	25	15.6	32	JUL 14+		6.8	79	88	198	117	6	30	19	37	35	117	6
LEXINGTON	17.0	6.6	11.8	36.7	JUL 13	- 23.3	JAN 30	2879	1178	56	SEP 18-19	732	239	JAN 22	76	79	59	62	4.0	.8	20	16.5	29	JUL 14		6.6	85	80	200	119	4	34	18	23	34	97	5
LOUISVILLE	17.8	7.4	12.7	38.3	JUL 13	- 22.8	JAN 30	2718	1141	71	JAN 31-1	859	330	NOV 2-3	73	79	58	58	3.7	.4	26	26.8	NW	JUL 6	62	6.5	88	94	183	116	3	29	14	37	31	93	3
LOUISIANA																																					
ALEXANDRIA	23.9	11.8	17.9	37.8	JUL 20	- 10.6	JAN 30	1314	1495	132	FEB 9-10	T	T	JAN 29 +	91	92	61	71	2.7	.4	6	15.6	32	DEC 28		6.2	88	119	158	104	0	49	51	65	0	41	0
BATON ROUGE	24.6	13.7	19.1	35.6	JUN 29	- 9.4	JAN 30	1026	1616	101	FEB 11-12	T	T	JAN 29 +	81	85	60	65	3.2	.5	7	13.4	18	DEC 28+		6.5	78	111	176	123	0	63	38	67	0	24	0
LAKE CHARLES	25.1	15.0	20.1	36.1	JUL 15	- 5.6	JAN 30	872	1515	104	JUN 13-14	T	T	MAR 4	87	89	63	71	3.7	.9	10	19.7	15	APR 21		6.1	98	113	154	109	0	69	50	75	0	16	0
NEW ORLEANS	24.5	14.2	19.4	36.1	JUL 29+	- 7.8	JAN 30	951	1729	109	JUL 30-31	0	0		86	88	66	72	3.7	.7	5	17.4	15	FEB 12		6.1	100	97	168	123	0	59	28	60	1	22	0
SHREVEPORT	23.9	12.6	18.3	38.3	JUL 15	- 10.6	JAN 30	1303	860	58	FEB 9-10	38	33	FEB 23	78	87	59	60	4.3	.7	14	16.5	33	MAR 23	58	5.8	108	112	145	96	1	45	25	78	1	43	0
MAINE																																					
CARIBOU	9.7	- .5	4.6	31.1	MAY 24	- 35.0	FEB 20	4991	709	52	OCT 19-20	2657	249	FEB 13-14		82	62	72								7.3	46	108	211	148	33			0	85	182	23
PORTLAND	12.6	1.4	7.1	33.9	JUL 13+	- 24.4	FEB 20	4192	1017	75	NOV 2-3	2024	401	FEB 25-26	82	79	59	71	3.5	1.1	27	17.9	NE	JAN 30	59	6.2	101	103	161	128	17	15	54	3	42	164	7
MARYLAND																																					
BALTIMORE	17.9	6.3	12.1	38.9	JUL 3	- 17.2	JAN 29	2907	1076	98	SEP 13-14	1351	307	JAN 29-30	71	74	50	58	3.8	1.2	29	21.0	W	JAN 30	58	5.9	110	107	148	112	12	20	23	50	25	116	0
MASSACHUSETTS																																					
BLUE HILL OBS R	14.1	4.4	9.3	35.0	JUL 3	- 20.0	FEB 20	3549	1045	54	JUL 7	2162	447	JAN 23-24	78	78	57	68				30.4	S	DEC 29	59					119	18			8	40	129	3
BOSTON	14.9	6.7	10.8	36.1	JUL 3	- 16.1	FEB 20	3107	915	49	JAN 23-24	1313	234	FEB 24-25	69	68	55	62	5.6	1.7	28	21.0	NE	DEC 24	63	6.0	106	92	167	122	13	20	18	10	22	90	0
NANTUCKET	13.1	4.6	8.8	31.1	JUL 4	- 12.8	FEB 20	3519	1038	126	NOV 2-3	531	132	DEC 21	86	82	69	84	5.5	1.3	26	24.6	S	DEC 25	57	6.5	94	85	186	122	6	19	86	0	14	124	0
PITTSFIELD	13.0	.8	6.9	35.0	JUL 3	- 24.4	FEB 20	4272	974	65	JUL 19	2456	432	DEC 24-25																158	22			4	52	173	12
WORCESTER	13.0	3.3	8.2	33.9	JUL 3	- 22.2	FEB 20	3901	1040	60	NOV 2-3	2149	381	FEB 24-25	74	73	54	64	4.5	2.3	28	20.6	29	MAR 2		6.0	98	110	157	125	17	18	82	3	49	145	5
MICHIGAN																																					
ALPENA	11.9	- .2	5.9	36.7	JUL 2	- 26.1	JAN 15	4650	694	49	NOV 28-29	2212	409	NOV 28-29	77	78	56	64	3.4	.8	27	17.0	E	APR 27	51	6.8	65	119	181	156	25	38	25	16	65	192	20

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
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State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max temp.		Min. temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 a m E S T	7:00 a m E S T	1:00 p m E S T	7:00 p m E S T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	32.2 °C and above	0 °C and below	0 °C and below	-17.8 °C and below
	°C	°C	°C.	°C		°C		Base 18.3 °C	Mm.	Mm.		Mm.	Mm.		%	%	%	%	M.p.s	M.p.s		M.p.s.			%	Tenths											
MICHIGAN																																					
DETROIT	14.3	5.1	9.7	37.2	JUL 3	- 20.6	JAN 28	3566							69	73	55	58	4.6	1.6	27	20.6	W	MAR 1								26	5	22	52	126	3
DETROIT M WAYNE CO	14.3	3.4	8.9	36.7	JUL 3	- 22.2	JAN 28	3743	875	81	JUL 12	1100	145	DEC 19-20	78	82	60	65	4.3	1.4	26				52	6.3	92	109	164	121	14	26	12	9	54	147	6
DETROIT WILLOW RUN	13.8	2.6	8.2	36.7	JUL 3	- 21.1	JAN 29+	3954	744	68	JUL 12	1059	216	NOV 2-3	73	78	56	59	5.0	1.7	26	19.7	25	MAR 18		6.3	92	106	167	109	13	23	16	13	58	157	5
FLINT	12.8	2.2	7.6	34.4	JUL 3+	- 23.9	JAN 29	4114	522	41	JUN 9	1229	178	NOV 2-3	76	78	59	63	4.5	1.7	25	17.9	33	JUL 12		6.7	73	112	180	122	14	29	10	7	63	151	10
GRAND RAPIDS	14.4	3.0	8.7	36.1	JUL 3+	- 26.7	JAN 29	3789	943	68	NOV 9-10	2096	269	JAN 12-13	80	82	59	65	4.4	1.3	26	18.8	SW	MAR 18	54	6.5	83	105	177	132	23	30	27	18	54	152	8
HOUGHTON LAKE	11.6	.2	5.9	35.6	JUL 2	- 27.8	JAN 16	4657	603	46	NOV 27-28	1872	178	NOV 2-3	82	84	61	66	4.0	1.3	26	14.3	32	JUL 25		6.7	81	92	192	143	23	31	23	10	78	184	21
LANSING	13.9	1.8	7.9	37.2	JUL 3	- 28.3	FEB 20	4093	644	51	JUN 9	1273	229	NOV 2-3	79	80	59	64	4.2	1.6	26	20.1	W	OCT 10	56	6.6	76	116	173	129	13	29	17	17	66	166	16
MARQUETTE U	9.9	1.9	5.9	34.4	JUN 30	- 25.0	FEB 18	4678	763	53	OCT 14-15	3543	318	NOV 27-28								17.0	NW	NOV 28+	54	7.0	71	87	207	170	38			7	86	175	11
MUSKEGON	13.2	3.3	8.3	35.0	JUL 2	- 24.4	JAN 29	3901	747	52	NOV 27-28	3851	272	JAN 12-13	77	80	62	66	4.6	1.0	26	19.7	1	NOV 29		6.6	92	76	197	158	49	29	23	6	60	153	7
SAULT STE MARIE	9.2	- .2	4.5	34.4	JUL 2+	- 28.9	FEB 18	5099	833	33	OCT 14-15	2675	234	JAN 27	83	84	66	71	4.6	.8	31	18.8	NW	MAY 3+	51	7.3	62	87	216	185	35	31	49	3	88	185	27
MINNESOTA																																					
DULUTH	8.2	- 2.3	2.9	32.2	JUL 12	- 38.3	JAN 28	5687	867	49	OCT 14-15	2123	231	MAR 4	76	79	62	63	5.0	.9	29	25.5	NE	MAR 3	55	6.5	91	88	186	125	23	26	50	1	108	198	58
INTERNATIONAL FALLS	7.5	- 4.5	1.5	35.6	JUN 30	- 42.2	FEB 20+	6248	649	124	JUL 2-3	1801	432	MAR 3-4	80	83	62	62	4.2	.7	27	17.0	12	APR 27		6.4	89	108	168	106	21	22	11	6	117	213	77
MINNEAPOLIS	11.8	.8	6.3	37.2	JUL 11+	- 33.3	JAN 29	4717	618	75	OCT 14-15	1260	345	MAR 22-23	74	79	58	59	4.4	.5	29	25.0	NE	JUL 10	60	5.9	111	89	165	100	12	38	19	23	88	165	42
ROCHESTER	11.2	.3	5.8	34.4	JUL 11	- 34.4	JAN 29	4798	610	71	OCT 14	1107	287	MAR 22-23	78	80	61	64	5.4	1.2	25	17.9	27	JUN 25		5.8	109	104	152	97	9	32	35	5	84	167	42
ST CLOUD	10.6	- 1.0	4.8	36.1	JUL 10	- 35.0	JAN 28	5185	566	53	AUG 20-21	871	135	JAN 1-2	78	81	58	59								6.1	110	86	169	96	13			15	97	180	54
MISSISSIPPI																																					
JACKSON	23.5	10.6	17.1	38.3	JUL 15	- 13.9	JAN 30	1506	1475	88	AUG 9-10	T	T	DEC 26 +	87	90	59	68	3.6	.5	10	20.1	NW	MAR 3	59	5.9	103	113	149	120	0	49	32	61	1	48	0
MERIDIAN	23.7	10.4	17.1	38.9	JUL 15	- 14.4	JAN 30	1464	1483	86	MAY 18-19	T	T	DEC 23 +	86	89	58	66	2.7	.2	1	13.4	26	JUL 2		6.2	92	110	163	107	0	61	32	58	1	55	0
VICKSBURG U	22.6	12.9	17.8	36.7	JUL 15	- 12.8	JAN 30	1336	1521	219	FEB 9-10	T	T	DEC 23 +								15.6	SE	FEB 9	65	5.6	134	77	154	115	0			46	1	29	0
MISSOURI																																					
COLUMBIA	18.1	6.7	12.4	38.9	JUL 14	- 22.8	JAN 29	2803	688	47	SEP 2-3	348	150	FEB 31-1	70	77	54	54	4.6	.4	19	20.1	N	JUL 29+	72	5.8	117	95	153	93	5	44	16	25	34	105	3
KANSAS CITY	19.1	7.6	13.4	38.9	JUL 18	- 21.7	JAN 29	2563	691	90	JUN 12-13	366	160	DEC 27-28	68	75	54	51	3.8	.3	18	18.8	NE	AUG 17	66	5.6	125	98	142	82	3	46	12	33	25	100	3
SAINT JOSEPH	19.8	5.1	12.4	37.8	JUL 18	- 25.0	JAN 29	2798	527	66	JUN 26	239	127	DEC 27	74	79	53	54	3.8	.2	22	19.7	32	MAR 23		5.0	147	94	124	75	2	40	13	48	27	128	5
ST LOUIS	18.0	6.6	12.3	41.1	JUL 13+	- 22.2	JAN 29	2863	821	58	FEB 9	269	211	FEB 31-1	74	82	55	57	4.0	.5	24	21.5	NW	AUG 15	61	6.2	103	98	164	96	2	44	10	39	33	111	3
SPRINGFIELD	19.2	5.8	12.5	38.3	JUL 11	- 22.2	DEC 24	2691	965	95	FEB 8-9	432	191	DEC 22-23	78	82	56	61	4.0	.8	17	17.0	N	MAY 17	61	5.5	120	113	132	96	4	60	13	36	21	111	5
MONTANA																																					
BILLINGS	14.6	1.6	8.1	39.4	JUL 16	- 28.3	JAN 20	4062	339	56	SEP 13	1321	246	MAR 2-3	58	67	52	44	4.8	1.7	27	21.5	NW	AUG 4	69	6.1	88	131	146	80	15	28	12	36	49	156	23
GLASGOW	10.9	- 1.9	4.5	37.8	JUL 16	- 33.9	JAN 20	5212	320	57	AUG 19-20	691	71	JAN 5-6	67	76	57	52								6.6	74	117	174	85	13			21	98	182	58
GREAT FALLS	13.6	.6	7.1	36.1	AUG 2	- 30.6	JAN 20	4272	358	25	MAY 10	1646	188	JAN 2-3	61	70	51	45	4.5	2.5	24	22.8	SW	NOV 25	70	6.7	77	98	190	97	25	29	7	22	53	160	29
HAVRE	11.9	- 2.2	4.9	36.7	JUL 19	- 33.9	JAN 20	5077	209	18	JUL 12	960	117	MAR 2-3		77	56					19.2	W	MAY 16	68	6.5	82	107	176	81	13			22	83	191	60
HELENA	15.2	.2	7.7	37.8	AUG 2	- 23.3	JAN 25+	4033	164	10	OCT 2	782	124	NOV 6	59	68	49	41	3.5	1.9	28	24.1	SW	JAN 8	63	6.6	78	91	196	84	10	31	3	29	42	185	15
KALISPELL	12.7	- .7	6.1	33.3	AUG 25+	- 26.7	MAR 4	4467	435	60	JUN 3-4	1808	160	JAN 3-4	79	85	66	57	3.6	.5	17	16.5	2	JAN 19		7.1	65	90	210	132	24	30	38	6	54	195	10
MILES CITY	13.6	- .2	6.7	42.2	JUL 16	- 31.7	JAN 21	4673	294			780			65	74	54	50	3.9	.7	32									94	15	26	18	48	77	177	46
MISSOULA	14.6	.9	7.7	37.8	AUG 2	- 17.8	JAN 25	3978	282	17	AUG 26-27	1585	229	JAN 2-3	69	79	60	50	2.8	.8	31	17.9	W	MAY 22	58	6.8	83	73	209	107	16	31	23	29	44	186	1

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days											
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max. temp.		Min. temp.	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 am EST	7:00 am EST	1:00 pm EST	7:00 pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	32.2°C and above	0°C and below	0°C and below	-17.8°C and below
	°C.	°C.	°C.	°C		°C		Base 18.3°C.	Mm.	Mm.		Mm.	Mm.		%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
NEBRASKA																																					
GRAND ISLAND	17.1	2.5	9.8	40.6	JUL 12+	- 26.7	JAN 29	3639	350	39	JUN 8	450	173	DEC 27-28	75	83	54	53	5.1	.5	22	23.2	35	MAR 22		5.5	128	92	145	77	3	42	21	46	47	153	21
LINCOLN U	16.4	4.7	10.6	40.6	JUL 12	- 27.8	JAN 29	3425	500	69	JUN 27-28	434	188	DEC 27-28								18.8	S	JUN 22+	64	5.5	123	102	140	86	5			31	50	133	10
NORFOLK	14.9	1.8	8.4	40.6	JUL 10	- 32.2	JAN 29	4063	534	66	JUN 8-9	676	246	MAR 22-23		77	52	51								5.7	115	107	143	75	7			28	57	168	28
NORTH PLATTE	16.3	.6	8.4	37.8	JUL 10	- 27.8	JAN 22	3977	446	69	JUN 22-23	950	226	MAR 22	75	82	55	52	4.4	.2	10	23.2	NW	MAR 4	66	5.7	113	108	144	65	10	44	15	32	50	185	28
OMAHA	16.9	3.9	10.4	37.2	JUL 12	- 27.2	JAN 29	3409	577	77	JUN 25-26	490	183	MAR 22-23	73	78	56	56	4.4	.2	14	27.7	NW	OCT 15	69	5.6	120	113	132	86	5	40	18	26	45	142	10
SCOTTSBLUFF	17.1	.7	8.9	38.3	JUL 11+	- 31.7	JAN 21	3831	312	31	JUN 7-8	546	99	APR 18	72	80	50	47	4.8	.8	1	24.1	32	MAR 3		5.4	130	103	132	76	10	43	12	53	40	185	23
VALENTINE	15.2	.2	7.7	42.2	JUL 10	- 30.6	JAN 29+	4281	478	58	AUG 11	688	147	APR 18-19								27.3	NW	JUN 4	70	5.6	117	113	135	73	8			46	61	185	33
NEVADA																																					
ELKO	17.6	- 1.9	7.8	37.8	JUL 29	- 25.0	FEB 11	3997	165	17	DEC 5-6	889	224	DEC 5-6	54	66	43	35	2.9	.6	24	17.9	14	MAY 9		5.1	147	88	130	59	13	11	11	63	42	205	27
ELY	16.8	- 2.2	7.3	34.4	AUG 8	- 26.1	JAN 20	4076	154	31	SEP 18-19	478	79	DEC 25-26	50	58	37	33	4.2	2.0	21	17.0	SW	SEP 11+	79	5.1	133	102	130	45	9	31	0	26	27	208	26
LAS VEGAS	26.8	11.8	19.3	43.9	AUG 8+	- 5.0	DEC 31+	1341	49	11	DEC 6	T	T	DEC 30 +	32	39	26	20	3.7	1.5	23	23.2	SW	MAR 1	86	3.8	195	81	89	18	0	14	0	145	0	44	0
RENO	20.4	- .2	10.1	37.8	JUL 29	- 13.9	JAN 21+	3093	83	21	DEC 5-6	193	127	DEC 6	52	70	43	29	3.0	.7	26	21.5	SE	JAN 4	85	4.4	178	79	108	26	2	6	7	50	2	197	0
WINNEMUCCA	19.2	.0	9.6	38.3	JUL 29	- 19.4	DEC 27	3382	115	10	JUN 6-7	523	102	DEC 5-6	46	57	39	29	3.5	.5	26	17.0	SW	OCT 20	64	5.1	141	92	132	47	8	9	4	59	4	188	3
NEW HAMPSHIRE																																					
CONCORD	15.0	.8	7.9	38.9	JUL 3	- 28.3	FEB 20	4044	828	57	SEP 21-22	1770	361	JAN 23-24	81	80	53	65	2.9	1.1	30	17.0	NW	OCT 20+	62	6.1	100	113	152	122	18	13	48	25	35	166	20
MT WASHINGTON OBS	.9	- 6.6	- 2.8	18.3	JUL 3	- 37.8	FEB 21	7673	1929	80	FEB 25-26	6706	724	FEB 25-26	86	84	85	85				71.5Y	W	MAR 2	33	7.8	38	88	239	208	65	15	306	0	161	244	56
NEW JERSEY																																					
ATLANTIC CITY	16.9	5.3	11.1	40.0	JUL 3	- 17.8	FEB 20+	3071	1150	163	AUG 23	803	191	JAN 26-27	81	80	54	70	4.6	1.1	27	17.9	27	JAN 30	55	6.0	96	117	152	113	9	26	49	24	21	114	3
NEWARK	17.0	7.6	12.3	40.6	JUL 3	- 13.9	FEB 20+	2831	962	120	SEP 21	798	208	DEC 24-25	71	71	52	59	5.0	1.4	28	19.2	24	JAN 31		6.0	94	133	138	117	8	19	15	33	16	86	0
TRENTON U	16.8	7.5	12.2	38.9	JUL 3	- 14.4	JAN 29	2842	1005	88	OCT 18-19	955	297	DEC 24-25								16.1	NW	MAR 1	60	5.8	105	125	135	117	10			32	26	89	0
NEW MEXICO																																					
ALBUQUERQUE	20.8	5.2	13.0	37.2	AUG 1+	- 14.4	JAN 22	2586	173	28	JUL 15-16	163	117	JAN 18	46	59	36	27	4.0	.1	2	24.1	SW	JUN 20+	81	4.0	183	113	69	44	2	38	2	68	5	122	0
CLAYTON	19.3	3.2	11.3	37.2	JUL 5	- 22.2	JAN 21	2928	392	63	JUN 17	307	74	JAN 20-21		69	37	37								4.6	161	107	97	56	5			26	17	142	4
RATON	18.9	.2	9.6	35.6	JUL 5	- 25.0	DEC 29	3347	328	41	JUL 6	455	102	OCT 16-17												5.1	131	125	109	71	6			14	13	180	17
ROSWELL	24.3	5.5	14.9	41.7	AUG 1	- 26.7	JAN 22	2152	246	49	APR 24-25	132	119	JAN 20-21		65	38					21.5	NW	MAR 22		4.4	167	109	89	37	1	34	14	97	4	132	2
SILVER CITY	21.6	5.9	13.8	36.7	JUL 6	- 12.8	DEC 29	2192	208	34	JUN 28	201	122	JAN 18												3.8	186	133	46	60	3			47	0	100	0
NEW YORK																																					
ALBANY	14.3	2.1	8.2	36.7	JUL 2	- 26.7	FEB 20	3912	848	65	SEP 4	2370	465	DEC 24-25	79	78	56	67	4.2	1.6	27	19.7	NW	JUN 6	52	7.0	56	114	195	143	19	26	19	11	48	158	13
BINGHAMTON	12.1	2.8	7.4	35.0	JUL 3	- 22.2	JAN 28	4181	782	57	JUN 9-10	2438	373	JAN 30-31	77	81	62	67	4.6	1.7	26	21.0	SW	JUN 9+	54	7.4	43	105	217	151	29	23	44	6	67	148	8
BUFFALO	12.7	3.6	8.2	34.4	JUL 2	- 21.1	JAN 28	3933	835	41	JAN 30-31	2540	462	JAN 22-23	80	80	64	70	5.2	2.6	25	19.2	SW	NOV 3+	53	7.2	63	90	212	176	27	34	18	4	59	141	6
NEW YORK U	17.2	8.4	12.8	39.4	JUL 3	- 13.3	FEB 20+	2698	1013	141	SEP 21	775	180	DEC 24-25	67	70	49	57	3.9	1.1	29	17.9	N	JAN 30	59	5.3	121	134	110	116	9	17		35	19	77	0
J.F. KENNEDY	16.1	7.3	11.7	40.0	JUL 3	- 13.9	JAN 28	2877	932	114	SEP 21	620	163	DEC 24	75	75	57	68	5.2	1.1	28	23.2	26	JAN 31		5.9	94	135	136	110	7	16	25	14	16	85	0
NEW YORK LA GUARDIA	16.3	9.2	12.8	41.7	JUL 3	- 12.2	JAN 28	2732	805	77	SEP 21	678	170	FEB 24-25	66	69	53	58	5.0	1.1	30	22.8	W	JAN 31		6.0	91	136	138	114	9	19	12	25	21	69	0
ROCHESTER	14.1	3.6	8.9	36.7	JUL 3	- 22.2	FEB 7	3713	663	53	JUL 27-28	2685	462	JAN 23	76	76	57	64	4.2	2.3	25	22.4	SW	JAN 31	52	6.8	76	100	189	137	27	21	10	14	55	140	8
SYRACUSE	13.5	2.7	8.1	35.6	JUL 3	- 32.2	JAN 26	3965	842	53	SEP 3-4	3561	622	JAN 30-31	76	76	57	66	4.6	1.6	27	24.6	W	JAN 31	52	6.8	76	97	192	164	33	23	5	8	58	150	16

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max temp.		Min. temp	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 a m E S T	7:00 a m E S T	1:00 p m E S T	7:00 p m E S T	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-0.3	Partly cloudy, 0.4-0.7	Cloudy, 0.8-1.0	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	32.2 °C and above	0 °C and below	0 °C and below	-17.8 °C and below
	°C	°C	°C.	°C		°C		Base 18.3°C.	Mm.	Mm		Mm.	Mm.		%	%	%	%	M.p.s	M.p.s		M.p.s			%	Tenths											
NORTH CAROLINA																																					
ASHEVILLE	17.4	5.0	11.2	32.2	JUL 14	-21.7	JAN 30	2797	1314	81	FEB 12-13	663	193	JAN 15-16	92	94	62	75	3.6	1.0	35	19.2	35	JUL 19	58	6.2	99	93	173	134	7	46	76	1	15	131	1
CAPE HATTERAS R	19.9	11.7	15.8	33.3	JUL 5	-8.3	JAN 30	1679	1427	126	JUN 11-12	T	T	DEC 24 +	83	81	66	79	5.2	.9	32	25.9	SSW	FEB 13	62	6.1	104	94	167	115	0	38	21	2	0	37	0
CHARLOTTE	20.8	9.1	14.9	37.2	JUL 28+	-15.6	JAN 31+	2022	892	71	SEP 18-19	272	112	JAN 25-26	76	84	53	60	3.0	.3	31	16.5	SW	FEB 13	69	5.6	122	99	144	113	4	32	28	43	2	69	0
GREENSBORO	20.3	8.1	14.2	37.8	JUL 14	-16.1	JAN 31	2223	922	48	SEP 19-20	726	208	JAN 25-26	82	86	55	66	3.1	.5	28	17.9	SW	FEB 13	56	5.9	109	96	160	107	7	30	29	39	5	89	0
RALEIGH	20.9	8.7	14.8	36.1	JUL 14+	-16.1	JAN 31	2060	1006	46	SEP 19-20	338	229	JAN 25-26	76	82	50	63	3.7	.4	27	17.9	34	OCT 1+	58	5.6	120	113	132	106	4	33	27	42	3	79	0
WILMINGTON	23.0	11.6	17.3	35.6	JUL 5	-8.3	JAN 31	1416	1667	196	JUN 10-11	T	T	DEC 30 +	81	81	54	71	3.7	.3	28	21.0	SW	FEB 13	65	5.6	117	109	139	114	0	44	23	47	1	47	0
NORTH DAKOTA																																					
BISMARCK	11.2	-2.8	4.2	35.6	JUL 30+	-39.4	JAN 29+	5352	425	36	JUL 31	1168	394	MAR 3	74	77	55	54	4.4	.5	1	23.2	NW	MAR 4	62	6.3	83	122	160	85	11	37	8	21	90	194	64
FARGO	9.7	-2.6	3.6	35.6	JUN 30	-36.1	JAN 28+	5640	482	49	JUL 31-1	823	203	MAR 2-3	75	78	60	60	5.1	.4	33	21.5	W	OCT 22	60	6.2	91	110	164	87	9	38	17	16	103	197	65
WILLISTON	11.4	-2.7	4.4	41.7	JUL 16	-40.0	JAN 29	5309	240	38	AUG 20-21	597	104	APR 26-27		78	54	52				28.6	NW	JUL 1	59	6.2	91	117	157	73	7			28	96	193	60
OHIO																																					
AKRON	14.7	4.1	9.4	33.9	JUL 3+	-22.2	JAN 29	3585	753	53	AUG 10-11	1311	277	JAN 22-23	79	83	61	67	4.2	1.3	25	14.3	23	MAR 23		6.8	67	110	188	147	13	27	21	10	51	138	3
CINCINNATI OBS	17.0	6.6	11.8	37.2	JUL 13	-23.3	JAN 30	2953	894	42	JAN 1-2	622	203	NOV 2-3								15.2	W	APR 1	50					124	4			38	36	98	3
CLEVELAND	14.2	4.2	9.2	35.6	JUL 3	-21.1	JAN 29	3637	812	49	JUL 24	1387	191	NOV 28-29	77	80	65	67	4.3	1.7	23	17.9	SW	MAR 23	53	7.0	69	92	204	149	19	25	8	10	52	130	2
COLUMBUS	15.6	4.9	10.3	36.1	JUL 3+	-22.8	JAN 24	3348	974	65	JUL 9-10	838	157	JAN 22-23	77	79	58	64	4.4	.7	25	21.0	NW	JUN 28	54	6.9	69	103	193	131	10	34	11	22	43	124	5
DAYTON	16.1	5.4	10.8	37.2	JUL 2	-23.3	JAN 30	3266	820	34	JUL 12-13	899	183	FEB 1	77	80	58	65	4.2	1.0	24	20.1	NW	JUN 27	58	6.8	75	96	194	130	7	35	16	31	41	119	6
MANSFIELD	13.6	3.6	8.6	33.9	JUL 3+	-22.2	JAN 28	3789	792	64	AUG 10-11	864	137	JAN 22-23		81	62									6.8	78	96	191	127	14	30	26	3	52	137	6
TOLEDO	14.6	3.4	9.0	35.6	JUL 3+	-21.1	JAN 28	3732	815	53	DEC 7-8	1278	211	NOV 2-3	76	80	57	62	4.1	1.4	26	15.6	NW	JAN 27	55	6.4	86	103	176	129	12	29	12	18	60	144	6
YOUNGSTOWN	13.9	3.1	8.5	36.1	JUL 3	-21.7	JAN 29	3842	838	40	AUG 10-11	1745	269	JAN 22-23	79	81	61	65	4.4	1.3	25	17.9	27	APR 1+		7.0	65	90	210	154	28	30	20	12	58	145	3
OKLAHOMA																																					
OKLAHOMA CITY	21.9	9.0	15.5	42.2	JUL 19	-16.7	JAN 30+	2064	649	85	AUG 18-19	221	97	JAN 19	71	79	53	52	4.8	1.0	15	18.8	SW	AUG 19+	68	5.2	147	83	135	69	4	47	18	78	18	83	0
TULSA	21.9	8.6	15.3	41.1	JUL 19+	-17.2	JAN 29	2141	682	50	SEP 2-3	318	69	DEC 22-23	72	81	53	51	4.6	1.0	18	19.2	SW	OCT 14	65	5.3	132	105	128	80	7	40	11	72	17	97	0
OREGON																																					
ASTORIA	14.7	6.1	10.4	32.8	JUN 15	-3.9	JAN 20+	2857	1620	59	DEC 3-4	188	81	MAR 1-2	88	90	79	74	3.8	1.0	23	16.1	26	JAN 2		7.7	53	68	244	204	3	11	41	1	0	34	0
BURNS U	15.8	.7	8.3	35.6	AUG 2	-18.3	FEB 13+	3768	248	17	SEP 13-14	881	107	DEC 24-25	60	70	54	41	3.1	1.2	30					5.7	119	86	160	96	17			15	17	185	3
EUGENE	17.9	6.2	12.1	35.6	JUN 15	-3.9	JAN 19	2382	1049	101	JAN 3-4	74	71	MAR 28-1	82	90	75	58	3.5	.7	22	14.3	20	MAR 14		7.0	69	81	215	118	1	6	58	14	1	26	0
MEACHAM	11.3	1.8	6.6	32.8	AUG 24	-13.9	JAN 20	4292	771	52	DEC 12-13	3698	254	FEB 13-14			62									7.0	83	65	217	142	46			1	45	172	0
MEDFORD	19.6	4.7	12.2	38.3	JUN 15	-7.8	JAN 21	2477	534	55	JAN 5-6	137	76	JAN 22	69	82	65	45	2.2	.7	30	17.0	12	MAY 4		5.9	115	85	165	89	2	9	51	41	0	82	0
PENDLETON	18.4	6.2	12.3	37.2	AUG 2+	-7.2	JAN 20	2503	294	27	JAN 2-3	422	208	JAN 2-3	59	67	53	45	3.9	1.5	25	23.7	27	MAR 21		6.3	97	88	180	92	3	7	33	36	6	60	0
PORTLAND	17.2	6.8	12.1	35.0	JUN 15	-4.4	JAN 20	2393	860	40	DEC 3-4	15	10	MAR 1	79	88	75	60	3.6	.4	21	16.1	SW	JAN 1	47	7.4	59	71	235	147	0	5	44	3	0	23	0
SALEM	17.9	4.9	11.4	37.8	JUN 15	-5.6	FEB 15+	2567	894	52	MAR 8-9	64	43	JAN 21	82	89	74	60	3.4	.9	21	17.9	18	JAN 1		6.8	76	80	209	146	1	5	37	14	1	58	0
SEXTON SUMMIT R	13.8	3.8	8.8	33.9	JUN 15	-7.2	MAR 3+	3524	836	71	NOV 14-15	1979	251	NOV 20-21			68	57								5.6	130	70	165	126	21			1	20	124	0
PACIFIC AREA																																					
CANTON ISLAND	31.4	25.8	28.7	33.3	DEC 11	22.2	JAN 28+	0	1112	141	JAN 21-22	0	0		75	79	79	65								6.5	70	142	153	118	0			76	0	0	0
ENIWETOK	30.8	25.4	28.1	34.4	SEP 21+	22.2	OCT 5	0	1301	117	AUG 7-8	0	0		75	81	82	72	6.4	5.5	6									197	0			66	0	0	0
TAGUAC GUAM R	29.7	22.4	26.1	33.9	JUL 28+	16.1	DEC 13	0	1891	149	SEP 7-8	0	0									12.5	E	FEB 26	57					239	0			6	0	0	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
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State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Greatest in 24 hours	Precipitation: Snow, Sleet: Date (s)	Relative humidity: 1:00 a.m E S T	Relative humidity: 7:00 a.m E S T	Relative humidity: 1:00 p.m E S T	Relative humidity: 7:00 p.m E S T	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-0.3	Number of days: Sunrise to sunset: Partly cloudy, 0.4-0.7	Number of days: Sunrise to sunset: Cloudy, 0.8-1.0	Number of days: Precipitation 25mm or more	Number of days: Snow, Sleet 25.4mm. or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max temp.: 32.2 °C and above	Number of days: Max temp.: 0 °C and below	Number of days: Min. temp: 0 °C and below	Number of days: Min. temp: -17.8 °C and below
	°C.	°C.	°C.	°C.		°C		Base 18.3 °C.	Mm.	Mm.		Mm.	Mm.		%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
PACIFIC AREA																																					
JOHNSTON	28.2	24.2	26.2	30.6	SEP 24+	20.0	FEB 22+	0	633	59	OCT 3-4	0	0		75	77	77	68	6.5	5.9	9	21.5	E	DEC 20	61	6.0	81	163	121	153	0	12	0	0	0	0	0
KOROR R	30.7	24.2	27.4	32.8	DEC 16+	22.2	NOV 22+	0	3563	140	OCT 26-27	0	0		76	88	90	79	3.2	1.2	8	13.0	SW	OCT 26	58	9.9	0	3	362	272	0	31	0	57	0	0	0
KWAJALEIN	30.4	24.9	27.7	33.3	SEP 4	21.7	JAN 24	0	2951	99	DEC 4-5	0	0		79	83	83	76	6.1	5.2	7	16.5	9	DEC 11+		8.6	8	82	275	250	0	8	0	11	0	0	0
MAJURO	29.8	25.2	27.5	31.7	NOV 9+	21.7	OCT 25	0	3269	110	JUL 12-13	0	0		79	82	83	77	4.4	3.7	7	15.6	E	DEC 17	57	8.5	13	80	272	241	0	25	0	0	0	0	0
MARCUS ISLAND	28.4	22.6	25.6	33.3	AUG 18	15.6	MAR 6	0	965	124	OCT 13-14	0	0		72	80		71				50.5	W	OCT 14	68	5.9	100	128	137	130	0			41	0	0	0
PONAPE R	30.6	23.5	27.1	33.3	OCT 2+	20.6	NOV 30+	0	4319	110	JAN 9-10	0	0		79	89	90	77	3.4	2.1	8	12.5	SW	OCT 31	54	8.9	7	51	307	283	0	25	0	46	0	0	0
TRUK MOEN ISLAND	30.1	24.6	27.3	32.8	OCT 5+	21.7	DEC 6	0	3090	159	DEC 5-6	0	0		77	85	86	77	4.5	2.7	8	17.4	SW	NOV 2	76	8.9	3	57	305	263	0	16	0	11	0	0	0
WAKE	28.9	23.7	26.3	31.7	SEP 14+	18.9	JAN 18	0	607	37	MAY 13-14	0	0		72	78	78	68	5.8	4.8	5	15.6	4	OCT 30+		5.9	86	159	120	154	0	7	0	0	0	0	0
YAP R	30.4	24.2	27.3	32.8	NOV 3+	21.7	NOV 17+	0	2341	141	JUN 22-23	0	0		76	87	89	78	3.5	2.1	5	13.0	SE	MAY 19	46	9.7	1	15	349	256	0	14	0	30	0	0	0
PENNSYLVANIA																																					
ALLENTOWN	15.9	4.4	10.2	40.6	JUL 3	- 18.3	JAN 29	3443	972	52	FEB 13	1730	338	DEC 24-25	77	79	54	61	4.2	1.4	29	20.6	25	JAN 30		6.2	90	116	159	117	12	22	17	41	33	135	2
ERIE	13.4	4.7	9.1	33.3	JUL 3	- 21.1	JAN 29	3632	959	42	AUG 10-11	2532	328	DEC 1-2	76	78	66	69	5.1	1.8	24	13.4	23	NOV 3+		6.7	80	96	189	163	30	38	11	2	52	125	4
HARRISBURG	17.6	6.4	12.0	41.7	JUL 3	- 17.8	JAN 29	3010	803	107	SEP 13-14	1593	310	JAN 29-30	71	74	52	59	3.6	1.3	29	18.8	NW	MAR 1+	63	6.5	84	101	180	114	15	19	12	60	32	108	1
PHILADELPHIA	17.1	6.2	11.7	40.0	JUL 3	- 15.6	FEB 6+	2979	1016	119	SEP 14	1173	318	DEC 24-25	74	75	53	62	4.5	1.2	29	17.0	W	FEB 13+	56	6.1	90	116	159	108	10	18	17	33	25	104	0
PITTSBURGH	15.5	4.6	10.1	36.7	JUL 3	- 23.3	JAN 29	3402	865	44	FEB 13	1491	356	JAN 22-23	77	81	58	63	4.1	1.5	27	19.7	28	APR 1	45	7.3	52	103	210	146	17	28	13	23	47	126	2
PITTSBURG U	15.8	5.9	10.9	36.7	JUL 3+	- 18.9	JAN 29	3168	813	51	FEB 12-13	947	330	JAN 22-23											44					138	11			20	43	111	2
READING U	17.0	7.2	12.1	39.4	JUL 3	- 15.0	JAN 29	2886	890	72	SEP 13-14	1577	297	JAN 29-30								28.2	W	JUN 14	56	5.9	100	123	142	118	13			40	25	91	0
SCRANTON	14.8	4.5	9.7	38.3	JUL 3	- 20.0	FEB 7	3531	722	81	AUG 16	1549	318	FEB 24-25	76	80	57	62	3.5	.9	26	15.2	S	NOV 10+	56	6.7	68	109	188	137	12	23	12	19	47	123	4
WILLIAMSPORT	15.1	3.4	9.3	37.8	JUL 3	- 19.4	FEB 6	3557	969	87	NOV 28-29	1278	315	JAN 29-30	83	84	56	66	3.6	1.3	28	17.4	28	NOV 10		6.7	69	108	188	143	15	33	25	10	36	142	2
RHODE ISLAND																																					
BLOCK ISLAND	12.9	6.3	9.6	30.0	JUL 3	- 14.4	FEB 20	3317	769	54	SEP 14-15	465	102	JAN 23												5.9	113	105	147	108	7			0	19	93	0
PROVIDENCE	15.2	4.6	9.9	35.6	JUL 3	- 16.7	FEB 20	3352	982	66	FEB 13	1029	206	MAR 12-13	76	75	54	65	4.7	1.5	27	17.9	24	JAN 31	58	6.0	105	108	152	113	11	24	27	7	21	124	0
SOUTH CAROLINA																																					
CHARLESTON	23.4	11.7	17.6	36.1	AUG 23	- 11.7	JAN 30	1319	1361	129	JUL 1-2	20	20	JAN 27	83	84	54	69	3.8	.2	26	26.4Y	NW	FEB 13	59	5.6	119	106	140	111	0	46	31	37	0	46	0
COLUMBIA	23.2	10.1	16.7	39.4	JUL 29	- 13.9	JAN 30	1606	1075	59	JAN 14-15	25	25	JAN 26-27	82	86	50	64	3.5	.3	29	17.9	20	FEB 13	61	5.6	123	105	137	103	0	31	17	63	1	65	0
GNVLE-SPARTANBURG	20.7	9.1	14.9	36.7	JUL 28	- 21.1	JAN 30	1925	1243	107	SEP 13-14	318	94	JAN 29 +	78	82	55	65	3.3	.4	33	23.2	NE	JUL 15	59	5.7	124	84	157	120	5	39	35	22	1	67	1
SOUTH DAKOTA																																					
ABERDEEN	12.2	- 1.8	5.2	43.3	JUL 10	- 34.4	JAN 30+	5081	522	43	JUN 21-22	1031	287	MAR 4-5	74	77	57	56	5.0	.6	3	25.9	20	JUL 31		6.0	102	102	161	85	12	33	28	25	82	192	58
HURON	13.2	- .4	6.4	44.4	JUL 10	- 36.7	JAN 29+	4710	573	72	OCT 13-14	1074	282	MAR 4	78	84	59	58	5.2	.2	15	24.1	NW	MAR 4	70	6.1	100	104	161	85	10	33	19	28	76	181	39
RAPID CITY	14.4	.3	7.3	39.4	JUL 16+	- 30.0	JAN 20	4317	518	54	SEP 13	1430	201	MAR 21-22	67	71	51	50	5.0	1.3	34	26.4	NW	NOV 29	61	6.0	99	112	154	100	17	36	22	34	59	183	22
SIOUX FALLS	13.4	.1	6.8	41.1	JUL 10	- 33.9	JAN 29	4603	529	102	SEP 11	648	142	DEC 27-28	74	80	56	57	5.1	.2	24	20.6	31	JUL 4		5.9	110	99	156	86	7	36	25	31	69	178	40
TENNESSEE																																					
BRISTOL	18.7	6.7	12.7	35.0	JUN 27	- 26.1	JAN 31	2520	1150	53	APR 12-13	765	224	JAN 29	81	85	58	66	2.4	.5	28	14.8	24	FEB 13		6.5	82	105	178	137	8	46	47	15	16	102	2
CHATTANOOGA	20.1	8.3	14.2	36.7	JUL 15+	- 23.3	JAN 31	2168	1199	71	SEP 12-13	213	213	JAN 29	88	91	61	66	2.7	.2	32	17.0	NE	JUL 15	55	6.3	90	101	174	119	1	52	51	25	6	81	2
KNOXVILLE	19.7	9.1	14.4	36.7	JUL 14	- 22.8	JAN 30	2124	1165	61	JUL 29-30	452	251	JAN 29	80	86	60	64	3.0	.6	30	21.9	W	APR 30	52	6.6	80	98	187	130	3	41	44	28	5	72	2

See reference notes at end of table.

ANNUAL CLIMATOLOGICAL DATA

METRIC UNITS

YEAR 1966

State and Station	Temperature							Heating degree days	Precipitation						Relative humidity				Wind						Possible sunshine	Average sky cover sunrise to sunset	Number of days										
	Averages			Extremes								Snow, Sleet										Fastest mile (1.6 kilometers)					Sunrise to sunset							Max temp.		Min. temp.	
	Daily maximum	Daily minimum	Annual	Highest	Date	Lowest	Date		Total	Greatest in 24 hours	Date (s)	Total	Greatest in 24 hours	Date (s)	1:00 am EST	7:00am EST	1:00pm EST	7:00pm EST	Average speed	Resultant speed	Resultant direction	Speed	Direction	Date			Clear, 0-03	Partly cloudy, 0.4-07	Cloudy, 0.8-10	Precipitation 25mm or more	Snow, Sleet 25.4mm or more	Thunderstorms	Heavy fog	32.2 °C and above	0°C and below	0°C and below	-17.8 °C. and below
	°C.	°C	°C.	°C		°C		Base 18.3°C	Mm.	Mm.		Mm.	Mm.		%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
TENNESSEE																																					
MEMPHIS	20.9	10.2	15.6	38.9	JUL 15	- 16.7	JAN 30	1946	1047	92	FEB 9-10	328	124	JAN 21-22	74	81	57	59	4.3	.2	17	17.0	S	NOV 10	64	5.8	121	85	159	100	6	41	11	47	10	67	0
NASHVILLE	20.4	8.8	14.6	39.4	JUL 14+	- 21.1	JAN 30	2161	1065	64	DEC 8-9	582	191	JAN 22	78	83	58	60	3.9	.1	18	22.4	NW	JUL 7	58	6.3	95	93	177	107	4	50	16	40	13	76	3
OAK RIDGE R	19.4	7.9	13.7	37.8	JUL 13	- 22.8	JAN 30	2319	1199	70	APR 12-13	389	173	JAN 29								17.9Y		MAR 19		6.5	101	69	195	126	4			25	8	80	2
TEXAS																																					
ABILENE	24.1	11.2	17.7	39.4	AUG 1+	- 13.9	JAN 30	1531	553	59	APR 23-24	206	94	JAN 21	65	75	50	44	5.1	1.7	17	18.3	NW	SEP 17+	71	5.1	147	99	119	61	4	36	6	97	5	66	0
AMARILLO	21.1	5.9	13.5	38.9	JUL 22+	- 21.1	JAN 29+	2482	379	69	JUN 17	241	130	JAN 20-21	64	75	45	41	6.5	2.0	20	20.6	NE	MAY 8	71	4.6	167	94	104	50	3	40	28	54	18	112	5
AUSTIN	25.4	13.7	19.6	38.3	JUL 31	- 10.0	JAN 30	1031	640	84	AUG 11-12	152	152	FEB 22-23	75	82	56	53	4.0	.6	15	19.2	NW	JUN 13	57	5.6	109	125	131	82	2	39	23	98	0	32	0
BROWNSVILLE	26.8	17.2	22.0	36.1	AUG 17	- 1.1	DEC 12	486	627	143	OCT 15	T	T	DEC 23 +	88	92	63	71	5.0	2.2	13	17.0	S	DEC 27+	67	5.6	119	126	120	80	0	17	29	91	0	2	0
CORPUS CHRISTI	26.4	16.1	21.3	37.2	AUG 17	- 3.3	JAN 30	657	759	96	APR 25	0	0		88	91	63	69	5.0	2.2	12	20.1	S	APR 14	52	6.1	86	126	153	84	0	26	45	87	0	12	0
DALLAS	23.6	12.8	18.2	38.3	AUG 1+	- 12.2	JAN 30	1378	1091	91	APR 28	135	58	JAN 21	72	82	59	54	4.9	1.4	15	22.4	W	JAN 1	60	5.4	129	94	142	73	2	45	9	80	4	42	0
DEL RIO	26.6	13.7	20.2	39.4	AUG 1+	- 5.0	DEC 13+	911	442	84	APR 23-24	56	56	FEB 22	64	78	54	43	3.9	2.1	12	12.5	31	DEC 9+		5.2	133	100	132	51	1	28	12	116	0	27	0
EL PASO	24.5	9.7	17.1	38.9	JUL 4	- 10.0	DEC 29	1577	235	37	JUN 26-27	10	10	JAN 18	44	56	37	28	3.5	.3	26	30.4	NE	JUL 27	85	3.7	197	100	68	39	0	40	1	95	0	80	0
FORT WORTH	23.6	12.3	18.0	37.8	AUG 9+	- 12.8	JAN 23	1430	998	79	JUN 12-13	185	74	FEB 21-22+	73	81	57	55	4.4	1.0	15	23.2	34	APR 29		5.4	135	92	138	74	5	46	13	83	4	45	0
GALVESTON U	23.0	17.8	20.4	33.3	AUG 17+	- 5.0	JAN 30	717	1348	149	SEP 9-10	T	T	JAN 30								18.3	W	APR 18	57					96	0			5	0	4	0
HOUSTON J	24.9	16.2	20.6	35.6	AUG 17+	- 6.1	JAN 30	777	1223	89	APR 14	0	0																	103	0			78	0	11	0
HOUSTON	25.4	15.3	20.4	36.1	JUL 31+	- 6.7	JAN 30	828	1502	132	APR 14	0	0		83	86	61	66	4.4	.9	12	17.0	16	APR 17	58	6.4	81	115	169	107	0	59	43	86	0	18	0
LUBBOCK	23.4	8.3	15.9	41.1	AUG 1	- 19.4	JAN 22	1908	468	96	AUG 23-24	135	97	JAN 21	57	67	43	36	5.3	1.2	19	20.6	10	JUN 10+		4.9	137	122	106	51	1	44	22	79	6	97	1
MIDLAND	24.1	9.3	16.7	39.4	AUG 1	- 16.7	JAN 22	1639	432	64	MAY 26-27	91	79	JAN 21	64	77	46	38	4.5	1.3	15	25.9	24	JUN 11		4.6	159	102	104	51	1	33	15	80	3	85	0
PORT ARTHUR	25.2	14.9	20.1	36.1	JUL 21	- 6.7	JAN 30	893	1795	215	AUG 11-12	0	0		88	90	64	74	4.4	.8	11	26.8	NW	APR 18	58	6.2	85	127	153	120	0	57	46	83	0	21	0
SAN ANGELO	25.1	11.2	18.1	40.0	AUG 1+	- 12.2	DEC 29	1402	402	71	AUG 23-24	152	104	FEB 21-22	67	79	50	44	4.2	1.5	18	18.3	18	APR 17		4.9	146	111	108	52	3	37	4	102	2	66	0
SAN ANTONIO	25.4	13.1	19.3	37.2	AUG 6+	- 8.9	JAN 30	1057	545	54	APR 24-25	89	89	FEB 22-23	82	89	59	55	4.0	1.1	11	17.4	N	MAR 22	62	5.6	105	130	130	84	1	38	25	86	0	43	0
VICTORIA	25.9	15.4	20.7	37.2	JUL 31	- 6.7	JAN 30	782	901	101	JUL 5-6	0	0		86	89	61	65	4.3	1.3	11	21.9Y	NW	APR 17		6.3	76	126	163	96	0	45	38	94	0	17	0
WACO	24.8	13.2	19.0	40.6	JUL 31	- 11.1	JAN 30+	1301	712	80	AUG 11-12	188	122	FEB 22-23	71	79	54	52	4.8	1.3	16	17.9	18	FEB 9+		5.2	139	97	129	63	2	39	16	103	2	37	0
WICHITA FALLS	24.2	10.0	17.1	42.2	AUG 1	- 20.6	JAN 23	1722	752	82	APR 25-26	323	150	JAN 21-22	71	80	52	49	5.3	1.4	16	19.2	16	APR 10+		5.4	129	94	142	64	3	40	17	102	9	74	1
UTAH																																					
MILFORD	19.1	.4	9.8	38.3	AUG 8+	- 28.9	DEC 28	3475	189	25	DEC 6-7	1316	193	DEC 26-27			39	31								4.8	153	98	114	52	17			69	30	183	14
SALT LAKE CITY	18.7	3.8	11.3	38.9	JUL 19	- 19.4	FEB 13	3151	228	23	MAR 1-2	1516	353	MAR 1-2	59	64	43	39	3.1	1.0	14	18.8	NW	AUG 11	77	5.6	119	99	147	66	19	33	7	74	30	142	1
WENDOVER	17.3	5.4	11.4	37.2	JUL 19	- 12.8	DEC 30+	3184	80	13	DEC 6	221	81	DEC 6		49	38													42	2			55	28	128	0
VERMONT																																					
BURLINGTON	12.1	.9	6.5	36.7	JUL 3	- 28.9	JAN 26	4459	725	34	FEB 25-26	3188	419	FEB 25-26	81	78	59	67	4.1	.9	21	17.0	N	JUN 29+	61	7.1	58	105	202	149	30	29	13	6	70	160	22
VIRGINIA																																					
LYNCHBURG	18.8	6.9	12.9	37.2	JUL 14	- 15.0	JAN 31+	2546	949	75	SEP 13-14	1422	277	JAN 29-30		76	50	61				15.2	W	APR 1+	62	5.7	114	102	149	106	12	21	25	32	11	101	0
NORFOLK	18.7	9.2	13.9	36.1	JUL 13	- 12.2	JAN 31	2225	964	94	JUL 30	399	185	JAN 26-27	80	81	60	69	5.1	.3	28	20.1	SW	FEB 13	59	6.1	105	97	163	104	4	27	26	20	5	70	0
RICHMOND	19.1	6.9	13.0	36.7	JUL 28	- 16.1	FEB 6	2506	921	89	OCT 18-19	1057	335	JAN 26	82	85	53	68	3.4	.3	28	17.9	SW	FEB 13	61	6.0	106	103	156	96	11	16	30	30	11	94	0
ROANOKE	18.3	6.7	12.6	37.8	JUL 14	- 16.1	JAN 30	2632	1044	86	OCT 18-19	1834	348	JAN 22-23	72	74	50	57	3.6	1.1	29	20.6	28	JUN 16+		5.9	99	122	144	106	10	22	21	29	16	98	0

See reference notes at end of table

ANNUAL CLIMATOLOGICAL DATA
METRIC UNITS

YEAR 1966

State and Station	Temperature: Averages: Daily maximum	Temperature: Averages: Daily minimum	Temperature: Averages: Annual	Temperature: Extremes: Highest	Temperature: Extremes: Date	Temperature: Extremes: Lowest	Temperature: Extremes: Date	Heating degree days	Precipitation: Total	Precipitation: Greatest in 24 hours	Precipitation: Date (s)	Precipitation: Snow, Sleet: Total	Precipitation: Snow, Sleet: Greatest in 24 hours	Precipitation: Snow, Sleet: Date (s)
	°C	°C.	°C.	°C		°C.		Base 18.3°C.	Mm.	Mm.		Mm.	Mm.	
WASHINGTON														
OLYMPIA	15.6	4.3	9.9	32.8	AUG 21	- 6.1	MAR 21	3009	1304	64	DEC 12-13	762	231	MAR 19-20
SEATTLE-TACOMA	15.0	7.0	11.0	31.1	AUG 21	- 2.8	JAN 24	2662	971	54	DEC 12-13	244	64	MAR 3
SPOKANE	14.9	3.2	9.1	37.8	AUG 24	- 18.3	JAN 24	3517	359	19	NOV 14-15	828	124	MAR 20-21
STAMPEDE PASS R	7.7	1.2	4.4	27.8	AUG 24	- 11.1	MAR 2+	5028	2099	65	DEC 12-13	10038	508	FEB 26-27
WALLA WALLA U	18.4	7.7	13.1	36.7	AUG 2+	- 4.4	JAN 25+	2314	382	26	DEC 12-13	411	221	JAN 2
YAKIMA	17.9	3.8	10.9	36.1	AUG 23+	- 15.0	JAN 1	2909	203	19	NOV 13-14	556	269	JAN 3
WEST INDIES														
SAN JUAN P.R.	29.3	23.2	26.3	33.3	JUL 1+	18.9	FEB 5	0	1529	74	APR 19-20	0	0	
SWAN ISLAND	29.1	24.5	26.8	32.2	OCT 4+	20.6	NOV 29+	0	2034	173	JUN 4-5	0	0	
WEST VIRGINIA														
BECKLEY	15.3	4.4	9.9	32.2	JUL 14	- 22.8	JAN 30	3279	1073	73	SEP 13-14	1923	244	DEC 23-24
CHARLESTON	18.7	6.4	12.6	36.1	JUL 3+	- 16.1	JAN 30+	2667	824	38	APR 30	998	330	JAN 22-23
ELKINS	15.9	2.2	9.1	33.9	JUL 2	- 23.3	FEB 6	3499	993	51	APR 30-1	1961	191	FEB 24-25
HUNTINGTON	17.5	6.5	12.0	35.6	JUL 2	- 20.6	JAN 30	2803	1047	76	JUL 12-13	622	208	JAN 22-23
PARKERSBURG U	17.2	6.2	11.7	36.7	JUL 3	- 18.9	JAN 30	2908	828	52	JUL 14	716	356	JAN 22-23
WISCONSIN														
GREEN BAY	11.9	.4	6.2	36.1	JUL 3	- 31.7	JAN 29	4617	550	51	JUL 10-11	912	119	DEC 19
LA CROSSE	13.8	1.4	7.6	36.7	JUL 11+	- 31.1	JAN 29	4258	614	55	OCT 14-15	772	231	DEC 27-28
MADISON	13.1	.1	6.6	36.1	JUL 10	- 30.6	JAN 29	4468	671	92	MAY 23	759	203	JAN 12-13
MILWAUKEE	12.3	2.2	7.3	36.1	JUL 3	- 30.6	JAN 29	4283	689	48	AUG 1-2	1229	307	JAN 12-13
WYOMING														
CASPER	15.5	- .2	7.7	37.2	JUL 30+	- 26.7	JAN 20	4124	207	17	JUN 4-5	1897	259	APR 18
CHEYENNE	15.8	.9	8.4	35.0	JUL 16+	- 28.3	JAN 21	3819	315	43	JUL 31	414	74	OCT 13-14
LANDER	15.0	.0	7.5	35.6	JUL 16+	- 25.6	JAN 21	4195	295	43	OCT 13	2822	518	APR 17-18
SHERIDAN	14.9	- 1.3	6.8	39.4	JUL 16	- 27.8	JAN 25+	4357	280	21	MAY 10-11	1859	155	DEC 21-22

State and Station	Relative humidity: 1:00 a.m. E S T	Relative humidity: 7:00 a.m. E S T	Relative humidity: 1:00 p.m. E S T	Relative humidity: 7:00 p.m. E S T	Wind: Average speed	Wind: Resultant speed	Wind: Resultant direction	Wind: Fastest mile (1.6 kilometers): Speed	Wind: Fastest mile (1.6 kilometers): Direction	Wind: Fastest mile (1.6 kilometers): Date	Possible sunshine	Average sky cover sunrise to sunset	Number of days: Sunrise to sunset: Clear, 0-0.3	Number of days: Sunrise to sunset: Partly cloudy, 0.4-0.7	Number of days: Sunrise to sunset: Cloudy, 0.8-1.0	Number of days: Precipitation .25mm or more	Number of days: Snow, Sleet 25.4mm. or more	Number of days: Thunderstorms	Number of days: Heavy fog	Number of days: Max. temp: 32.2 °C and above	Number of days: Max. temp: 0°C and below	Number of days: Min. temp: 0°C and below	Number of days: Min. temp: −17.8 °C and below
	%	%	%	%	M.p.s.	M.p.s.		M.p.s.			%	Tenths											
WASHINGTON																							
OLYMPIA	83	90	76	64	3.2	1.6	21	14.3	24	NOV 11		7.6	49	77	239	161	8	7	86	1	0	74	0
SEATTLE-TACOMA	77	84	75	64	3.0	1.0	20	17.0	21	MAR 15	47	7.7	49	69	247	154	4	7	36	0	0	22	0
SPOKANE	65	75	61	50	3.1	1.5	20	17.4	S	JAN 2	55	6.7	78	87	200	109	12	8	54	14	21	140	1
STAMPEDE PASS R		90	80	76								8.0	44	54	267	212	87			0	85	178	0
WALLA WALLA U								21.9	W	JAN 2	58	6.6	91	75	199	97	2			27	5	53	0
YAKIMA	65	74	54	44	3.2	1.6	28	15.6	31	MAY 10+		6.2	96	101	168	66	5	11	14	22	7	119	0
WEST INDIES																							
SAN JUAN P.R.	84	81	69	79	4.2	3.1	8	15.6	NE	FEB 10	66	6.1	54	198	113	207	0	37	0	17	0	0	0
SWAN ISLAND												6.6	49	163	153	159	0			3	0	0	0
WEST VIRGINIA																							
BECKLEY	80	82	58	67	4.2	1.3	23	16.5	23	NOV 2		7.0	75	78	212	154	17	40	47	1	37	124	3
CHARLESTON	79	82	53	59	2.9	.9	24	14.3	27	APR 28		7.0	59	113	193	134	9	21	107	37	30	104	0
ELKINS	88	90	57	69	3.0	1.3	28	19.7	30	APR 28		7.3	56	96	213	164	26	26	76	5	35	153	9
HUNTINGTON	79	85	58	63	2.8	.8	23	15.6	23	NOV 10		6.9	66	107	192	133	6	32	54	23	34	106	2
PARKERSBURG U								21.0	W	JUL 14	48					125	7			26	35	104	1
WISCONSIN																							
GREEN BAY	78	80	58	63	4.5	1.3	28	17.9	SW	OCT 22	54	6.0	108	97	160	101	10	28	26	11	73	172	33
LA CROSSE	79	82	56	60	3.8	.5	23	20.6	36	JUL 10		5.6	130	93	142	95	8	33	19	27	62	151	35
MADISON	81	84	59	62	4.2	1.1	28	22.8	NW	APR 1	65	5.8	112	105	148	110	8	30	23	11	63	182	31
MILWAUKEE	78	81	63	67	4.6	1.1	28	17.9	SW	MAY 23	63	5.6	124	96	145	116	13	23	20	11	66	156	15
WYOMING																							
CASPER	58	65	41	39	5.8	3.3	25	24.1	27	MAR 16		5.9	104	111	150	85	25	23	5	38	47	191	25
CHEYENNE	58	60	36	40	5.7	2.8	29	26.8	N	MAR 3	67	5.7	112	117	136	67	6	45	16	21	33	169	7
LANDER	54	61	46	41	3.3	1.2	25	29.5	SW	JAN 8	71	6.0	82	143	140	65	23	28	0	29	45	194	18
SHERIDAN	61	65	45	42	3.1	1.4	30	25.0	NW	APR 2	64	6.3	85	114	166	91	29	23	7	28	45	199	24

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile" data can be evaluated.

Data in this table are obtained by conversion from data in the English Units table.

+ And also on an earlier date or dates.

B Number of days maximum 21.1°C. or above for Alaskan Stations.

Y Peak gust.

V Sun below horizon November 19 - January 23, inclusive.

X Sun below horizon November 24 - January 17, inclusive.

* less than 0.05

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F) Normal (1931-1960) January Daily maximum	January Daily minimum	July Daily maximum	July Daily minimum	Annual	Extremes Length, yrs	Record highest	Record lowest	Normal degree days (1931-1960) January	Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Driest month	Annual	Extremes Wettest month	Driest month	Maximum in 24 hours	Snow, sleet Mean total January	Seasonal	Ex treme Maximum in 24 hours	Relative humidity (percent) January 7:00 a m EST	1:00 p m EST	7:00 p m EST	July 7:00 a m EST	1:00 p m EST	7:00 p m EST	Wind Speed (m p h) Mean speed January	July	Fastest mile	Sunshine (percent of possible) January	July	Annual mean number of days Sunrise to sunset Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature Max 90 and above	Max 32 and below	Min 32 and below	Min Zero and below
ALABAMA							83	112	-24							0.00	20.33																								
BIRMINGHAM	620	56.6	36.3	92.5	70.7	64.1	3	102	- 4	592	2551	6.00	2.95	53.05	17.67	T	6.57	0.5	1.5	8.4	82	61	66	91	65	69	8.9	6.0	65	40	60	101	115	149	117	1	55	8	32	61	*
HUNTSVILLE	600	52.4	33.4	92.4	69.8	62.0	8	104	-11	694	3070	5.57	2.72	48.67	12.55	T	5.84	2.4	8.2	17.1	80	62	67	86	56	60	8.4	5.5	---	---	---	109	101	155	113	2	53	12	64	70	1
MOBILE	211	62.3	43.7	92.0	73.1	68.2	5	100	8	415	1560	9.67	3.03	68.13	19.29	0.05	13.36	0.1	0.4	3.5	80	64	71	89	63	73	11.4	7.4	---	---	---	104	119	142	124	*	82	36	76	22	0
MONTGOMERY	194	58.5	37.7	91.9	71.7	65.0	3	102	5	543	2291	6.16	2.28	50.69	21.32	0.02	8.81	0.2	0.2	2.5	83	61	65	93	64	70	7.9	6.1	60	48	64	107	106	152	109	*	62	21	59	39	0
ALASKA							83	100	-76							0.00	37.67																								
ANCHORAGE PK SP 1965 2/	85	20.5	4.3	64.6	49.5	35.2	44	86	-38	1631	10864	2.57	0.42	14.71	5.91	0.00	2.06	10.7	59.4	17.7	--	--	--	--	--	--	---	---	---	---	---	---	---	---	113	21	--	--	#12	201	41
ANCHORAGE	114	19.9	4.3	66.0	50.3	35.8	2	77	-30	1640	10648	2.57	0.42	14.71	4.60	0.27	1.66	9.1	74.9	16.4	74	75	73	82	83	63	5.6	6.8	---	37	43	67	63	235	124	24	1	29	#12	188	52
ANNETTE	110	38.4	30.3	63.2	51.4	45.6	6	90	1	949	7069	16.88	5.67	118.36	34.87	0.71	7.59	12.1	50.0	14.2	81	81	77	87	77	67	12.7	8.1	---	---	---	41	58	266	222	16	2	17	#25	78	0
BARROW	31	- 9.4	-23.0	44.9	33.3	9.6	46	78	-56	2517	20174	0.90	0.11	4.26	2.81	0.00	1.00	2.3	28.9	15.0	63	64	63	95	91	88	11.3	11.7	---	---	---	x60	x55	x184	73	8	*	66	*	324	169
BARTER ISLAND	39	- 9.9	-23.6	47.5	35.0	10.4	17	72	-59	2536	19862	1.05	0.17	6.28	4.91	T	2.25	6.5	47.1	17.0	69	68	68	93	89	86	13.9	10.1	---	---	---	v49	v67	v194	99	13	*	72	*	310	167
BETHEL	125	10.8	- 3.7	61.8	47.5	28.7	8	86	-39	1903	13196	4.20	0.58	18.42	5.81	0.02	1.31	4.4	50.1	6.5	73	73	73	93	85	66	14.6	12.2	---	---	---	62	60	243	143	17	1	65	#12	226	83
COLD BAY	94	32.6	22.9	54.3	45.0	37.9	22	78	- 9	1153	9880	4.59	1.46	34.30	9.97	0.02	3.43	7.5	47.5	9.7	85	86	83	93	91	83	17.4	15.6	---	---	---	12	47	306	207	15	*	25	*	163	1
CORDOVA 1963	41	31.6	14.5	60.3	46.1	38.2	20	84	-33	1299	9764	12.51	3.48	80.98	27.72	0.08	7.92	25.0	124.7	22.9	83	82	81	92	86	80	4.6	4.1	---	---	---	51	52	262	215	35	2	12	# 8	189	18
FAIRBANKS	436	- 0.8	-21.4	71.7	47.6	25.8	3	85	-56	2359	14279	2.20	0.25	11.29	4.35	T	1.63	10.2	63.9	20.1	73	74	77	76	67	52	2.9	6.1	---	---	---	69	84	212	100	21	6	19	#51	226	132
JUNEAU	12	30.1	20.0	62.7	47.8	40.1	23	84	-21	1237	9075	8.33	2.87	54.62	13.29	0.27	4.66	20.9	102.7	31.0	80	80	78	89	79	69	8.4	7.7	---	30	30	46	37	282	221	27	*	21	#20	147	10
KING SALMON	49	20.8	5.9	63.0	46.8	33.8	3	78	-30	1600	11343	3.43	0.64	19.18	7.30	0.00	2.00	6.0	44.6	9.5	77	78	77	91	83	70	11.2	10.2	---	---	---	58	63	244	152	15	1	22	#10	219	55
KOTZEBUE	10	1.3	-12.7	58.6	46.8	20.7	24	85	-52	2192	16105	2.16	0.28	8.18	5.18	T	1.78	5.3	45.9	8.6	71	72	71	88	86	78	14.4	12.7	---	---	---	88	69	208	113	14	*	21	# 4	252	120
MC GRATH	344	0.8	-18.7	68.6	48.7	25.8	24	88	-67	2294	14283	3.79	0.47	18.58	6.26	T	2.39	15.3	88.0	15.2	69	68	69	87	75	57	2.7	6.0	---	---	---	67	64	234	136	27	6	14	#28	232	114
NOME	13	11.5	- 2.7	54.6	44.4	26.1	19	81	-42	1879	14171	3.80	0.69	17.88	7.82	T	2.38	10.3	57.4	8.4	77	77	77	90	86	82	12.2	10.2	---	39	31	82	65	218	131	19	*	25	# 2	240	89
ST. PAUL ISLAND	22	29.7	21.1	49.4	41.6	34.3	49	64	-26	1228	11199	3.29	0.96	23.60	9.32	0.08	1.93	13.1	56.7	13.8	87	88	86	96	96	91	19.9	12.6	---	---	---	23	64	278	202	19	*	60	# 0	190	5
SHEMYA	122	33.9	28.6	49.2	43.6	38.4	21	63	16	1045	9687	2.76	1.32	27.27	8.59	0.14	5.26	11.8	59.5	15.3	85	84	83	96	97	93	20.6	13.4	m139	---	---	5	58	302	212	20	0	80	# 0	124	0
YAKUTAT	28	34.4	20.2	60.5	47.7	40.0	2	72	-24	1169	9092	19.59	5.06	131.81	43.88	0.52	7.13	35.6	216.1	32.4	80	81	78	99	90	83	8.2	7.2	---	---	---	40	48	277	226	50	2	32	# 3	205	25
ARIZONA							72	127	-37							0.00	13.09																								
FLAGSTAFF	6993	40.4	14.1	81.4	49.6	45.6	17	94	-20	1169	7152	2.84	0.51	18.31	6.63	T	3.43	17.4	78.1	22.0	77	53	51	71	33	38	7.7	5.9	---	---	---	172	92	101	72	19	49	7	1	211	10
PHOENIX	1117	64.0	35.3	104.6	75.[illegible]	69.0	6	114	20	474	1765	1.12	0.09	7.20	5.56	0.00	3.07	T	T	0.6	66	45	31	48	29	20	4.6	6.5	75	77	84	212	83	70	34	0	22	2	164	17	0
PRESCOTT 1964	5014	51.0	23.1	90.8	61.1	55.7	12	103	- 5	865	4362	2.66	0.24	12.23	9.61	0.00	3.08	5.9	16.7	12.4	71	49	44	59	30	31	7.1	8.3	72	73	74	184	99	82	60	6	46	4	48	130	*
TUCSON	2584	62.6	37.0	98.5	74.1	67.7	26	111	16	471	1800	2.88	0.13	11.00	7.93	0.00	3.93	0.3	1.4	6.4	63	40	34	57	32	28	7.7	9.0	59	81	76	195	90	80	50	1	40	1	144	21	0
WINSLOW	4895	45.2	16.8	95.7	64.6	55.7	7	105	-13	1054	4782	1.43	0.26	7.23	4.80	0.00	2.12	2.8	9.8	7.8	78	63	53	57	29	26	7.5	9.1	---	---	---	179	97	89	53	4	37	5	74	136	4
YUMA	194	66.8	43.0	106.9	78.7	72.5	7	114	30	363	1217	0.50	0.01	3.03	2.68	0.00	2.42	0.0	0.0	0.0	63	44	31	47	30	22	7.3	9.5	54	85	90	253	65	47	15	0	7	1	177	[illegible]	0
ARKANSAS							76	120	-29							0.00	12.00																								
FORT SMITH	447	50.2	29.4	94.7	71.2	61.8	2	110	0	781	3292	5.26	2.66	42.22	14.01	T	7.13	2.0	5.0	5.6	80	57	62	90	55	52	8.3	6.5	58	47	69	129	95	141	93	3	57	13	70	80	1
LITTLE ROCK	257	50.6	30.5	92.7	71.1	61.7	7	108	- 4	756	3219	5.28	2.82	48.66	14.46	T	7.71	2.6	5.7	11.3	81	58	61	88	58	61	8.9	7.0	65	44	68	123	97	145	101	2	56	15	80	65	1
TEXARKANA	372	54.9	35.2	93.3	71.9	64.3	2	101	9	626	2533	5.30	2.73	49.19	16.65	T	6.55	1.5	2.8	7.5	81	64	65	90	59	60	7.9	6.3	---	---	---	135	83	147	98	1	63	18	70	44	0
CALIFORNIA							82	134	-45							0.00	26.12																								
BAKERSFIELD	475	57.4	37.4	100.3	68.2	65.1	3	111	25	546	2122	1.17	T	6.36	4.61	0.00	1.68	T	T	T	81	74	59	47	33	20	5.0	7.1	---	---	---	201	80	84	37	0	3	22	97	15	0
BISHOP	4108	53.7	19.8	98.0	55.2	56.2	19	109	- 6	874	4227	1.18	0.09	5.84	5.79	0.00	3.35	3.3	6.0	9.0	--	46	34	--	18	14	---	---	---	--	---	204	86	75	28	2	13	*	98	144	*
BLUE CANYON	5280	43.6	30.5	77.0	59.0	50.7	23	93	5	865	5507	11.70	0.06	60.37	45.12	0.00	9.33	49.6	236.3	38.5	--	60	--	--	32	--	m10.7	m7.1	---	---	---	175	66	124	87	39	10	68	1	100	0
BURBANK 1965	724	64.9	42.3	86.2	61.4	63.6	2	106	32	366	1646	3.22	T	14.53	13.84	0.00	7.76	0.2	0.2	4.7	62	45	37	82	50	38	4.5	5.9	---	---	---	187	102	76	38	*	4	28	49	1	0
EUREKA U	43	53.6	41.1	60.5	52.0	52.3	56	85	22	546	4643	6.71	0.10	38.43	13.97	0.00	5.83	0.2	0.2	3.0	--	--	--	--	--	--	5.9	6.8	56	41	52	80	102	183	117	*	5	49	0	5	0
FRESNO	328	55.4	36.7	[illegible]	62.6	63.0	3	110	25	586	2492	2.19	T	11.14	6.73	0.00	1.91	0.1	0.1	1.5	92	85	66	65	39	23	5.4	7.1	43	53	97	203	70	92	42	*	5	40	104	32	0
LONG BEACH	34	65.3	42.8	[illegible]	61.1	62.8	7	111	25	375	1711	2.31	T	9.84	9.05	0.00	6.86	T	T	T	69	53	46	85	64	55	5.6	6.7	---	---	---	156	128	81	28	0	3	63	16	1	0
LOS ANGELES	97	63.8	45.0	75.9	62.3	61.9	8	110	30	347	1799	2.88	0.01	12.63	11.07	0.00	6.19	T	T	T	63	49	55	85	67	68	6.5	7.2	62	---	---	142	115	108	35	0	2	49	5	*	0
LOS ANGELES C	270	65.[illegible]	46.6	83.3	62.6	64.4	26	110	28	310	1349	3.33	T	14.68	12.42	0.00	6.11	T	T	0.3	63	51	50	84	54	53	6.8	5.4	49	72	81	185	107	73	35	0	6	17	18	*	0
MT SHASTA	3544	41.4	25.1	85.3	50.7	49.9	24	103	- 2	983	5722	6.36	0.18	36.72	17.60	0.00	5.90	33.9	106.6	37.4	--	75	70	--	40	30	---	---	---	---	---	163	85	117	89	19	13	7	20	134	*
OAKLAND	6	55.4	42.6	72.7	55.9	57.5	3	92	32	527	2870	3.83	T	17.93	11.29	0.00	5.45	T	T	1.0	81	78	72	84	74	67	6.3	9.2	---	---	---	144	117	104	62	*	2	18	1	*	0
POINT ARGUELLO 1963	[illegible]	59.0	42.3	65.5	51.5	55.2	4	97	24	474	3595	2.35	0.02	11.27	8.36	T	2.28	T	T	T	--	--	--	--	--	--	7.3	6.9	---	---	---	116	89	160	68	0	2	140	1	9	0
RED BLUFF	341	53.4	37.5	97.6	67.9	63.5	22	114	21	605	2515	4.29	0.04	22.05	11.38	0.00	4.00	1.1	1.6	9.9	80	71	59	48	29	18	8.9	8.1	68	53	96	178	67	120	60	1	11	18	96	23	0
SACRAMENTO	17	53.2	37.2	93.4	57.4	60.4	6	115	23	614	2773	3.24	T	16.29	12.64	0.00	5.59	T	T	T	91	88	72	77	48	28	8.5	9.6	70	44	97	194	68	103	56	0	5	35	76	20	0
SACRAMENTO U 1964	13	54.4	38.3	[illegible]	58.[illegible]	60.7	32	112	22	577	2587	3.58	T	18.02	12.20	0.00	5.07	---	---	---	--	--	--	--	--	--	---	---	---	---	---	--	---	---	58	--	--	--	66	10	0
SANDBERG R	4517	46.[illegible]	33.8	85.6	63.2	55.5	34	102	3	778	4209	2.58	0.02	12.10	11.12	0.00	4.95	8.9	26.2	38.5	--	56	--	--	25	--	17.3	12.9	---	---	---	210	80	75	39	6	4	79	20	56	0
SAN DIEGO	13	64.6	45.4	74.8	63.4	63.2	6	111	31	313	1439	2.15	0.01	10.40	7.60	0.00	3.07	T	T	T	68	50	52	84	69	67	5.5	6.8	51	70	68	154	120	91	42	0	3	29	4	*	0
SAN FRANCISCO	8	55.4	41.7	71.4	53.6	56.9	3	95	30	508	3012	4.09	0.01	18.69	12.30	0.00	3.74	T	T	1.5	88	80	67	88	67	62	6.9	13.6	62	---	---	161	105	99	62	*	2	19	3	4	0
SAN FRANCI[illegible]	52	55.8	45.5	64.3	53.3	56.8	30	101	30	443	3001	4.55	0.01	20.78	11.47	0.00	3.65	T	T	T	--	c82	c68	--	c85	c75	6.7	11.2	47	56	65	---	---	---	66	0	2	--	1	*	0
SANTA CATALINA	1568	59.7	47.4	77.9	59.4	60.9	4	101	36	353	2052	3.16	0.02	14.36	7.49	0.00	3.15	0.0	T	T	--	--	--	--	--	--	---	---	---	---	---	173	94	98	43	0	4	158	15	0	0
SANTA MARIA	236	62.3	38.1	71.6	52.8	57.[illegible]	3	100	23	459	2967	2.84	0.03	13.37	9.69	0.00	3.07	T	T	T	81	61	57	93	64	62	6.7	6.5	---	---	---	177	108	80	45	0	2	87	9	33	0
STOCKTON	22	53.4	37.0	95.4	60.9	61.3	7	113	19	629	2676	2.66	T	13.37	8.05	0.00	3.01	0.0	0.0	0.0	90	87	69	65	41	24	6.3	7.8	---	---	---	194	71	100	48	0	2	42	85	27	0
COLORADO							79	118	-60							0.00	11.08																								
ALAMOSA	7536	35.6	- 0.9	82.5	47.2	41.9	21	91	-50	1476	8529	1.07	0.17	6.56	2.45	T	1.82	4.5	32.0	14.7	76	59	58	83	39	36	---	---	---	---	---	149	141	75	66	12	44	15	1	226	47
COLORADO SPRINGS	6145	41.[illegible]	15.2	84.[illegible]	56.7	48.5	6	99	-21	1128	6423	2.37	0.24	13.19	8.00	T	3.09	4.5	37.9	18.0	55	36	44	71	36	42	10.2	9.7	---	---	---	133	123	109	86	11	60	21	19	157	10
DENVER	5283	42.1	14.8	88.4	57.4	49.5	7	100	-25	1132	6283	2.70	0.47	14.81	7.31	T	3.43	8.7	58.7	19.4	59	42	46	69	33	33	9.6	8.8	56	73	72	115	135	115	87	18	41	10	32	160	12
GRAND JUNCTION	4855	34.8	17.1	92.5	63.8	52.5	3	102	- 5	1209	5641	1.07	0.42	8.29	3.48	0.00	1.35	8.3	27.9	9.1	73	58	58	49	29	22	5.4	9.4	66	60	78	143	104	118	71	9	37	8	59	125	2
PUEBLO	4684	45.3	14.7	92.[illegible]	60.8	52.7	2	102	-13	1085	5462	1.85	0.30	11.84	6.17	T	3.77	6.2	31.8	16.8	58	41	40	71	36	34	7.8	8.4	80	75	77	142	119	104	70	9	44	8	55	160	11
CONNECTICUT							79	105	-32							0.00	12.12																								
BRIDGEPORT	7	37.4	22.9	82.6	64.8	51.5	3	97	- 5	1079	5617	4.45	2.96	44.89	13.29	0.07	4.67	7.9	26.8	15.0	74	62	68	82	61	72	12.8	9.6	---	---	---	104	108	153	115	7	22	28	4	108	1
HARTFORD	169	34.7	17.3	85.[illegible]	61.8	49.8	7	102	-26	1209	6172	4.01	2.94	42.92	21.87	0.35	12.12	13.4	53.7	14.8	74	58	64	80	50	62	10.2	7.9	51	56	62	83	111	171	125	14	22	32	20	140	8
NEW HAVEN	6	37.1	22.0	82.5	63.2	50.2	23	100	- 8	1097	5897	4.62	3.19	46.02	10.95	0.12	5.55	9.8	36.8	17.2	76	63	--	81	66	--	8.3	6.3	57	54	68	102	106	157	128	11	27	28	3	113	1

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature(°F)								Normal degree days (1931-1960)		Precipitation (inches)									Relative humidity (percent)						Wind Speed (m p h)			Sunshine (percent of possible)		Annual mean number of days									
		Normal (1931-1960)					Extremes					Normal (1931-1960)			Extremes			Snow, sleet			January			July			Mean speed					Sunrise to sunset							Temperature		
		January		July														Mean total		Ex-treme																			Max	Min	
		Daily maximum	Daily minimum	Daily maximum	Daily minimum	Annual	Length, yrs	Record highest	Record lowest	January	Seasonal	Wettest month	Driest month	Annual	Wettest month	Driest month	Maximum in 24 hours	January	Seasonal	Maximum in 24 hours	7:00 a.m. EST	1:00 p.m. EST	7:00 p.m. EST	7:00 a.m. EST	1:00 p.m. EST	7:00 p.m. EST	January	July	Fastest mile	January	July	Clear	Partly cloudy	Cloudy	Precipitation 01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	90 and above	32 and below	Zero and below
DELAWARE							74	110	-17							0.00	7.83																								
WILMINGTON	78	41.3	25.5	86.2	65.8	54.1	19	102	- 4	980	4930	5.59	2.91	44.56	12.09	0.16	6.24	6.4	23.0	15.6	76	61	70	80	52	66	9.8	7.6	---	---	---	96	110	159	117	6	30	41	21	104	*
DIST.OF COLUMBIA																																									
WASHINGTON U 1958	72	44.0	28.9	87.1	68.4	56.8	87	106	-15	884	4258	4.49	2.64	41.44	17.45	0.14	7.31	5.9	19.4	25.0	73	56	64	78	52	67	7.7	5.7	62	46	64	125	116	124	124	6	33	12	28	81	*
WASHINGTON NATL AP	14	44.3	29.5	87.0	69.3	57.0	6	101	3	871	4224	4.90	2.47	40.78	14.31	T	6.39	5.6	18.1	14.4	69	54	59	75	50	58	10.4	8.4	78	49	64	105	106	154	112	5	29	14	40	81	0
FLORIDA							77	109	- 2							0.00	38.70																								
APALACHICOLA U	13	62.3	47.9	87.6	75.4	68.8	37	102	13	347	1308	8.53	2.44	56.23	22.55	0.01	11.71	T	T	1.2	87	69	80	85	72	76	8.4	6.6	67	59	63	134	111	120	106	*	71	25	17	4	0
DAYTONA BEACH	31	69.6	48.7	88.2	72.0	70.3	23	102	21	248	879	7.00	1.95	49.90	19.89	0.06	9.29	0.0	T	T	90	60	79	89	67	80	9.4	7.9	---	---	---	95	134	136	116	0	82	33	56	6	0
FORT MYERS	15	74.8	52.2	91.0	73.3	73.7	7	98	26	146	442	9.08	1.20	53.34	16.32	0.00	10.85	0.0	0.0	0.0	88	60	75	85	60	73	8.6	7.0	---	---	---	104	157	104	116	0	98	21	119	1	0
JACKSONVILLE	20	66.8	45.0	92.0	73.2	69.5	25	105	12	332	1239	7.68	1.69	53.36	19.36	0.04	10.17	T	0.1	1.5	87	56	74	86	57	75	8.7	8.1	82	58	59	96	127	142	116	*	61	34	86	12	0
KEY WEST INTL AP	4	73.7	65.4	87.4	79.1	76.8	14	95	46	40	108	6.73	1.53	39.99	18.45	0.00	8.89	0.0	0.0	0.0	83	69	78	76	66	72	12.4	10.1	122	68	71	106	162	97	111	0	59	1	55	0	0
LAKELAND U	214	71.2	52.2	90.5	72.6	72.3	26	101	20	195	661	8.30	1.59	51.37	15.67	T	10.12	T	T	T	--	--	--	--	--	--	7.3	5.7	---	60	60	96	156	113	122	0	100	19	85	1	0
MIAMI U 1961	8	74.4	62.6	86.8	76.4	75.3	49	95	27	57	173	7.88	1.73	47.26	25.34	T	15.10	0.0	0.0	0.0	--	--	--	--	--	--	---	---	122	70	61	155	96	114	---	--	--	--	--	---	---
MIAMI BEACH 1964	9	74.2	63.9	87.0	77.6	76.2	24	98	35	56	141	7.36	1.65	46.26	18.02	0.01	8.35	0.0	0.0	0.0	--	--	--	--	--	--	11.7	10.9	122	67	63	147	121	97	123	0	--	--	14	0	0
MIAMI INTL AP	7	75.8	57.9	88.8	74.7	75.1	2	94	35	74	214	9.47	1.67	59.76	24.40	0.01	9.95	0.0	0.0	0.0	84	58	70	91	68	77	9.2	7.8	---	---	---	80	170	115	127	0	78	7	23	0	0
ORLANDO	108	70.7	50.0	92.0	73.0	72.0	3	97	24	220	766	8.00	1.57	51.37	19.57	T	9.67	T	T	T	87	58	69	92	62	76	9.0	7.7	---	---	---	98	144	123	116	0	79	28	87	2	0
PENSACOLA U 1961	13	61.1	46.9	86.9	75.0	68.0	22	103	13	383	1435	7.59	3.84	61.60	18.80	T	9.16	T	0.2	2.1	86	64	79	85	64	74	8.1	6.7	91	56	66	---	---	---	112	*	65	--	39	9	0
PENSACOLA 1/	112	62.3	44.6	89.2	74.1	68.4	3	97	11	400	1463	8.02	2.98	62.87	15.52	0.00	7.51	T	T	T	79	62	72	90	67	73	8.7	6.0	57	44	51	---	---	---	128	0	69	--	37	17	0
TALLAHASSEE	55	65.1	42.7	90.5	72.0	68.0	6	100	10	375	1485	8.05	2.43	56.86	20.12	T	9.26	T	T	T	86	60	72	91	59	72	9.3	6.7	---	---	---	92	136	137	121	0	83	50	86	30	0
TAMPA	19	71.3	51.0	89.7	73.4	72.2	3	97	24	202	683	8.62	1.46	51.57	20.59	T	12.11	T	T	T	86	59	74	86	63	72	9.3	7.8	---	67	60	98	140	127	110	0	90	25	75	4	0
WEST PALM BEACH	15	75.5	58.3	90.8	74.3	75.3	2	94	32	87	253	9.66	2.35	61.70	24.86	0.12	15.23	0.0	0.0	0.0	84	60	74	87	66	77	9.9	7.5	---	---	---	74	154	137	132	0	78	8	46	1	0
GEORGIA							75	112	-17							0.00	18.00																								
ATHENS	802	54.6	34.5	90.2	69.2	61.9	23	105	- 1	642	2929	5.10	2.86	48.53	14.98	T	5.54	0.7	1.7	5.0	81	58	66	91	60	69	9.4	6.6	---	---	---	111	106	148	111	1	51	33	55	52	*
ATLANTA	1010	52.0	37.3	87.0	70.7	61.4	6	98	- 3	639	2983	5.37	2.44	47.14	15.72	T	5.67	0.8	1.6	8.3	77	59	63	91	66	71	11.0	7.5	70	48	62	111	109	145	115	*	50	28	17	58	*
AUGUSTA	145	59.4	35.7	91.3	70.0	64.0	2	99	6	549	2397	4.50	2.01	39.18	9.91	T	5.98	0.1	0.3	1.3	82	54	66	90	59	72	6.9	5.9	---	---	---	110	101	154	104	*	55	24	71	64	0
COLUMBUS	385	59.0	36.6	91.5	70.6	64.4	21	104	3	552	2383	6.01	1.77	48.67	12.53	0.00	5.63	T	T	T	85	60	72	88	59	70	8.1	5.7	---	---	---	110	100	155	110	0	59	19	78	46	0
MACON	354	60.2	38.2	92.8	71.0	65.6	2	101	3	505	2136	5.64	2.01	44.08	11.77	0.00	4.97	0.2	0.2	3.7	86	57	66	92	60	71	8.8	7.3	70	56	64	117	100	148	113	*	57	24	63	56	0
ROME	637	52.8	31.3	90.6	67.4	60.4	21	106	- 5	710	3326	5.87	2.93	52.26	17.37	T	7.53	0.6	1.9	8.2	81	58	73	88	54	67	---	---	---	---	---	105	117	143	122	1	61	26	63	81	*
SAVANNAH	46	62.5	40.9	91.2	71.4	66.4	2	96	9	437	1819	6.62	2.05	48.91	20.10	0.02	6.36	T	0.1	1.0	84	54	69	93	63	77	9.2	7.6	66	56	65	106	116	143	110	*	66	37	47	44	0
THOMASVILLE U 1963	283	63.4	44.0	92.0	72.0	68.2	41	106	8	394	1529	6.81	2.08	51.01	18.83	T	9.00	T	T	2.0	85	60	70	85	60	78	5.3	4.1	---	54	57	122	119	124	116	*	72	13	77	15	0
HAWAII							62	100	18							0.00	51.35																								
HILO	27	78.7	62.8	82.4	67.4	73.1	20	94	53	----	----	15.18	6.79	136.62	50.82	0.36	15.59	0.0	0.0	0.0	85	81	66	88	82	66	7.9	7.4	---	46	42	29	122	214	284	0	8	0	*	0	0
HONOLULU U 1964	12	----	----	----	----	75.1	42	88	57	----	----	3.86	0.62	23.96	18.70	0.06	17.41	0.0	0.0	0.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	147	0	--	--	0	0	0
HONOLULU	7	79.1	65.8	84.6	73.0	75.9	4	93	56	----	----	3.76	0.33	21.89	20.79	T	17.07	0.0	0.0	0.0	77	76	63	69	66	52	10.1	13.4	67	66	76	95	170	100	99	0	7	0	17	0	0
KAHULUI	48	80.8	63.4	86.4	70.1	75.2	2	93	54	----	----	3.14	0.18	16.33	9.46	0.00	5.82	0.0	0.0	0.0	--	83	62	--	70	52	12.7	18.1	34	67	75	102	176	87	92	0	5	0	11	0	0
LIHUE	103	78.2	63.5	83.1	72.0	74.5	16	90	51	----	----	5.51	1.46	43.00	18.45	0.30	11.20	0.0	0.0	0.0	84	84	67	80	75	65	10.4	12.8	73	52	62	56	167	142	205	0	9	0	*	0	0
IDAHO							74	118	-60							0.00	7.17																								
BOISE	2838	36.1	22.1	91.4	59.0	51.0	27	111	-17	1113	5809	1.33	0.16	11.43	4.00	0.00	2.24	8.2	21.5	13.0	82	75	72	53	34	22	8.6	8.5	61	42	89	124	91	150	91	8	16	20	41	128	2
IDAHO FALLS 42NW 66R	4790	26.5	0.2	89.0	49.2	41.7	16	103	-43	1600	8760	1.24	0.33	7.02	5.04	0.00	1.78	---	---	---	--	--	--	--	--	--	4.7	8.0	50	---	---	---	---	---	66	--	--	--	30	219	41
IDAHO FALLS 46W R	4932	27.5	3.2	87.9	50.1	42.4	17	101	-40	1538	8475	1.10	0.26	7.57	4.42	0.00	1.73	6.4	26.7	8.5	--	--	--	--	--	--	5.6	7.9	51	---	---	---	---	---	68	10	13	14	25	212	33
LEWISTON	1413	37.7	23.7	89.8	57.8	51.6	20	115	-22	1063	5542	1.73	0.43	13.24	4.80	T	1.73	7.6	18.5	12.8	80	75	72	61	36	24	---	---	---	---	---	94	78	193	102	6	16	21	36	98	3
POCATELLO	4454	31.6	13.0	89.6	55.1	47.0	3	100	-19	1324	7033	1.21	0.51	10.85	3.30	0.00	1.30	10.9	36.6	10.1	79	74	70	60	32	23	10.7	9.8	72	37	84	114	97	154	89	12	25	15	30	183	12
SALMON 1960	3949	28.2	4.1	89.6	46.8	44.0	48	---	---	1513	7922	1.28	0.42	8.64	3.88	0.00	1.50	---	---	---	--	--	--	--	--	--	---	---	---	---	---	---	---	---	---	--	--	--	--	---	---
ILLINOIS							77	117	-35							0.00	16.17																								
CAIRO U	314	44.6	30.2	90.3	71.8	59.6	24	104	- 5	856	3821	4.79	2.88	45.23	14.95	T	7.56	2.8	8.9	7.3	80	67	--	84	59	--	9.8	6.5	60	46	76	114	100	151	114	3	53	7	52	65	*
CHICAGO MIDWAY	607	33.0	19.0	84.1	67.1	50.8	3	98	-16	1209	6155	4.07	1.60	33.18	14.17	0.20	6.24	8.5	37.3	12.5	70	63	66	76	54	55	11.3	8.0	60	44	70	95	103	167	119	11	36	14	22	122	6
MOLINE	582	31.6	13.6	88.0	63.2	50.1	7	100	-26	1314	6408	4.37	1.35	32.79	11.00	0.01	6.29	7.0	27.3	9.6	75	65	69	85	57	59	10.4	7.4	77	48	72	103	99	163	110	9	47	20	24	137	19
PEORIA	652	33.7	17.6	87.0	65.0	51.4	7	102	-20	1218	6025	4.27	1.71	34.84	13.09	0.03	5.06	5.1	22.6	9.0	77	68	70	86	59	59	11.2	8.2	75	45	69	103	99	163	108	8	48	20	19	134	13
ROCKFORD	724	30.2	13.7	86.3	62.1	48.6	3	99	-20	1333	6830	4.30	1.44	35.62	11.81	0.01	5.56	8.8	33.4	10.9	76	66	72	85	55	56	9.6	8.0	---	---	---	96	105	164	111	11	41	24	14	146	13
SPRINGFIELD	588	36.3	20.5	89.6	66.4	53.6	7	106	-22	1135	5429	4.45	1.82	34.83	9.91	0.15	5.12	4.1	21.0	10.3	77	67	70	84	57	58	13.1	8.5	75	43	73	111	93	161	111	7	50	17	29	123	10
INDIANA							80	116	-35							0.00	10.50																								
EVANSVILLE	381	42.7	25.6	90.3	67.2	57.0	6	104	-18	955	4435	4.31	2.57	41.45	13.50	0.01	6.05	3.4	11.8	10.6	79	65	69	87	55	57	9.6	6.5	59	42	76	104	100	161	114	4	47	14	48	112	6
FORT WAYNE	791	34.4	19.6	85.1	63.2	50.3	6	101	-18	1178	6205	4.17	2.09	35.31	9.72	0.14	4.60	6.6	30.1	13.6	80	71	75	83	54	56	11.3	8.0	65	40	71	81	108	176	129	9	43	20	16	134	13
INDIANAPOLIS	793	37.1	21.0	86.0	64.3	52.1	8	99	-18	1113	5699	4.62	2.28	39.25	12.69	0.17	3.90	4.5	19.9	12.5	79	67	70	87	60	62	11.5	7.5	90	41	72	94	98	173	121	7	45	21	18	123	10
SOUTH BEND	773	33.0	18.1	84.5	62.6	49.4	3	97	-13	1221	6439	3.62	1.88	35.70	9.75	0.02	3.70	14.7	62.0	15.0	76	68	70	80	53	55	12.0	8.3	---	---	---	73	109	183	138	21	43	23	15	130	5
IOWA							94	118	-47							0.00	12.99																								
BURLINGTON	703	32.7	16.1	87.6	65.6	51.2	69	111	-27	1259	6114	5.01	1.39	34.60	15.10	0.06	6.28	7.1	25.9	13.0	80	69	74	85	57	59	11.2	8.0	73	53	77	103	105	157	104	9	53	18	33	128	11
DES MOINES	938	28.5	11.3	87.3	65.2	49.2	6	100	-23	1398	6808	4.71	1.10	30.37	14.19	0.03	5.50	8.5	32.7	19.8	79	71	72	84	60	59	11.8	9.2	76	51	71	102	100	163	105	11	50	18	18	140	21
DUBUQUE	1056	27.3	11.1	83.7	61.5	46.6	14	99	-26	1420	7376	4.22	1.40	35.71	15.46	T	6.28	9.1	42.1	15.5	81	70	76	85	58	62	---	---	---	---	---	95	99	171	109	14	45	28	8	154	19
SIOUX CITY	1095	27.9	9.5	89.5	65.2	49.1	7	104	-26	1435	6951	4.33	0.74	24.77	9.69	T	4.28	6.2	32.3	11.4	77	67	70	88	61	57	11.0	9.0	91	59	75	108	104	153	98	11	47	19	18	150	26
WATERLOO	868	26.8	8.9	85.7	61.8	47.2	7	99	-34	1460	7320	4.83	0.92	31.48	11.38	T	5.28	7.1	30.6	12.2	80	71	75	88	61	63	10.6	8.1	---	---	---	100	102	163	91	9	41	23	14	157	29

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F) Normal (1931-1960) January Daily maximum	Temperature (°F) Normal (1931-1960) January Daily minimum	Temperature (°F) Normal (1931-1960) July Daily maximum	Temperature (°F) Normal (1931-1960) July Daily minimum	Temperature (°F) Normal (1931-1960) Annual	Temperature (°F) Extremes Length, yrs	Temperature (°F) Extremes Record highest	Temperature (°F) Extremes Record lowest	Normal degree days (1931-1960) January	Normal degree days (1931-1960) Seasonal	Precipitation (inches) Normal (1931-1960) Wettest month	Precipitation (inches) Normal (1931-1960) Driest month	Precipitation (inches) Normal (1931-1960) Annual	Precipitation (inches) Extremes Wettest month	Precipitation (inches) Extremes Driest month	Precipitation (inches) Extremes Maximum in 24 hours	Snow, sleet Mean total January	Snow, sleet Mean total Seasonal	Snow, sleet Extreme Maximum in 24 hours	Relative humidity (percent) January 7:00 a m EST	Relative humidity (percent) January 1 00 p m EST	Relative humidity (percent) January 7 00p m EST	Relative humidity (percent) July 7.00 a m EST	Relative humidity (percent) July 1 00 p m EST	Relative humidity (percent) July 7:00 p m EST	Wind Speed (m p h) Mean speed January	Wind Speed (m p h) Mean speed July	Wind Speed (m p h) Fastest mile	Sunshine (percent of possible) January	Sunshine (percent of possible) July	Annual mean number of days Sunrise to sunset Clear	Annual mean number of days Sunrise to sunset Partly cloudy	Annual mean number of days Sunrise to sunset Cloudy	Annual mean number of days Precipitation 01 inch or more	Annual mean number of days Snow, sleet, hail 1 0 inch or more	Annual mean number of days Thunderstorms	Annual mean number of days Heavy fog	Annual mean number of days Temperature Max 90 and above	Annual mean number of days Temperature Min 32 and below	Annual mean number of days Temperature Min Zero and below
KANSAS							80	121	-40							0.00	12.59																								
CONCORDIA U 1961	1375	37.6	18.6	91.2	68.7	54.5	77	116	-25	1144	5323	4.23	0.59	25.40	13.74	T	6.46	4.5	21.4	17.2	78	63	68	67	47	48	7.7	7.0	65	60	78	142	126	97	86	7	45	10	48	118	6
CONCORDIA	1470	37.3	17.6	92.1	68.4	54.1	5	108	-13	1163	5479	4.20	0.70	25.39	8.51	0.03	3.01	3.0	18.3	13.2	79	62	63	79	50	46	12.1	11.9	63	63	75	141	92	132	82	5	65	19	52	130	8
DODGE CITY	2582	42.4	19.7	92.8	67.5	55.4	3	107	-10	1051	4986	3.03	0.47	19.25	9.13	T	4.17	4.2	18.4	9.3	75	54	54	75	43	37	14.2	13.4	78	69	78	143	103	119	76	6	54	23	66	126	4
GOODLAND	3645	40.9	13.9	91.8	61.3	50.8	45	111	-26	1166	6140	2.67	0.39	16.50	8.09	0.00	2.95	5.7	32.9	15.2	76	53	60	78	45	41	12.3	12.0	---	---	---	143	124	98	75	11	52	29	58	157	8
TOPEKA	876	38.5	19.0	91.6	68.1	54.9	2	105	- 9	1122	5182	4.51	1.02	32.36	12.02	T	4.66	5.5	20.5	9.3	77	62	64	81	60	58	10.9	9.5	81	54	67	116	99	150	93	6	60	14	29	129	4
WICHITA	1321	41.6	22.3	92.4	69.4	57.1	14	113	-12	1023	4620	4.21	0.81	28.41	10.46	T	4.98	4.7	14.7	13.0	80	63	65	80	51	46	12.8	11.4	66	60	74	127	100	138	82	4	56	17	65	112	2
KENTUCKY							78	114	-34							0.00	10.40																								
LEXINGTON	966	42.9	26.1	88.2	66.5	55.6	3	98	-10	946	4683	4.94	2.28	44.73	16.65	0.24	5.88	5.7	15.0	9.5	77	66	67	83	56	60	12.2	7.7	---	---	---	100	105	160	128	5	48	18	24	101	3
LOUISVILLE	477	43.5	26.5	88.5	66.6	55.7	6	101	-20	930	4660	4.59	2.25	41.32	14.91	0.23	6.97	5.4	17.1	13.0	78	64	64	89	59	60	9.7	6.6	61	40	67	99	104	162	121	5	45	10	28	98	3
LOUISIANA							76	114	-16							0.00	22.00																								
ALEXANDRIA	92	60.7	39.9	91.8	72.6	66.4	7	104	5	471	1921	5.73	3.13	56.69	12.06	0.29	6.18	0.2	0.3	7.3	87	65	71	96	62	70	6.9	4.6	---	---	---	108	109	148	101	*	68	40	76	47	0
BATON ROUGE	64	63.5	42.3	92.0	73.4	68.1	8	102	10	409	1560	6.27	2.45	54.46	14.51	0.09	8.38	T	0.1	1.0	85	65	68	91	63	71	9.7	6.1	---	---	---	98	119	148	105	*	72	37	83	27	0
LAKE CHARLES	9	62.3	45.0	90.5	74.0	68.6	2	98	22	381	1459	7.29	3.06	56.04	17.36	T	14.10	T	T	T	88	69	77	91	59	67	11.1	6.5	---	---	---	93	129	143	88	0	67	52	79	13	0
NEW ORLEANS U 1961	9	63.5	48.3	90.3	75.8	70.4	47	102	17	341	1175	7.09	3.66	63.54	25.11	T	14.01	T	0.1	1.3	+85	+67	+73	+84	+63	+71	7.5	5.6	98	49	61	110	135	120	119	*	74	15	68	4	0
NEW ORLEANS AUDUBON	6	64.8	46.2	91.4	73.7	69.5	3	97	17	344	1254	8.12	3.15	62.96	10.15	0.00	4.03	0.9	2.3	4.5	80	68	72	96	72	80	5.4	3.2	26	37	47	99	129	137	115	1	79	18	84	14	0
NEW ORLEANS INTL AP	3	64.4	44.8	90.6	72.6	68.6	20	100	14	363	1385	6.72	2.84	53.90	19.09	0.00	9.86	T	0.2	2.7	87	67	74	91	66	74	9.7	6.4	---	---	---	111	124	130	112	*	72	32	70	11	0
SHREVEPORT	252	56.7	38.3	94.2	73.2	66.1	14	107	3	552	2184	4.94	2.28	46.28	12.39	0.00	7.17	0.5	1.5	4.0	83	63	64	90	55	56	10.8	8.3	---	52	76	125	99	141	94	1	54	21	94	33	0
MAINE							79	105	-48							0.00	7.72																								
CARIBOU	624	19.8	1.1	75.1	53.9	38.4	27	96	-41	1690	9767	4.07	2.02	36.31	8.45	0.12	6.23	22.4	107.1	18.2	74	68	73	83	58	71	12.4	9.8	---	---	---	57	102	206	160	30	20	27	2	191	42
PORTLAND	47	31.8	11.7	79.5	56.7	45.0	26	100	-39	1339	7511	4.37	2.42	42.85	12.27	0.26	7.71	19.6	71.2	21.0	79	64	73	80	58	75	9.5	7.7	76	55	66	111	97	157	126	18	19	53	5	162	15
MARYLAND							71	109	-40							0.00	14.75																								
BALTIMORE U 1964	14	44.1	30.4	87.4	70.7	57.6	94	107	- 7	859	4111	4.60	2.98	44.21	17.69	0.05	7.82	6.1	22.7	24.5	72	58	66	71	52	65	10.3	8.8	66	48	65	121	123	121	122	6	32	15	26	71	*
BALTIMORE INTL AP	148	44.2	25.3	87.2	66.4	55.2	16	102	- 7	936	4654	5.19	2.89	43.05	18.35	T	7.82	6.6	25.2	15.5	73	57	64	80	52	63	10.4	8.8	80	52	67	111	111	143	112	9	27	30	32	103	1
FREDERICK 1961	294	41.4	24.0	87.9	65.4	54.7	12	102	-11	1001	4854	4.03	2.58	40.23	11.26	0.15	5.56	5.2	22.0	16.0	--	64	--	--	57	--	---	---	---	---	---	---	---	---	123	8	--	9	28	119	1
MASSACHUSETTS							79	106	-34							0.00	11.14																								
BLUE HILL OBS	629	34.4	19.5	80.2	61.6	48.7	81	101	-21	1178	6368	4.54	3.27	47.50	18.78	0.06	9.93	16.0	60.0	27.2	77	62	69	80	57	74	17.4	13.0	92	45	57	---	---	---	135	16	--	--	6	132	4
BOSTON	15	36.8	23.0	81.9	65.4	51.4	2	97	- 4	1088	5634	4.22	2.88	42.77	17.09	0.35	8.40	13.1	41.3	19.4	71	61	67	69	50	62	14.9	11.1	65	52	66	100	106	159	128	11	20	24	10	100	1
NANTUCKET	43	39.2	26.8	74.3	61.7	49.5	18	95	- 3	992	5891	4.54	2.71	43.66	12.92	0.01	4.95	9.7	34.9	20.1	80	72	76	86	74	89	14.8	11.2	73	41	62	87	92	186	125	8	21	97	*	94	*
PITTSFIELD	1170	30.5	13.1	79.2	56.4	44.9	28	95	-25	1339	7578	4.89	2.51	44.42	10.32	0.42	4.25	19.2	76.6	17.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	152	23	--	--	3	162	14
WORCESTER	986	31.2	16.8	79.0	60.5	46.8	11	94	-19	1271	6969	4.26	2.92	45.41	8.56	0.83	4.79	19.1	77.7	24.0	73	60	67	73	55	67	13.4	9.1	---	---	---	94	108	163	129	19	20	83	2	147	7
MICHIGAN							80	112	-51							0.00	9.91																								
ALPENA U 1959	587	28.1	14.2	76.8	57.9	43.5	45	104	-28	1358	8073	3.20	1.45	26.63	7.43	0.16	4.40	16.0	64.4	16.7	80	70	76	77	61	68	11.7	9.2	61	29	70	82	119	164	144	19	29	20	3	155	10
ALPENA	689	28.9	10.4	80.4	51.4	42.1	8	98	-28	1404	8506	3.61	1.61	29.92	7.45	0.16	2.54	19.0	75.2	16.1	77	67	72	82	49	58	7.7	6.4	43	43	73	73	107	185	145	22	38	25	7	188	28
DETROIT CITY AP	619	33.0	20.7	83.9	64.8	50.1	33	105	-16	1181	6232	3.53	2.05	30.95	8.05	0.23	3.72	7.9	31.8	10.0	80	70	75	75	50	55	11.5	8.3	77	32	70	80	108	177	133	11	32	11	15	125	2
DETROIT METRO. AP	633	33.9	19.1	84.7	61.1	49.7	8	98	-13	1194	6293	3.54	1.92	30.80	7.70	0.27	3.71	7.7	37.0	10.3	77	68	72	82	51	57	11.2	8.3	---	44	66	77	110	178	130	13	34	26	13	143	7
DETROIT WILLOW RUN	711	33.4	19.8	86.0	62.4	50.0	6	99	-13	1190	6258	3.48	1.94	30.67	8.71	0.25	4.78	7.3	33.1	8.7	78	69	72	83	49	51	11.9	8.7	---	---	---	80	105	180	125	12	33	28	17	142	7
ESCANABA U 1961	594	25.0	11.0	75.3	58.4	41.9	52	100	-31	1473	8657	3.22	1.37	28.08	9.93	0.07	5.05	13.5	55.7	14.5	78	70	74	80	65	69	10.2	9.0	68	41	66	102	108	155	129	18	33	19	*	163	20
FLINT	770	31.9	17.1	83.5	58.9	47.5	3	97	-11	1256	6885	3.39	1.70	30.14	8.68	0.07	6.04	10.0	40.5	13.4	73	67	69	81	51	53	11.9	9.1	---	---	---	68	109	188	129	13	33	19	10	145	7
GRAND RAPIDS	784	31.3	16.7	84.5	60.0	47.6	3	100	-16	1271	6998	3.46	1.75	31.19	7.81	0.60	2.66	22.9	83.4	12.1	83	72	78	82	51	53	11.6	8.2	58	40	67	71	108	186	137	25	37	28	15	149	6
HOUGHTON LAKE	1149	----	----	----	----	44.4	2	96	-18	----	----	----	----	----	5.76	0.40	1.81	23.0	80.4	9.2	83	72	79	81	49	50	10.1	7.2	---	---	---	76	90	199	148	24	37	31	6	180	21
LANSING	841	31.1	17.4	83.4	59.9	47.6	3	100	-19	1262	6909	3.73	1.95	31.18	7.63	0.35	4.35	9.4	45.2	11.0	86	77	82	80	49	53	12.5	8.8	63	34	72	84	103	178	137	14	33	23	17	157	11
MARQUETTE U	677	25.7	13.2	75.7	57.6	42.6	30	102	-21	1411	8393	3.46	1.65	31.61	10.20	0.21	4.65	19.1	103.8	16.1	75	68	72	76	63	66	8.9	7.1	59	33	67	62	100	203	156	31	28	17	5	160	11
MUSKEGON	627	32.3	19.7	81.9	60.6	48.2	7	99	-12	1209	6696	3.06	1.80	30.07	8.54	0.19	3.61	27.3	89.0	20.1	82	76	79	82	57	57	12.1	8.1	---	---	---	82	88	195	140	29	37	24	4	140	6
SAULT STE MARIE	721	23.1	8.4	75.6	53.5	40.6	26	98	-27	1525	9048	3.81	1.50	31.22	7.12	0.16	3.58	23.1	103.2	14.3	84	77	82	88	61	67	10.3	8.5	---	34	63	65	93	207	163	34	30	47	2	178	27
MINNESOTA							80	114	-59							0.00	10.75																								
DULUTH U 1959	1162	18.7	1.9	75.8	55.8	39.2	84	106	-41	1696	9574	3.72	1.00	26.67	11.52	0.07	5.35	11.1	56.0	23.0	78	74	74	87	61	66	12.3	10.5	75	46	67	110	119	136	126	16	31	27	2	173	41
DULUTH	1428	17.9+	0.6	77.1	53.9	37.9	6	95	-38	1745	10000	4.27	0.96	28.97	8.48	0.13	4.05	14.4	75.5	25.4	72	63	64	85	59	60	12.4	10.1	75	52	67	78	102	185	133	22	34	53	1	186	54
INTERNATIONAL FALLS	1179	14.2+	8.1	78.4	52.8	36.2	27	98	-44	1919	10606	3.87	0.71	24.69	11.26	0.10	4.87	9.5	58.3	17.0	73	68	70	88	57	58	9.3	7.8	---	---	---	80	106	179	134	18	30	14	4	198	67
MINNEAPOLIS	834	22.4	2.3	83.9	60.7	43.7	7	99	-32	1631	8382	4.00	0.70	24.78	8.03	T	4.12	6.5	42.5	16.2	75	67	68	85	56	56	10.4	9.3	92	51	69	102	102	161	112	13	36	22	15	161	26
ROCHESTER	1297	23.0	4.2	84.0	60.5	44.0	7	97	-31	1593	8295	4.46	0.80	28.46	6.26	0.04	3.28	7.3	44.6	11.3	77	72	74	86	61	61	13.4	9.7	---	---	---	95	97	173	114	13	46	39	7	164	35
ST CLOUD	1034	20.4+	0.2	83.1	58.9	42.0	27	103	-40	1702	8879	4.49	0.72	25.92	9.34	0.01	4.62	6.6	42.2	14.5	76	69	71	87	55	56	8.2	7.0	---	---	---	96	104	165	107	13	36	20	11	178	44
MISSISSIPPI							78	115	-19							0.00	12.35																								
JACKSON	310	58.3	37.4	92.9	71.7	65.5	3	101	7	547	2203	5.74	2.04	50.82	11.88	0.00	6.97	0.5	0.5	1.8	83	61	68	91	57	64	9.9	6.5	45	49	67	104	113	148	110	*	59	28	91	46	0
MERIDIAN	290	59.4	36.8	92.6	70.3	64.8	2	102	6	543	2289	6.32	2.22	53.13	16.82	T	6.95	0.6	1.7	15.0	89	63	70	94	59	66	7.6	5.3	---	---	---	121	110	134	103	*	58	22	65	60	0
VICKSBURG U 1966	234	57.4	40.5	90.4	73.2	65.9	29	101	2	512	2041	5.73	2.04	49.50	16.58	T	9.97	0.9	1.6	10.0	83	62	70	93	62	71	9.3	6.7	56	45	67	111	114	140	105	1	62	12	65	23	0
MISSOURI							79	118	-40							0.00	18.18																								
COLUMBIA	778	39.3	21.3	89.7	67.6	55.0	28	113	-18	1076	5046	4.70	1.71	36.96	13.30	0.09	4.05	4.4	20.0	10.3	79	65	68	85	55	56	11.1	8.0	63	51	74	116	99	150	106	7	54	15	41	109	4
KANSAS CITY	742	39.9	23.4	91.9	71.0	56.8	7	104	- 9	1032	4711	4.57	1.24	34.07	11.94	0.04	5.96	5.8	20.4	12.8	72	58	58	79	59	55	9.9	8.9	72	53	76	118	106	141	99	6	50	12	40	98	4
SAINT JOSEPH	811	37.2	17.1	91.0	67.8	53.8	3	101	-13	1172	5484	5.93	1.09	34.18	13.73	0.01	7.12	5.7	20.5	11.3	75	62	65	85	65	62	11.2	8.1	---	46	62	129	97	140	95	6	58	18	38	127	4
ST. LOUIS U 1958	465	41.0	25.6	89.6	71.6	57.3	23	112	-12	983	4469	4.10	1.88	37.86	20.45	0.03	8.78	3.8	14.6	12.4	b77	b65	b68	b73	b50	b55	12.6	9.5	82	45	72	129	106	131	110	6	51	8	46	83	2
ST LOUIS	535	40.2	23.5	89.2	66.9	55.3	6	106	-11	1026	4900	4.29	1.97	35.31	7.97	0.25	3.29	4.4	17.5	11.2	77	60	64	84	57	55	10.2	7.6	60	51	71	107	102	156	102	7	42	9	35	108	5
SPRINGFIELD	1268	43.4	23.8	92.3	67.2	56.5	7	102	-10	973	4561	5.28	1.96	41.08	18.75	0.08	6.85	2.9	12.8	12.5	77	57	62	88	60	60	12.7	9.6	66	50	71	113	102	150	106	5	59	12	38	105	4

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F)								Normal degree days (1931-1960)		Precipitation (inches)									Relative humidity (percent)						Wind Speed (m p h)			Sunshine (percent of possible)		Annual mean number of days									
		Normal (1931-1960)					Extremes					Normal (1931-1960)			Extremes			Snow, sleet														Sunrise to sunset							Temperature		
		January		July														Mean total		Ex-treme	January			July			Mean speed												Max	Min	
		Daily maximum	Daily minimum	Daily maximum	Daily minimum	Annual	Length, yrs	Record highest	Record lowest	January	Seasonal	Wettest month	Driest month	Annual	Wettest month	Driest month	Maximum in 24 hours	January	Seasonal	Maximum in 24 hours	7:00 a m EST	1:00 p m EST	7:00 p m EST	7:00 a m EST	1:00 p m EST	7:00 p m EST	January	July	Fastest mile	January	July	Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	90 and above	32 and below	Zero and below
MONTANA							100	117	-70							0.00	10.10																								
BILLINGS	3567	33.2	13.1	88.5	60.8	47.5	8	105	-26	1296	7049	2.55	0.54	13.23	7.64	T	2.83	8.1	54.7	23.7	65	61	56	62	39	29	12.9	9.8	73	52	79	90	121	154	93	19	30	18	30	148	19
BUTTE 1961	5530	28.0	0.4	79.8	45.0	38.3	29	100	-52	1575	9760	2.28	0.55	12.69	5.40	T	2.02	7.1	51.0	13.0	--	--	--	--	--	--	6.9	8.0	---	---	---	79	107	179	105	19	41	6	4	228	43
GLASGOW	2284	19.6	-0.1	85.3	56.1	41.4	2	100	-29	1711	8996	2.98	0.41	12.27	5.36	T	3.98	4.9	23.2	5.0	70	69	69	79	51	40	---	---	---	---	---	86	107	172	83	8	28	11	17	181	60
GREAT FALLS	3662	31.6	12.5	84.7	54.1	44.7	6	106	-36	1349	7750	2.90	0.60	14.07	8.13	T	3.20	8.9	54.4	11.0	68	63	63	69	39	30	16.3	10.4	82	52	80	86	106	173	98	19	28	13	16	147	29
HAVRE U 1961	2852	26.3	6.1	85.9	56.6	43.6	57	107	-57	1513	8213	2.98	0.39	12.31	7.09	T	2.94	7.3	37.4	22.9	82	71	--	74	38	--	8.8	7.2	70	49	78	121	124	120	90	13	25	5	22	172	38
HAVRE	2582	24.2	3.6	85.3	54.6	42.1	6	111	-35	1584	8700	2.73	0.43	11.89	4.72	0.05	1.96	5.8	28.1	5.5	73	68	--	74	40	--	10.8	8.3	71	54	82	95	95	175	86	11	24	5	24	182	44
HELENA	3828	28.8	8.4	84.4	52.3	43.4	3	100	-38	1438	8129	2.23	0.43	10.85	4.74	0.02	2.06	7.8	47.2	21.5	71	66	66	67	39	28	6.8	7.9	73	51	79	84	107	174	97	14	37	8	18	188	15
KALISPELL	2965	27.6	12.0	83.7	47.6	42.8	7	105	-29	1401	8191	2.21	0.96	15.42	4.72	T	1.99	19.2	67.2	15.4	89	84	85	85	43	38	6.8	6.7	---	---	---	75	83	207	132	22	24	34	14	195	17
MILES CITY	2629	27.4	5.6	90.2	60.4	45.8	29	110	-37	1504	7723	2.71	0.37	12.17	9.78	T	2.71	6.3	29.6	10.5	75	70	69	70	38	30	8.9	9.5	---	---	---	101	108	156	89	13	30	10	39	172	33
MISSOULA	3190	28.0	10.3	85.0	49.0	43.2	7	105	-30	1420	8125	1.91	0.72	12.83	4.19	0.02	1.82	12.8	48.5	11.2	85	83	78	80	45	32	5.0	6.7	72	30	80	75	83	207	123	16	26	28	19	195	11
NEBRASKA							91	118	-47							0.00	13.15																								
GRAND ISLAND	1841	34.1	11.0	90.7	63.7	50.1	6	106	-28	1314	6530	3.85	0.56	21.85	9.60	0.00	5.41	5.8	28.0	9.1	77	61	63	86	54	50	11.5	11.0	---	---	---	125	101	139	87	9	51	17	39	151	20
LINCOLN U	1150	34.0	16.2	92.3	67.9	52.8	6	107	-15	1237	5864	4.50	0.90	27.43	11.40	0.05	5.38	6.1	28.7	19.0	--	--	--	--	--	--	9.8	9.4	64	62	75	115	105	145	97	8	49	8	26	130	10
NORFOLK	1544	30.1	8.6	89.2	64.7	48.9	21	113	-26	1414	6979	4.26	0.73	23.95	9.11	T	3.46	5.5	28.9	9.7	76	63	68	84	54	51	---	---	---	---	---	119	101	145	88	10	50	11	34	157	21
NORTH PLATTE	2775	37.3	10.7	90.0	62.2	49.2	2	100	-18	1271	6684	3.25	0.40	18.27	8.01	T	3.80	5.1	32.4	9.7	81	64	62	89	61	55	9.6	10.1	72	61	75	122	109	134	85	11	52	18	23	174	26
OMAHA	977	31.7	12.9	89.7	67.3	51.5	3	107	-17	1324	6218	4.53	0.80	27.56	13.75	T	6.47	8.1	32.5	18.3	76	63	65	82	60	61	11.2	9.3	73	56	76	115	107	143	97	9	50	15	30	137	11
SCOTTSBLUFF	3957	38.7	11.9	89.2	60.1	48.7	2	101	-25	1231	6673	3.10	0.29	14.38	8.33	T	3.74	6.0	36.5	12.1	78	59	57	85	48	44	10.4	9.7	---	---	---	122	109	134	83	12	45	10	34	171	18
VALENTINE	2587	33.3	6.7	90.6	60.2	46.9	12	109	-29	1395	7425	3.11	0.34	17.30	8.96	T	3.19	3.6	22.8	8.2	81	68	66	84	50	42	10.1	10.1	72	69	77	121	108	136	77	8	45	5	39	178	26
NEVADA							78	122	-50							0.00	7.13																								
ELKO	5050	35.1	10.0	90.8	48.3	45.4	2	100	-14	1314	7433	1.16	0.30	9.05	3.35	0.00	1.62	10.5	37.7	16.7	82	72	63	54	26	20	5.6	6.4	---	---	---	134	98	133	77	14	21	6	41	207	21
ELY	6253	36.8	8.7	86.8	48.1	44.3	28	99	-27	1308	7733	0.95	0.49	8.33	3.53	0.00	1.50	8.6	45.0	13.1	71	59	55	48	22	20	10.8	10.7	74	64	81	136	105	124	69	14	31	2	15	217	20
LAS VEGAS	2162	54.2	32.0	103.5	75.8	65.7	7	113	8	688	2709	0.53	0.04	3.90	2.59	0.00	2.59	1.1	1.4	5.0	50	35	25	26	16	12	6.9	10.1	54	78	86	220	79	66	23	1	14	1	135	44	0
RENO	4404	44.6	16.2	89.4	45.9	48.4	3	101	- 4	1073	6332	1.19	0.17	7.15	5.25	0.00	2.37	6.0	23.9	16.9	79	69	53	67	29	19	6.1	6.6	59	66	92	168	92	105	47	8	13	9	41	189	1
WINNEMUCCA	4299	39.7	14.7	92.0	49.9	47.4	17	105	-24	1172	6761	1.05	0.15	8.63	2.86	0.00	1.79	6.4	23.9	9.9	78	66	58	44	21	14	7.7	8.3	66	45	85	141	87	137	66	9	14	4	50	194	8
NEW HAMPSHIRE							90	106	‡-46							0.00	8.00																								
CONCORD	342	31.7	10.6	82.8	56.4	45.6	23	100	-37	1358	7383	3.75	2.48	38.80	10.10	0.41	4.47	18.4	60.8	19.0	78	59	70	80	50	67	7.4	5.6	72	49	62	99	107	159	124	17	22	53	13	169	18
MT WASHINGTON OBS	6262	14.7	-2.2	54.9	43.3	27.0	34	71	-47	1820	13817	7.00	5.21	74.09	18.23	0.75	7.03	30.6	201.1	32.0	83	83	82	91	87	90	46.5	25.1	231	33	31	52	78	235	204	60	16	308	0	243	64
NEW JERSEY							82	110	-34							0.00	14.81																								
ATLANTIC CITY U 1958	8	42.4	29.1	79.3	67.9	54.1	85	104	- 9	905	4741	4.72	2.98	41.77	14.87	0.01	9.21	4.2	14.6	18.0	79	68	74	81	72	82	16.2	13.3	91	51	67	118	122	125	122	5	23	21	3	75	*
ATLANTIC CITY/NAFEXP	64	42.9	26.6	83.8	66.3	54.1	2	104	- 8	936	4812	4.90	2.83	42.36	13.09	0.10	6.46	5.5	16.1	14.4	74	58	69	82	51	70	13.0	9.5	---	58	65	105	104	156	112	4	24	44	22	120	3
NEWARK	7	39.5	25.0	86.1	66.5	53.7	23	105	- 7	1014	5067	4.43	2.80	42.38	11.84	0.21	4.71	7.6	29.7	26.0	72	58	64	74	51	63	11.4	8.9	---	---	---	99	114	152	122	8	25	22	25	94	*
TRENTON U	56	40.0	26.2	85.2	66.7	53.9	34	106	-14	989	4980	4.77	2.59	41.28	14.10	0.05	4.85	5.8	23.3	16.6	--	--	--	--	--	--	9.8	7.8	64	51	67	101	116	148	121	7	33	--	18	90	*
NEW MEXICO							75	116	-50							0.00	11.28																								
ALBUQUERQUE	5311	46.4	23.5	91.2	65.8	56.6	7	103	- 7	930	4348	1.33	0.38	8.13	3.25	0.00	1.92	2.1	9.9	14.2	67	49	38	61	36	28	7.8	8.9	90	72	76	175	112	78	58	4	43	4	63	117	1
CLAYTON	4969	46.2	20.2	88.4	60.6	53.1	22	102	-21	986	5158	2.74	0.33	14.51	7.77	0.00	4.67	3.5	18.4	12.7	63	42	48	76	41	41	---	---	---	---	---	168	97	100	66	6	54	11	39	142	3
RATON	6379	45.3	12.6	86.6	52.9	48.9	22	98	-31	1116	6228	2.63	0.26	14.75	11.93	0.00	5.60	4.8	24.2	10.1	--	45	--	--	38	--	---	---	---	---	---	136	130	99	78	9	75	8	17	182	9
ROSWELL	3617	55.1	20.6	95.4	61.7	58.5	7	107	-24	840	3793	1.82	0.34	11.62	5.64	0.00	3.37	3.2	10.1	15.3	71	47	39	70	38	33	8.5	9.5	75	85	78	183	100	82	49	4	40	9	108	128	3
SILVER CITY	5373	52.6	26.4	90.3	63.9	58.2	6	102	- 9	791	3705	2.40	0.28	10.76	4.47	0.00	2.08	3.0	7.5	6.0	--	43	39	--	36	36	---	---	---	---	---	196	103	66	61	3	54	1	46	107	*
NEW YORK							77	108	-52							0.00	11.17																								
ALBANY	275	31.0	14.4	83.7	60.5	47.6	18	100	-26	1311	6875	3.58	2.20	35.08	8.96	0.20	4.08	17.1	62.8	18.3	78	65	73	77	50	62	9.8	7.3	71	45	64	75	110	180	132	15	28	23	13	146	12
BINGHAMTON	1590	30.1	17.4	78.3	58.5	45.8	15	96	-20	1277	7286	3.85	2.18	36.24	9.46	0.26	3.88	22.2	89.2	23.0	82	74	76	84	55	64	12.1	8.6	72	35	68	51	101	213	161	25	31	50	3	150	8
BINGHAMPTON U	858	34.2	18.9	83.1	60.4	48.8	76	103	-28	1190	6451	3.81	2.38	36.68	9.59	0.16	4.55	12.9	52.0	21.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	151	15	--	--	9	133	7
BUFFALO	705	30.8	18.2	80.1	59.4	46.7	6	94	-20	1256	7062	3.60	2.54	35.65	9.13	0.11	3.88	26.8	97.8	19.9	75	72	75	79	55	62	14.7	10.8	91	33	70	61	107	197	167	28	29	21	4	140	5
NEW YORK U 1960	10	39.9	25.8	82.3	66.9	53.4	90	102	-14	995	5050	4.34	3.04	42.03	14.51	0.11	9.40	7.3	30.1	25.8	72	a62	66	76	a58	67	16.4	14.5	113	51	65	104	131	130	124	8	30	20	7	91	*
NEW YORK CENTRAL PK	132	39.5	26.9	85.3	68.2	54.5	98	106	-15	986	4871	4.44	2.84	42.37	16.85	0.02	11.17	7.8	29.7	26.4	68	60	61	75	55	63	11.0	7.8	70	50	66	107	125	133	121	8	16	--	17	81	1
NEW YORK J F KENDY	13	38.0	25.6	84.7	67.1	53.2	6	104	- 2	1029	5219	4.97	2.93	43.93	17.41	T	6.59	8.9	28.5	18.0	70	58	65	72	54	69	13.7	10.8	---	---	---	99	120	146	118	8	25	31	10	91	*
NEW YORK LA GUARDIA	11	39.6	27.5	84.8	68.8	54.7	5	107	- 2	973	4811	5.08	3.09	44.22	16.05	0.03	7.11	7.2	29.8	22.8	65	58	59	69	48	57	14.6	10.5	70	---	---	96	117	152	120	8	23	14	18	72	*
ROCHESTER	547	32.6	17.8	82.5	60.7	48.0	3	98	- 8	1234	6748	3.01	2.38	31.50	9.70	0.22	3.13	21.1	82.4	18.7	74	67	72	75	45	52	11.7	8.0	73	36	71	67	111	187	153	25	29	13	13	138	5
SYRACUSE	410	31.5	16.5	82.4	62.0	48.0	3	97	-26	1271	6756	3.60	2.84	37.60	8.41	0.21	4.27	28.1	109.0	24.5	78	67	76	74	49	56	10.9	8.6	63	35	68	70	101	194	168	32	28	9	11	145	9
NORTH CAROLINA							80	109	-26							0.00	22.22																								
ASHEVILLE U 1964	2203	49.0	30.4	85.0	63.7	56.5	34	99	- 7	784	4042	4.31	2.22	37.88	13.75	T	6.78	2.5	12.2	15.8	81	59	66	89	57	70	9.4	5.6	52	48	60	105	124	136	128	3	50	47	13	84	*
ASHEVILLE	2140	47.5	27.7	83.5	61.3	54.7	2	90	- 7	849	4466	5.85	2.77	48.15	7.73	0.16	3.17	11.6	20.6	7.6	87	61	70	97	66	76	10.4	6.3	---	56	60	107	89	169	132	6	55	78	1	118	1
CAPE HATTERAS R	7	53.2	39.9	83.8	72.2	62.2	9	94	14	580	2612	6.42	2.99	54.47	14.63	0.45	8.11	0.4	1.9	7.0	80	67	77	85	70	83	12.3	10.3	72	58	71	104	104	157	121	1	44	18	2	33	0
CHARLOTTE	736	51.4	34.0	88.8	69.5	60.8	6	100	2	691	3191	4.88	2.53	43.38	10.89	T	4.84	2.3	4.7	10.2	78	54	60	89	57	66	8.2	6.6	59	56	69	116	104	145	110	2	43	24	40	72	0
GREENSBORO	897	49.6	29.8	87.7	66.9	58.2	3	100	3	784	3805	4.79	2.68	42.16	13.26	0.13	7.49	3.5	8.5	14.3	79	55	64	90	62	72	8.4	6.7	63	51	63	113	108	144	118	2	48	31	28	85	0
RALEIGH	434	51.9	31.3	88.1	67.6	59.5	2	97	3	725	3393	5.49	2.71	43.58	12.94	0.25	5.20	3.3	7.2	9.1	74	50	60	88	57	69	8.5	6.6	---	58	63	118	104	143	115	3	46	34	34	82	0
WILMINGTON	28	58.4	37.3	89.0	70.9	63.8	3	97	17	546	2347	7.68	2.85	51.29	15.51	0.17	8.24	0.3	1.4	5.3	78	53	69	83	65	75	10.1	9.0	88	58	64	118	114	133	116	1	46	21	36	41	0
WINSTON-SALEM 1964	963	49.8	31.5	88.2	67.8	59.1	10	100	1	753	3595	4.63	2.78	44.13	10.86	0.12	3.60	3.2	9.2	10.9	72	52	59	84	57	67	9.3	7.4	---	---	---	121	102	142	115	3	42	32	34	76	0
NORTH DAKOTA							75	121	-60							0.00	7.70																								
BISMARCK	1647	19.6	0.1	85.7	57.7	42.2	7	108	-39	1708	8851	3.40	0.36	15.15	8.29	T	3.25	6.6	36.5	15.5	70	64	66	82	50	45	10.1	9.8	72	55	75	96	107	162	96	12	35	12	23	186	51
DEVILS LAKE U 1961	1471	14.2	-4.7	81.7	56.9	38.7	58	112	-46	1866	9940	3.18	0.40	17.61	8.55	T	4.82	6.2	35.4	13.4	76	72	76	86	53	52	9.7	8.4	57	53	71	112	109	144	101	11	30	9	10	189	60
FARGO	896	17.3	-2.8	83.8	59.0	41.1	7	100	-35	1789	9226	3.04	0.51	18.45	8.52	0.02	4.72	5.6	32.0	11.2	70	67	69	86	55	54	13.2	10.9	88	51	69	89	112	164	102	10	34	13	16	181	57
WILLISTON U 1961	1877	19.8	0.2	83.5	58.2	41.3	46	110	-50	1705	9068	3.59	0.46	14.66	7.88	T	3.06	5.5	32.9	10.6	74	67	69	77	45	41	6.8	6.9	60	52	78	122	116	127	89	12	27	7	18	178	43
WILLISTON	1899	19.4	-2.9	85.9	56.7	40.9	5	107	-41	1758	9243	3.31	0.48	13.70	7.38	T	5.03	4.9	30.8	5.7	75	68	69	85	49	42	10.3	9.3	70	51	72	90	111	164	87	10	19	9	19	189	57

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature(°F)								Normal degree days (1931-1960)		Precipitation (inches)									Relative humidity (percent)						Wind Speed (m p h)			Sunshine (percent of possible)		Annual mean number of days									
		Normal (1931-1960)					Extremes					Normal (1931-1960)			Extremes			Snow, sleet			January			July			Mean speed					Sunrise to sunset							Temperature		
		January		July														Mean total		Ex-treme																			Max	Min	
		Daily maximum	Daily minimum	Daily maximum	Daily minimum	Annual	Length, yrs.	Record highest	Record lowest	January	Seasonal	Wettest month	Driest month	Annual	Wettest month	Driest month	Maximum in 24 hours	January	Seasonal	Maximum in 24 hours	7:00 a.m. EST	1:00 p.m. EST	7:00p.m. EST	7:00 a.m. EST	1:00 p.m. EST	7:00 p.m. EST	January	July	Fastest mile	January	July	Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	90 and above	32 and below	Zero and below
OHIO							93	113	-39							0.00	8.70																								
AKRON	1208	35.6	20.9	83.2	61.9	50.3	3	94	- 9	1138	6037	4.26	2.25	36.43	11.43	0.20	4.18	10.0	47.6	10.9	80	70	73	82	49	57	11.8	7.6	---	---	---	74	103	188	149	15	40	28	13	136	4
CINCINNATI 1961	869	39.7	23.8	85.9	64.3	53.6	17	---	---	1021	5195	4.04	2.17	39.16	----	----	----	---	---	---	82	70	74	84	52	60	---	---	---	---	---	108	115	142	---	--	--	--	--	---	---
CINCINNATI ABBE OBS.	761	41.3	26.1	87.5	66.3	55.2	51	109	-17	970	4806	4.18	2.24	39.51	13.68	0.10	4.77	5.4	19.0	11.0	--	--	--	--	--	--	8.3	5.2	49	42	71	---	---	---	132	7	50	--	29	98	2
CINCINNATI/GRT.CINAP	869	40.5	22.7	87.4	63.3	53.4	5	102	-19	1035	5265	3.89	2.26	38.02	12.18	0.18	5.21	7.2	24.3	9.3	79	65	68	85	54	58	10.7	7.2	---	---	---	84	98	183	127	7	45	18	27	116	9
CLEVELAND	777	34.8	20.3	82.8	60.2	49.2	6	98	-19	1159	6351	3.52	2.33	35.35	9.50	0.36	3.73	10.4	50.9	15.0	79	71	73	82	55	60	12.5	8.9	74	30	68	72	105	188	153	18	37	14	9	130	6
COLUMBUS	812	37.8	22.0	86.6	62.9	52.0	7	98	-15	1088	5660	4.16	2.11	36.67	9.75	0.11	4.81	7.0	27.8	8.7	76	66	69	84	54	58	10.0	6.4	63	39	69	80	106	179	135	9	42	19	19	126	6
DAYTON	1002	36.9	22.2	85.3	65.1	52.3	3	100	-12	1097	5622	4.10	2.23	36.04	10.89	0.10	4.30	6.7	27.0	10.0	74	64	68	78	51	54	12.1	8.1	78	41	70	81	107	177	128	8	42	22	23	117	4
MANSFIELD	1295	34.8	19.8	82.6	60.8	49.1	5	95	-20	1169	6403	4.23	2.27	38.16	7.04	0.43	2.79	9.1	42.0	8.0	82	74	--	83	55	--	---	---	---	---	---	73	106	186	135	14	38	27	5	135	10
SANDUSKY U 1961	603	35.7	21.8	83.7	65.5	51.3	34	105	-12	1122	5859	3.73	1.92	33.16	12.51	0.19	5.95	6.2	26.9	12.3	--	--	--	--	--	--	10.1	6.9	75	35	75	93	115	157	137	10	37	8	19	111	2
TOLEDO	676	34.1	18.4	85.1	60.2	49.0	11	98	-17	1200	6494	3.79	1.88	30.50	8.47	0.27	2.50	8.5	36.0	9.8	80	70	74	86	53	59	10.7	7.6	72	45	71	78	109	178	130	11	40	19	16	144	8
YOUNGSTOWN	1178	34.4	20.2	81.7	59.3	48.8	23	100	-18	1169	6417	4.32	2.50	39.27	9.87	0.27	4.31	12.9	57.4	20.7	82	73	78	83	53	63	11.8	8.0	---	---	---	72	101	192	161	19	36	29	9	136	5
OKLAHOMA							75	120	-27							0.00	19.75																								
OKLAHOMA CITY	1285	45.9	28.1	92.8	72.2	60.3	11	107	- 4	868	3725	5.19	1.31	30.82	10.78	T	4.82	3.4	8.9	8.4	80	62	62	84	54	49	14.3	11.9	87	60	76	146	95	124	82	3	51	18	70	85	1
TULSA	650	45.9	26.5	92.9	71.4	59.7	7	110	- 3	893	3860	5.26	1.62	37.08	18.00	T	7.54	3.6	9.2	9.0	78	57	56	81	54	50	11.3	9.3	75	53	70	127	102	136	90	4	54	9	77	90	1
OREGON							77	119	-54							0.00	31.10																								
ASTORIA	8	46.5	34.8	68.6	52.5	50.8	13	100	14	753	5186	13.65	1.27	80.44	21.89	0.01	4.32	2.0	5.9	7.2	87	85	79	91	75	69	8.9	8.4	---	---	---	50	71	244	199	2	8	43	1	36	0
BURNS U	4151	35.2	14.3	86.8	52.1	46.7	16	103	-26	1246	6957	1.62	0.29	10.96	5.47	0.00	2.15	16.0	48.6	10.9	83	76	68	54	34	21	6.2	7.5	---	---	---	129	85	151	92	17	14	12	20	184	5
EUGENE	359	45.3	32.8	82.2	51.0	52.5	3	99	10	803	4726	6.61	0.27	39.56	20.99	T	4.82	4.1	6.7	7.2	93	91	83	88	59	39	8.3	8.1	---	---	---	78	85	202	138	3	5	58	14	36	0
MEACHAM	4050	32.7	19.3	77.6	49.2	43.5	22	105	-23	1209	7874	4.53	0.50	33.87	9.29	0.00	3.00	32.9	149.3	22.9	--	80	--	--	40	--	---	---	---	---	---	91	70	204	153	45	16	31	3	169	4
MEDFORD	1298	42.4	28.4	88.3	55.7	52.6	6	109	0	918	5008	3.38	0.18	19.78	12.72	0.00	3.75	3.9	8.1	7.9	92	90	75	78	47	28	4.2	5.7	---	---	---	118	81	166	101	3	9	47	43	97	*
PENDLETON	1482	39.3	25.1	89.3	57.8	52.8	31	113	-22	1017	5127	1.49	0.22	12.38	3.23	0.00	1.49	8.1	17.1	13.3	82	77	76	54	34	23	8.2	9.7	---	---	---	107	89	169	100	6	11	30	31	84	3
PORTLAND U 1964	30	44.9	35.5	79.2	57.9	54.6	62	107	3	769	4109	7.42	0.39	42.37	17.45	0.00	5.01	5.1	9.1	16.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	152	3	--	--	8	21	0
PORTLAND	21	43.7	33.0	78.6	55.7	52.9	26	107	- 3	825	4635	6.38	0.41	37.18	12.83	T	2.60	4.7	7.6	10.6	86	82	77	84	63	46	10.0	7.4	88	24	67	66	70	229	152	2	7	33	8	45	*
ROSEBURG 1964	505	47.2	33.4	84.0	51.8	53.4	11	106	- 1	766	4491	5.69	0.21	33.11	15.74	T	4.80	3.2	6.5	9.4	--	86	73	--	54	34	3.9	5.9	50	26	79	75	89	201	135	2	5	59	21	56	*
SALEM	196	45.5	31.5	81.7	50.4	52.4	5	104	9	822	4754	7.37	0.35	41.75	15.40	0.00	3.16	3.5	6.4	10.8	89	86	79	90	62	43	8.8	6.7	---	---	---	77	84	204	150	2	6	40	12	63	0
SEXTON SUMMIT R	3836	39.3	28.9	75.5	51.6	48.0	22	100	- 2	958	6254	5.59	0.25	33.12	20.03	0.00	5.20	24.3	99.1	33.5	--	80	73	--	61	43	12.8	11.8	---	---	---	125	68	172	130	29	6	160	2	112	*
PACIFIC AREA																																									
CANTON ISLAND	8	88.4	77.8	89.4	77.7	83.5	20	98	70	0	0	4.35	1.10	29.43	20.49	T	5.56	0.0	0.0	0.0	80	79	65	80	80	65	15.1	13.1	---	---	---	75	146	144	103	0	4	0	155	0	0
ENIWETOK	13	84.6	77.8	86.5	79.1	82.3	13	94	70	0	0	9.09	1.02	51.46	24.54	0.12	4.62	0.0	0.0	0.0	77	77	68	82	84	75	17.3	12.6	---	---	---	---	---	---	202	0	5	0	15	0	0
TAGUAC GUAM R	361	83.9	72.4	86.7	72.3	79.3	10	95	54	0	0	13.36	2.64	88.53	22.28	0.50	7.50	0.0	0.0	0.0	--	--	--	--	--	--	8.1	4.9	80	54	46	---	---	---	265	0	28	*	5	0	0
JOHNSTON ISLAND	7	80.7	73.4	85.0	77.1	79.3	11	88	62	0	0	3.89	0.84	26.11	15.80	0.11	9.51	0.0	0.0	0.0	75	76	67	78	77	68	13.5	15.1	49	69	76	59	194	112	164	0	4	0	0	0	0
KOROR R	94	86.0	74.6	86.6	75.1	80.9	17	93	69	0	0	15.76	7.13	147.49	34.82	1.65	11.57	0.0	0.0	0.0	88	91	81	90	92	82	8.3	6.1	59	53	51	*	42	323	273	0	40	0	43	0	0
KWAJALEIN,MARSHALL IS	8	82.2	78.0	85.2	77.9	81.1	14	97	69	0	0	12.13	2.15	94.76	30.38	0.18	6.68	0.0	0.0	0.0	79	80	71	85	86	78	18.5	10.6	---	---	---	24	89	252	241	0	10	0	24	0	0
MAJURO,MARSHALL IS.	10	84.1	76.3	84.6	75.7	80.4	11	91	69	0	0	15.92	6.98	143.63	24.26	0.86	10.01	0.0	0.0	0.0	80	81	75	83	84	77	13.2	8.7	38	64	53	11	70	284	258	0	20	0	*	0	0
MARCUS ISLAND	20	76.0	68.2	87.2	78.0	78.2	3	93	58	0	0	7.19	1.61	42.57	13.51	0.10	5.66	0.0	0.0	0.0	71	73	67	76	79	69	14.0	11.7	114	59	78	85	147	133	143	0	5	1	29	0	0
PONAPE R	123	85.6	75.3	86.6	72.7	80.1	16	96	67	0	0	20.31	9.74	191.92	38.65	1.71	22.48	0.0	0.0	0.0	84	85	76	94	95	80	9.1	4.2	36	48	50	3	56	306	300	0	31	0	34	0	0
TRUK MOEN ISLAND	5	84.9	76.5	86.1	74.8	80.7	16	94	70	0	0	14.12	6.29	137.52	34.89	0.84	14.92	0.0	0.0	0.0	81	83	76	89	91	80	9.4	6.7	45	58	51	1	57	307	270	0	22	0	5	0	0
WAKE	11	81.5	73.3	86.6	77.4	80.0	19	92	64	0	0	7.08	1.14	36.86	17.66	0.06	15.00	0.0	0.0	0.0	74	75	65	81	82	72	13.0	12.2	---	---	---	113	157	95	178	0	7	0	5	0	0
YAP R	62	85.3	75.6	87.6	75.1	81.3	18	97	69	0	0	14.70	4.64	121.50	29.44	1.08	10.45	0.0	0.0	0.0	85	87	79	90	92	81	10.4	5.4	72	53	46	7	43	315	262	0	15	0	48	0	0
PENNSYLVANIA							79	111	-42							0.00	34.50																								
ALLENTOWN	387	36.7	21.3	85.2	63.0	51.1	23	105	-12	1116	5810	4.82	2.64	44.12	12.10	0.09	4.79	8.8	33.8	17.5	77	62	70	81	50	61	11.3	7.4	---	---	---	96	116	153	123	9	33	29	18	129	2
AVOCA W B SCRANTONAP	930	33.6	21.7	81.6	63.2	49.4	11	101	-11	1156	6254	4.79	1.99	38.48	7.78	0.03	3.18	12.2	50.9	20.1	75	63	67	81	52	60	9.0	7.5	60	42	60	74	111	180	135	13	31	26	10	135	5
ERIE	731	34.0	20.5	80.1	62.0	48.7	7	94	-15	1169	6451	3.67	2.32	37.50	9.87	0.58	4.84	19.4	80.7	23.0	78	72	76	76	60	61	13.0	9.0	---	---	---	70	99	196	154	26	39	16	4	124	5
HARRISBURG	338	38.9	23.6	87.0	65.3	53.3	28	107	- 8	1045	5251	3.90	2.31	37.65	9.07	0.04	4.36	10.3	36.2	21.0	71	58	64	77	50	60	8.4	6.3	68	48	69	86	106	173	123	9	33	22	26	107	1
PHILADELPHIA	5	40.3	24.3	85.9	65.2	53.5	7	104	- 5	1014	5101	4.63	2.78	42.48	9.70	0.09	5.45	6.1	21.7	14.6	74	59	66	78	52	61	10.4	8.1	73	50	63	92	114	159	117	6	26	28	18	111	1
PITTSBURGH U	747	39.5	24.7	85.0	64.8	53.0	32	103	-13	983	5053	3.95	2.31	36.87	8.84	0.16	3.57	7.9	30.7	20.1	--	--	--	--	--	--	---	---	---	25	54	---	---	---	146	9	--	--	18	95	1
PITTSBURGH GTR. AP	1137	36.5	21.2	83.3	60.9	50.3	7	98	-18	1119	5987	3.91	2.19	36.14	8.20	0.16	3.56	11.3	44.9	14.7	77	67	68	84	51	58	10.8	7.6	---	40	66	61	104	200	148	13	36	17	8	128	5
READING U	266	39.1	26.3	86.4	67.3	54.3	26	103	- 2	1001	4945	4.26	2.64	41.43	14.85	0.17	6.08	8.9	31.0	18.7	71	--	--	75	--	--	11.4	8.5	80	46	63	96	109	160	122	8	32	8	24	92	*
WILLIAMSPORT	524	36.1	21.4	85.3	61.8	50.7	22	102	-15	1122	5934	4.18	2.51	40.65	9.45	0.19	4.38	10.6	42.7	23.1	76	62	68	86	52	63	9.4	6.9	---	---	---	69	116	180	142	12	34	36	17	132	4
RHODE ISLAND							79	102	-23							0.00	12.13																								
BLOCK ISLAND	110	37.9	26.3	75.9	63.2	50.1	16	91	- 4	1020	5804	4.07	2.56	40.45	11.51	T	8.52	6.0	22.5	16.9	73	65	--	87	72	--	---	---	---	---	---	101	111	153	111	7	17	82	*	98	*
PROVIDENCE	51	37.3	21.0	81.4	62.7	50.1	3	97	- 3	1110	5954	4.14	2.76	42.13	11.89	0.39	6.63	11.3	39.2	18.3	68	57	63	75	53	64	12.1	9.9	---	56	62	109	106	150	123	10	22	28	8	126	2
SOUTH CAROLINA							82	111	-13							0.00	13.25																								
CHARLESTON	40	61.2	38.3	89.2	72.0	65.2	24	103	8	487	2033	7.71	2.09	49.16	18.46	0.08	8.84	T	0.1	2.1	85	55	74	89	64	80	9.5	8.0	62	58	62	100	115	150	116	*	58	29	47	35	0
CHARLESTON U 1961	9	61.4	39.2	89.4	70.8	65.2	18	103	14	472	1973	8.04	1.92	46.11	17.31	0.08	8.84	T	0.1	2.1	87	56	75	90	65	82	9.9	8.3	---	65	80	96	116	153	121	*	60	31	48	31	0
COLUMBIA	241	58.2	35.6	92.5	70.7	64.0	19	107	4	570	2484	6.09	2.36	46.82	16.72	T	7.66	0.3	1.1	8.8	85	54	68	86	52	66	7.1	6.8	---	60	64	124	104	137	110	*	53	25	84	55	0
FLORENCE 1964	146	58.3	36.7	90.9	70.4	64.0	17	108	8	552	2387	6.24	2.18	42.69	13.68	0.00	6.36	0.1	1.0	4.8	82	52	66	88	57	73	8.2	7.2	---	---	---	121	107	137	110	*	53	29	71	46	0
GREENVILLE 1961	1018	51.6	35.0	87.9	68.8	61.0	2	98	8	673	3060	4.81	3.00	47.65	10.10	0.52	5.79	0.5	4.1	6.4	70	41	50	85	56	70	9.4	7.7	70	58	63	107	104	154	116	1	50	23	48	54	0
SPARTANBURG 1961	801	52.1	34.7	88.7	69.1	61.2	18	104	3	670	3044	4.70	2.97	46.66	10.33	0.13	6.85	0.8	3.6	7.1	73	44	51	89	56	70	8.6	6.8	---	---	---	127	87	151	114	1	47	23	49	52	0
GRNVLE SPARTANBURG	957	52.4	35.0	87.0	71.0	61.2	4	98	- 6	665	3044	4.75	2.84	46.42	11.30	0.24	4.45	4.3	7.2	5.7	73	51	61	87	59	69	7.6	6.4	52	57	60	129	88	148	112	3	41	35	41	65	*

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F)								Normal degree days (1931-1960)		Precipitation (inches)									Relative humidity (percent)						Wind Speed (m p h)			Sunshine (percent of possible)		Annual mean number of days									
		Normal (1931-1960)					Extremes					Normal (1931-1960)			Extremes			Snow, sleet			January			July			Mean speed		Fastest mile	January	July	Sunrise to sunset			Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	Temperature		
		January		July		Annual	Length, yrs	Record highest	Record lowest	January	Seasonal	Wettest month	Driest month	Annual	Wettest month	Driest month	Maximum in 24 hours	Mean total		Extreme	7:00 a m EST	1:00 p m EST	7:00 p m EST	7:00 a m EST	1:00 p m EST	7:00 p m EST	January	July				Clear	Partly cloudy	Cloudy					Max	Min	
		Daily maximum	Daily minimum	Daily maximum	Daily minimum													January	Seasonal	Maximum in 24 hours																			90 and above	32 and below	Zero and below
SOUTH DAKOTA							77	120	-58							0.00	13.52																								
ABERDEEN	1296	21.5	0.0	87.6	59.4	43.7	7	112	-32	1680	8473	3.76	0.61	19.14	8.88	0.00	4.02	7.0	34.5	14.3	68	64	67	84	53	50	10.4	9.3	---	---	---	95	101	169	85	12	34	19	23	185	50
HURON	1282	23.1	1.9	90.3	59.6	44.7	7	112	-39	1628	8223	3.14	0.48	17.33	7.69	T	4.20	6.0	37.5	17.5	76	69	72	89	52	49	11.7	11.0	77	55	77	105	111	149	93	11	43	15	31	177	44
RAPID CITY	3162	34.1	9.8	87.7	59.9	46.8	17	109	-26	1333	7345	3.08	0.30	14.71	7.05	T	4.01	5.4	36.3	14.7	70	60	65	71	45	40	10.3	10.0	66	55	71	111	113	141	94	12	45	15	33	166	21
SIOUX FALLS	1418	25.1	5.2	86.0	62.5	45.7	3	106	-30	1544	7839	4.35	0.62	25.16	7.94	T	4.32	5.7	40.6	26.0	77	63	69	87	56	51	10.8	9.6	---	---	---	106	104	155	92	11	44	21	26	173	35
TENNESSEE							84	113	-32							0.00	11.00																								
BRISTOL	1507	46.8	29.7	86.4	65.4	56.8	5	95	-15	828	4143	5.55	2.15	41.06	9.73	0.07	3.65	4.7	15.3	16.2	78	59	65	91	61	66	6.7	4.1	---	---	---	91	111	163	132	5	46	41	15	98	2
CHATTANOOGA	665	49.9	33.4	90.0	71.4	61.2	27	106	-10	722	3254	5.64	3.02	51.96	13.68	0.20	5.40	1.5	3.8	8.9	82	62	68	88	57	64	7.3	5.1	82	42	63	109	108	148	120	2	56	35	55	73	*
KNOXVILLE	980	50.1	32.6	88.5	68.2	59.6	6	98	- 9	732	3494	4.88	2.54	45.85	11.74	T	5.08	3.9	12.3	18.2	79	62	64	90	61	65	8.5	6.4	73	38	58	102	107	156	126	3	48	29	23	75	1
MEMPHIS	255	50.6	32.4	91.1	71.5	61.5	25	106	-13	729	3232	6.07	2.72	49.73	12.29	T	4.94	2.5	5.9	14.3	81	64	70	85	57	59	10.9	7.6	56	48	74	120	100	145	103	2	51	11	68	59	*
NASHVILLE	590	48.8	30.9	90.7	69.6	60.0	25	107	-15	778	3578	5.49	2.32	45.14	13.92	T	5.34	3.8	11.2	10.2	83	67	72	86	55	61	9.0	6.2	73	40	65	105	107	153	117	4	56	15	59	75	1
OAK RIDGE R	905	49.2	30.6	87.7	66.7	58.2	19	105	- 9	778	3817	5.95	2.67	54.71	13.27	T	7.48	2.8	9.3	12.0	--	--	--	--	--	--	4.8	3.9	---	---	---	115	91	159	126	3	53	34	35	81	1
OAK RIDGE AREA 1964	886	48.9	31.2	88.0	66.7	58.5	20	103	- 8	772	3742	5.44	2.82	51.52	12.84	0.00	7.75	---	---	---	--	--	--	--	--	--	5.7	3.8	---	---	---	---	---	---	119	--	--	--	35	79	*
TEXAS							86	120	-24							0.00	38.20																								
ABILENE	1762	56.4	32.8	94.3	72.1	64.3	3	105	7	642	2624	4.33	0.88	23.32	13.19	0.00	6.70	1.6	3.8	5.7	68	50	44	62	38	30	12.3	10.8	73	62	78	152	96	117	64	2	41	6	103	54	0
AMARILLO	3604	49.8	23.5	94.2	67.0	58.7	6	104	- 9	877	3985	3.37	0.62	19.67	10.73	0.00	6.75	4.0	13.5	12.2	68	45	42	72	40	36	13.2	12.4	84	d70	d77	162	106	97	66	4	48	24	73	106	4
AUSTIN	597	60.3	40.5	95.1	73.9	68.3	6	105	12	468	1711	3.71	1.94	32.58	12.31	0.00	7.22	0.6	1.2	7.0	76	57	55	88	47	41	9.9	8.6	57	49	78	120	115	130	81	*	40	23	112	25	0
BROWNSVILLE	19	70.5	52.2	92.5	75.5	73.7	28	104	19	205	600	4.99	1.04	26.75	17.12	T	8.18	T	T	T	89	65	74	92	55	65	11.9	11.8	57	47	81	98	138	129	71	0	23	25	114	2	0
CORPUS CHRISTI	41	67.4	47.4	93.5	74.6	71.8	2	101	26	291	914	4.40	1.44	28.34	14.54	0.00	7.68	0.1	0.1	1.1	91	68	70	95	58	62	12.0	11.6	70	48	84	107	121	137	75	*	32	27	97	9	0
DALLAS	481	55.8	36.0	94.5	75.3	65.8	8	107	8	601	2363	4.83	1.93	34.55	15.40	T	9.18	1.5	2.4	7.4	77	59	56	78	51	44	10.5	10.1	65	50	77	142	94	129	79	1	41	8	98	40	0
DEL RIO	1026	63.7	38.8	98.5	73.8	70.0	4	107	19	438	1504	2.73	0.62	17.83	15.79	T	4.50	T	1.7	3.0	71	52	42	73	47	32	8.5	10.6	---	---	---	131	104	130	51	1	38	13	127	22	0
EL PASO	3918	56.3	29.5	94.9	68.9	63.3	7	106	- 8	685	2700	1.29	0.29	7.89	6.29	0.00	2.89	1.3	3.9	7.8	60	42	33	56	40	29	9.8	9.4	70	77	79	198	98	69	44	1	36	2	108	63	*
FT. WORTH GTR. INTL	537	56.0	34.9	95.9	74.9	65.8	3	108	4	614	2405	4.59	1.68	31.33	12.64	0.02	5.91	2.2	3.6	12.1	80	60	57	74	44	39	12.2	10.6	---	---	---	147	94	124	76	1	44	11	92	48	0
GALVESTON 1961	7	60.4	48.2	88.7	77.9	70.1	11	97	18	362	1233	5.82	3.14	47.98	25.06	T	11.34	T	0.2	2.0	84	73	78	82	69	71	13.0	11.3	---	---	---	111	118	136	90	*	52	32	32	2	0
GALVESTON U	7	60.5	49.3	87.3	78.9	69.9	96	101	8	350	1235	5.09	2.59	41.81	26.01	0.00	14.35	T	0.2	15.4	--	--	--	--	--	--	11.6	9.8	100	49	73	---	---	---	97	*	--	--	12	4	0
HOUSTON U	41	62.6	46.6	92.0	75.8	70.0	29	106	10	363	1278	5.15	2.40	45.26	17.64	0.01	10.83	0.2	0.3	3.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	104	*	--	--	91	7	0
HOUSTON	50	63.6	43.6	92.1	73.8	69.2	7	106	17	384	1396	4.36	2.67	45.95	22.31	T	15.65	0.2	0.4	4.4	84	65	68	91	58	64	12.0	8.9	---	50	78	88	127	150	103	*	60	43	100	14	0
LAREDO 1964	496	68.4	47.0	99.0	76.0	73.9	20	110	18	267	797	2.86	0.62	18.63	8.62	0.00	5.55	0.1	0.1	2.0	81	58	53	83	44	39	9.6	14.8	---	---	---	130	116	119	58	*	31	14	174	6	0
LUBBOCK	3254	53.0	25.4	92.4	66.5	59.7	19	107	-16	800	3578	3.18	0.54	18.08	8.85	0.00	5.14	2.0	8.4	12.1	73	49	49	77	47	40	13.3	12.3	---	---	---	168	106	91	59	3	43	14	87	101	1
MIDLAND	2851	57.1	30.9	94.5	71.2	64.3	3	107	2	651	2591	2.08	0.36	14.24	6.73	0.00	5.99	1.4	3.1	5.9	70	46	39	63	34	26	9.5	9.8	---	---	---	170	95	100	48	2	35	15	106	73	0
PORT ARTHUR	16	63.5	43.7	91.0	72.7	68.5	6	107	14	384	1447	6.00	2.88	53.09	18.71	0.00	13.17	T	0.6	4.4	88	68	77	94	63	71	11.7	8.1	73	44	66	89	130	146	103	*	64	41	95	20	0
SAN ANGELO	1903	59.4	34.3	96.9	72.7	66.4	7	111	6	567	2255	3.20	0.78	18.63	9.20	0.00	6.03	0.9	2.6	5.1	72	49	43	72	40	33	10.3	9.7	---	---	---	164	94	107	54	1	36	7	126	56	0
SAN ANTONIO INTL AP	788	62.3	41.6	94.0	73.9	68.7	25	106	0	428	1546	3.49	1.37	27.84	15.78	0.00	6.97	0.3	0.6	4.7	80	60	58	88	49	43	9.1	9.1	74	49	77	114	116	135	78	*	36	24	118	20	*
VICTORIA	104	64.8	46.0	91.7	74.6	70.2	6	107	16	344	1173	4.23	2.32	36.20	7.64	0.22	6.14	0.0	T	T	84	62	66	92	55	58	11.0	8.8	99	---	---	86	129	150	81	0	43	33	111	14	0
WACO	500	58.2	37.8	96.0	74.6	67.2	3	106	7	536	2030	4.57	1.68	32.08	15.00	0.00	7.18	1.1	1.8	7.0	80	58	57	69	40	36	12.7	11.6	---	---	---	136	99	130	76	1	46	13	105	38	0
WICHITA FALLS	994	53.9	31.6	97.9	73.3	64.5	7	113	- 5	698	2832	4.60	1.12	26.20	12.03	0.00	5.61	2.2	5.7	5.9	79	54	53	75	41	37	11.0	10.6	---	---	---	162	94	109	69	2	47	12	107	67	*
UTAH							76	116	-50							0.00	5.08																								
MILFORD	5028	37.1	12.1	92.1	55.5	48.9	18	104	-28	1252	6497	1.03	0.43	8.00	2.45	0.00	1.20	9.4	40.5	16.3	--	65	60	--	23	20	---	---	---	---	---	153	100	112	60	14	32	7	60	179	14
SALT LAKE CITY	4220	36.8	17.5	94.1	59.6	50.9	7	107	-18	1172	6052	1.76	0.53	13.90	4.90	0.00	2.41	13.1	52.9	15.4	79	71	68	49	24	18	7.4	9.4	71	48	83	132	105	128	86	17	35	10	60	141	4
WENDOVER	4237	35.9	18.0	92.0	66.8	52.3	29	112	-19	1178	5778	0.66	0.29	4.67	3.01	0.00	1.33	2.3	7.0	5.5	66	58	58	29	20	14	---	---	---	---	---	154	94	117	45	3	29	5	52	128	1
VERMONT							79	105	-50							0.00	8.77																								
BURLINGTON	332	25.4	6.9	81.9	56.0	43.2	2	98	-20	1513	8269	3.85	1.79	33.21	11.54	0.38	3.59	17.8	70.6	16.5	71	65	67	78	49	58	9.9	7.9	72	39	63	63	103	199	148	20	25	15	6	166	19
VIRGINIA							76	110	-29							0.00	12.50																								
LYNCHBURG	916	46.2	29.0	86.6	65.9	56.7	3	99	0	849	4166	4.41	2.58	40.30	11.36	0.33	4.98	6.1	18.5	12.8	70	51	60	82	53	65	8.8	6.8	56	50	63	111	108	146	121	5	41	40	22	95	*
NORFOLK	22	50.2	32.2	87.9	69.6	59.7	18	103	8	738	3421	5.97	2.74	44.94	12.83	0.36	11.40	3.7	7.5	11.4	77	60	70	82	59	72	11.9	8.7	78	57	64	109	107	149	116	2	38	25	33	55	0
RICHMOND	162	48.3	29.0	89.4	66.7	58.1	37	104	-12	815	3865	5.61	2.90	44.21	18.87	0.30	8.79	5.9	14.8	21.6	81	57	70	85	56	72	8.2	7.0	68	52	67	104	106	155	114	4	37	29	43	85	1
ROANOKE	1149	47.0	29.1	88.0	65.2	56.9	2	100	3	834	4150	4.63	2.70	41.23	9.12	0.18	4.95	8.1	24.8	17.4	69	53	58	79	51	58	9.9	6.6	---	---	---	100	119	146	120	7	40	26	23	93	0
WASHINGTON							100	118	-42							0.00	32.27																								
OLYMPIA	195	45.1	31.1	79.7	48.0	50.8	7	100	3	834	5236	9.05	0.76	52.37	19.84	0.00	4.93	7.4	16.6	13.7	91	89	81	89	64	49	7.3	6.0	---	---	---	50	90	225	162	5	4	93	5	84	0
SEATTLE U 1964	14	45.6	36.8	75.1	56.1	53.2	31	100	11	738	4424	5.42	0.63	34.10	10.93	T	3.31	4.3	8.1	11.5	--	--	--	--	--	--	---	---	65	28	63	71	93	201	152	3	6	--	2	15	0
SEATTLE-TACOMA	400	43.6	33.0	75.6	54.1	51.1	7	99	10	828	5145	6.29	0.81	38.94	12.92	T	3.41	6.0	14.2	21.4	81	80	76	86	67	50	10.5	8.9	---	---	---	54	82	229	162	5	8	53	3	35	0
SPOKANE	2356	31.4	19.2	85.6	55.4	47.8	7	108	-20	1231	6655	2.44	0.38	17.19	5.71	T	2.07	19.2	55.9	13.0	84	82	76	61	38	25	8.1	7.8	56	26	81	85	90	190	116	18	11	48	20	138	4
STAMPEDE PASS R	3958	27.5	19.5	65.4	47.0	39.5	23	90	-16	1287	9283	16.19	1.46	92.19	29.06	0.19	7.94	79.6	441.2	36.2	93	92	91	87	67	60	---	---	---	---	---	66	57	242	205	85	7	252	*	189	3
TATOOSH ISLAND R	101	45.2	38.8	59.5	51.5	49.3	63	88	14	713	5719	12.16	1.98	77.69	22.57	0.02	5.91	3.5	7.7	12.0	84	82	82	94	89	87	20.0	10.1	94	26	47	58	76	231	197	3	5	59	0	8	0
WALLA WALLA U	949	39.0	27.4	89.2	62.7	54.2	52	113	-16	986	4805	1.89	0.21	15.50	4.52	0.00	2.02	7.8	19.7	14.0	--	76	--	--	34	--	5.1	5.4	67	24	86	119	88	158	106	7	11	14	36	65	2
YAKIMA	1052	36.5	18.5	88.9	53.1	49.8	20	108	-25	1163	5941	1.19	0.13	7.86	4.19	0.00	1.40	10.0	24.5	14.0	84	77	72	69	36	25	5.5	7.6	---	---	---	110	89	166	69	8	8	20	32	150	4
WEST INDIES							66	103	40							0.00																									
SAN JUAN U 1964	47	79.9	70.3	84.2	76.0	78.3	66	96	62	0	0	7.16	2.07	60.36	16.88	0.05	10.55	0.0	0.0	0.0	--	--	--	--	--	--	---	---	---	---	---	---	---	---	208	0	49	0	10	0	0
SAN JUAN	13	81.3	67.4	87.1	73.7	78.0	12	94	60	0	0	7.13	2.20	64.21	14.99	0.68	5.08	0.0	0.0	0.0	86	66	78	81	68	79	8.4	9.6	80	66	64	52	207	106	209	0	38	0	33	0	0
SWAN ISLAND R 1954	28	82.6	73.9	87.3	77.6	81.0	23	92	64	0	0	7.39	0.63	51.61	31.53	T	10.77	0.0	0.0	0.0	--	--	--	--	--	--	---	---	---	---	---	79	164	122	152	0	--	--	15	0	0

NORMALS, MEANS AND EXTREMES

State and Station	Elevation ground (feet)	Temperature (°F)								Normal degree days (1931-1960)		Precipitation (inches)									Relative humidity (percent)						Wind Speed (m p h)			Sunshine (percent of possible)		Annual mean number of days									
		Normal (1931-1960)					Extremes					Normal (1931-1960)			Extremes			Snow, sleet														Sunrise to sunset							Temperature		
		January		July														Mean total		Extreme	January			July			Mean speed												Max	Min	
		Daily maximum	Daily minimum	Daily maximum	Daily minimum	Annual	Length, yrs	Record highest	Record lowest	January	Seasonal	Wettest month	Driest month	Annual	Wettest month	Driest month	Maximum in 24 hours	January	Seasonal	Maximum in 24 hours	7:00 a m EST	1:00 p m EST	7:00p m EST	7:00 a m EST	1:00 p m EST	7:00 p m EST	January	July	Fastest mile	January	July	Clear	Partly cloudy	Cloudy	Precipitation .01 inch or more	Snow, sleet, hail 1.0 inch or more	Thunderstorms	Heavy fog	90 and above	32 and below	Zero and below
WEST VIRGINIA							76	112	-37							0.00	19.00																								
BECKLEY	2504	----	----	----	----	----	3	90	- 9	----	----	----	----	----	8.27	0.14	5.34	19.2	60.0	13.4	78	64	69	88	57	69	11.5	6.6	---	---	---	73	92	200	147	17	47	38	1	118	2
CHARLESTON	939	45.2	27.9	85.6	64.2	55.6	19	102	-12	880	4476	5.67	2.58	44.43	13.54	0.09	5.60	8.5	27.5	15.1	77	62	66	89	61	66	7.8	5.2	---	---	---	60	116	189	147	8	42	109	24	99	1
ELKINS	1970	43.0	22.0	82.3	57.9	50.7	22	97	-21	1008	5675	5.49	2.75	45.92	9.30	0.31	2.94	17.1	63.1	7.5	81	63	71	96	57	69	7.4	4.3	---	---	---	53	110	202	164	22	45	84	3	142	5
HUNTINGTON	827	45.3	27.9	86.0	64.3	55.8	6	100	-15	880	4446	4.50	1.85	39.53	8.57	T	4.27	8.7	23.5	8.2	80	63	64	91	59	65	7.3	4.9	---	---	---	77	113	175	129	7	40	53	19	105	4
PARKERSBURG U	615	42.9	26.3	86.3	65.2	55.0	78	106	-27	942	4754	4.27	2.05	38.77	12.05	0.07	4.81	6.9	24.3	18.3	82	66	74	80	52	67	7.2	5.1	66	31	62	109	103	153	142	8	44	12	23	97	2
WISCONSIN							76	114	-54							0.00	11.72																								
GREEN BAY	682	25.1	8.5	82.0	59.0	44.3	6	97	-29	1494	8029	3.36	1.08	25.83	7.80	T	3.68	8.6	39.9	10.1	75	70	71	87	58	59	10.9	8.2	73	46	64	96	102	167	118	13	37	29	7	160	32
LA CROSSE	651	25.6	7.4	84.6	63.0	46.3	2	99	-31	1504	7589	4.20	1.05	31.16	10.52	0.02	3.92	7.8	41.8	15.7	74	63	71	90	58	57	9.2	7.9	---	---	---	96	95	174	108	11	43	23	18	155	36
MADISON	858	25.9	9.1	82.2	60.0	45.0	7	98	-30	1473	7863	3.95	1.13	30.16	10.93	0.06	5.25	9.1	38.7	10.8	77	67	71	89	57	59	10.5	8.2	77	50	71	98	97	170	114	12	40	23	10	167	28
MILWAUKEE	672	28.3	12.8	78.9	58.4	45.1	7	98	-24	1376	7635	3.64	1.40	29.51	9.87	0.15	5.28	13.3	44.3	16.7	76	69	72	83	60	63	12.9	9.6	73	44	71	98	101	166	119	13	37	27	10	149	18
WYOMING							107	114	-63							0.00	5.50																								
CASPER	5338	32.8	13.9	87.1	56.3	46.0	2	99	-31	1290	7410	2.03	0.48	11.80	3.93	T	2.49	9.3	67.9	14.6	62	53	54	65	30	24	16.8	10.2	---	---	---	114	107	144	89	21	35	9	24	186	23
CHEYENNE	6126	37.2	13.6	85.2	54.8	45.9	7	96	-27	1228	7278	2.52	0.45	15.06	5.35	T	2.68	6.2	52.3	16.5	54	44	49	70	33	38	14.7	10.0	69	62	69	106	132	127	100	17	52	24	14	170	13
LANDER	5563	30.8	7.7	85.8	55.4	44.4	20	101	-37	1417	7870	2.65	0.42	13.58	3.88	T	3.56	8.7	93.3	23.1	65	58	58	56	33	28	6.2	7.6	77	68	77	120	125	120	70	23	32	2	21	186	20
SHERIDAN	3964	34.0	8.6	87.1	55.5	45.2	2	103	-29	1355	7683	2.57	0.62	15.91	9.54	0.02	3.84	9.2	65.6	26.7	66	56	59	67	37	30	7.8	7.3	84	58	76	101	114	150	106	22	37	6	23	194	24

Data from airport or from airport and Urban site records combined.
U indicates Urban, R indicates Rural sites.
Data for this table are based on records through 1966 except as indicated in notes.
Date after station name indicates last year included in summarization of data.
Normal values are based on the period, 1931-1960, and are means adjusted to represent observations taken at the present standard location.
Degree days are based on a daily average of 65° F.
For detailed periods of record see ANNUAL LOCAL CLIMATOLOGICAL DATA, 1966.

Fastest mile is the speed of the wind recorded in the shortest time on an automatic recording wind instrument.
Clear Day averages 0-3 tenths sky cover, Partly Cloudy 4-7 tenths and Cloudy 8-10 tenths.
Heavy Fog includes data formerly referred to as "Dense" or "Thick." The upper visibility limit for heavy fog is 1/4 mile.
* Less than one-half.
- No record.
# Number of days Maximum 70° or above (Alaskan stations).
† Relative humidity means for period of record through 1960.
‡ Mt. Washington excluded.
ø Estimated amounts during typhoon.
1/ Means and extremes are from post office location through 1962.
2/ Based on records from Urban office through January 1943; airport through June 1964.

a Relative Humidity readings NOON Local Time.
b Relative Humidity readings reported 30 minutes later.
c Relative Humidity readings 8:00 a.m. and NOON Local Time.
d Estimated
e Reopened 1963.
f Combined Records, city office and airport.
g 8:00 a.m., and 2:00 p.m., EST.
n Estimated, recorder pen against stop at 128 m.p.h.
T Trace, an amount too small to measure.
x Sun below horizon continuously Nov. 19 - Jan. 23.
v Sun below horizon continuously Nov. 24 - Jan. 17.
(x and v)-Yearly totals for period sun above horizon.
m Record for 1949-1951, 1958-1962.
r Resumed 1965.

ELEVATIONS OF STATION PRESSURES

State and station	Ft	Mtrs
ALABAMA		
Birmingham	630	192
Huntsville	644	196
Mobile	221	67
Montgomery	202	62
ALASKA		
Anchorage	132	40
Annette	110	34
Barrow	13	4
Barter Island	50	15
Bethel	150	46
Cold Bay	103	31
Fairbanks	454	138
Juneau	24	7
King Salmon	49	15
Kotzebue	16	5
McGrath	338	103
Nome	22	7
St. Paul Island	28	9
Shemya	102	31
Yakutat	31	9
ARIZONA		
Flagstaff	7018	2139
Phoenix	1107	337
Tucson	2555	779
Winslow	4883	1488
Yuma	206	63
ARKANSAS		
Fort Smith	463	141
Little Rock	265	81
Texarkana	368	112
CALIFORNIA		
Bakersfield	492	150
Bishop	4145	1263
Blue Canyon	5283	1610
Burbank	725	221
Eureka (U)	60	18
Fresno	327	100
Long Beach	40	12
Los Angeles (U)	512	156
Los Angeles	104	32
Mt Shasta (R)	3587	1093
Oakland	7	2
Red Bluff	353	108
Sacramento	25	8
Sandberg (R)	4523	1379
San Diego	28	9
San Francisco (U)	155	47
San Francisco	18	5
Santa Catalina	1580	482
Santa Maria	238	73
Stockton	27	8
COLORADO		
Alamosa	7541	2298
Colorado Springs	6170	1881
Denver	5332	1625
Grand Junction	4839	1475
Pueblo	4720	1439
CONNECTICUT		
Bridgeport	17	5
Hartford	179	55
New Haven	13	4
DELAWARE		
Wilmington	80	24
DISTRICT OF COLUMBIA		
Wash. Nat'l AP	65	20
FLORIDA		
Apalachicola (U)	35	11
Daytona Beach	41	12
Fort Myers	12	4
Jacksonville	31	9
Key West	21	6
Lakeland (U)	236	72
Miami	12	4
Orlando	119	36
Pensacola	118	36
Tallahassee	68	21
Tampa	11	3
West Palm Beach	21	6
GEORGIA		
Athens	811	247
Atlanta	1034	315
Augusta	148	45
Columbus	394	120
Macon	362	110
Rome	643	196
Savannah	51	16
HAWAII		
Hilo	36	11
Honolulu	15	5
Kahului	67	20
Lihue	148	45
IDAHO		
Boise	2858	871
Idaho Falls 46W (R)	4938	1505
IDAHO (Cont'd)		
Lewiston	1436	438
Pocatello	4478	1365
ILLINOIS		
Cairo (U)	357	109
Chicago (O'Hare)	674	205
Chicago (Midway)	623	190
Moline	594	181
Peoria	662	202
Rockford	743	226
Springfield	613	187
INDIANA		
Evansville	388	118
Fort Wayne	828	252
Indianapolis	808	246
South Bend	773	236
IOWA		
Burlington	702	214
Des Moines	963	294
Dubuque	1080	329
Sioux City	1103	336
Waterloo	878	268
KANSAS		
Concordia	1484	452
Dodge City	2592	790
Goodland	3688	1124
Topeka	885	270
Wichita	1340	408
KENTUCKY		
Covington	877	267
Lexington	989	301
Louisville	488	149
LOUISIANA		
Alexandria	118	36
Baton Rouge	76	23
Lake Charles	32	10
New Orleans	30	9
Shreveport	259	79
MAINE		
Caribou	628	191
Portland	63	19
MARYLAND		
Baltimore	155	47
MASSACHUSETTS		
Boston	29	9
Nantucket	12	4
Pittsfield	1169	356
Worcester	1017	310
MICHIGAN		
Alpena	693	211
Detroit (City AP)	626	191
Detroit (M. Wayne Co.)	664	202
Detroit (Willow Run)	777	237
Flint	766	233
Grand Rapids	803	245
Houghton Lake	1160	354
Lansing	874	266
Marquette (U)	734	224
Muskegon	633	193
Sault Ste. Marie	724	221
MINNESOTA		
Duluth	1417	432
International Falls	1183	361
Minneapolis	838	255
Rochester	1320	402
St. Cloud	1043	318
MISSISSIPPI		
Jackson	331	101
Meridian	310	94
Vicksburg (U)	247	75
MISSOURI		
Columbia	785	239
Kansas City	750	229
St. Joseph	817	249
St. Louis (Lambert)	564	172
Springfield	1270	387
MONTANA		
Billings	3570	1088
Glasgow	2298	700
Great Falls	3657	1115
Havre	2599	792
Helena	3898	1188
Kalispell	2973	906
Miles City	2634	803
Missoula	3189	972
NEBRASKA		
Grand Island	1856	566
Lincoln (U)	1189	362
Norfolk	1551	473
North Platte	2787	849
Omaha (Eppley AP)	982	299
Scottsbluff	3958	1206
Valentine	2598	792
NEVADA		
Elko	5077	1547
Ely	6262	1909
Las Vegas	2180	664
Reno	4400	1341
Winnemucca	4339	1323
NEW HAMPSHIRE		
Concord	341	104
NEW JERSEY		
Atlantic City (Exp. Cntr.)	67	20
Newark	30	9
Trenton (U)	190	58
NEW MEXICO		
Albuquerque	5314	1620
Clayton	4972	1515
Raton	6376	1943
Roswell	3619	1103
Silver City	5376	1639
NEW YORK		
Albany	292	89
Binghamton	1638	499
Buffalo	706	215
New York Central Park	87	27
New York (Kennedy AP)	22	7
New York (LaGuardia)	52	16
Rochester	555	169
Syracuse	408	124
NORTH CAROLINA		
Asheville	2170	661
Cape Hatteras (R)	11	3
Charlotte	769	234
Greensboro	886	270
Raleigh	441	134
Wilmington	38	12
NORTH DAKOTA		
Bismarck	1660	506
Fargo	899	274
Williston	1905	581
OHIO		
Akron	1236	377
Cleveland	805	245
Columbus	833	254
Dayton	1003	306
Mansfield	1312	400
Toledo	692	211
Youngstown	1186	361
OKLAHOMA		
Oklahoma City	1304	397
Tulsa	676	206
OREGON		
Astoria	22	7
Burns (U)	4170	1271
Eugene	373	114
Meacham	4056	1236
Medford	1329	405
Pendleton	1495	456
Portland	39	12
Salem	201	61
Sexton Summit (R)	3841	1171
PACIFIC AREA		
Canton Island	11	3
Eniwetok	21	6
Johnston Island	17	5
Koror (R)	109	33
Kwajalein	26	8
Majuro, Marshall Islands	10	3
Marcus Island	55	17
Ponape (R)	151	46
Taguac, Guam (R)	365	111
Truk (Moen Island)	8	2
Wake Island	12	4
Yap (R)	56	17
Pago Pago	10	3
PENNSYLVANIA		
Allentown	385	117
Erie	737	225
Harrisburg	351	107
Philadelphia	28	9
Pittsburgh (U)	842	257
Pittsburgh	1225	373
Reading (U)	323	98
Scranton	948	289
Williamsport	525	160
RHODE ISLAND		
Block Island	118	36
Providence	62	19
SOUTH CAROLINA		
Charleston (U)	48	15
Charleston	48	15
Columbia	225	69
Grnvl-Spartanburg	971	296
SOUTH DAKOTA		
Aberdeen	1300	396
Huron	1289	393
Rapid City	3168	966
SOUTH DAKOTA (Cont'd)		
Sioux Falls	1427	435
TENNESSEE		
Bristol	1525	465
Chattanooga	688	210
Knoxville	980	299
Memphis	284	87
Nashville	605	184
Oak Ridge	914	279
TEXAS		
Abilene	1753	534
Amarillo	3604	1099
Austin	621	189
Brownsville	20	6
Corpus Christi	44	13
Dallas	488	149
Del Rio	1027	313
El Paso	3916	1194
Fort Worth	576	176
Galveston (U)	54	16
Houston	62	19
Lubbock	3241	988
Midland	2862	872
Port Arthur	22	7
San Angelo	1908	582
San Antonio	794	242
Victoria	117	36
Waco	508	155
Wichita Falls	1030	314
UTAH		
Milford	5033	1534
Salt Lake City	4227	1288
Wendover	4239	1292
VERMONT		
Burlington	340	104
VIRGINIA		
Lynchburg	937	286
Norfolk	30	9
Richmond	164	50
Roanoke	1176	358
WASHINGTON		
Olympia	200	61
Seattle-Tacoma	450	137
Spokane	2365	721
Stampede Pass (R)	3967	1209
Tatoosh Island (R)	86	26
Walla Walla (U)	991	302
Yakima	1066	325
Quillayute	205	62
WEST INDIES		
San Juan, P. R.	62	19
Swan Island	35	11
WEST VIRGINIA		
Beckley	2514	766
Charleston	951	290
Elkins	2006	611
Huntington	838	255
Parkersburg (U)	637	194
WISCONSIN		
Green Bay	702	214
La Crosse	672	205
Madison	866	264
Milwaukee	693	211
WYOMING		
Casper	5290	1612
Cheyenne	6141	1872
Lander	5558	1694
Sheridan	3968	1209

Data from airport unless otherwise specified. U indicates Urban, R indicates Rural, sites.

These are the elevations of the barometer (in feet and meters above mean sea level) to which station pressure values pertain in the "Climatological Data" table in the monthly publication CLIMATOLOGICAL DATA NATIONAL SUMMARY.

GENERAL SUMMARY OF TORNADOES, 1966

Lucius W. Dye and Esther K. Grabill
Environmental Data Service, ESSA
Washington, D. C.

Tornadoes reported in the United States in 1966 totaled 570. More than half of the tornadoes, 314, occurred in May, June and July. Almost 3/4 (70%) occurred from April to July and 4/5 (79%) occurred from April to August. Tornadoes struck on 150 days during the year. Over half of these days (76) were in the 3-month period, June to August. Tornadoes occurred on 3 days out of 4 from April to August and 9 days out of 10 in June and July.

Fifteen tornadoes killed 105 persons in 10 states on 13 days. More than half of these people lost their lives in the Jackson, Miss., tornado which is described more completely below. Table 1 summarizes by State the occurrences of tornadoes and the deaths and injuries attributed to the storms. Four of the tornadoes crossed State boundaries. These are tabulated by state but are counted only once in the National total. The Jackson, Miss., tornado moved from Mississippi to Alabama on March 3. On July 9, a tornado crossed the Mississippi River from Dubuque, Iowa, to East Dubuque, Ill. A tornado traveled from south of Ashley, N. Dak., to nearby South Dakota on July 31. The fourth tornado to cross a State boundary struck near North Cannan, Conn., before moving to New Boston, Mass. Table 1 shows that the early-season tornadoes occurred in the Southland. Twenty-five of the 35 tornadoes that occurred in January to March struck 7 southern states: Alabama, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and Texas. In contrast northern states were struck most frequently during the "middle months" May to July. This is shown in Table 2.

Table 3 shows the number of tornadoes, tornado days, and other information for each year, 1916 to 1966. The averages are for the 14-year period 1953 to 1966. In these recent years, tornado reporting has received more attention and the data are more nearly complete. There still remains the probability that some tornadoes are not reported and, therefore, are not listed in Storm Data from which this summary is prepared.

Table 4 lists and summarizes the tornadoes, tornado days, and deaths by months for the years 1953 to 1966.

Table 5 shows the number of tornadoes per 10,000 square miles in selected States in 1966. Table 6 lists the number of funnel clouds reported in each month for each State. Over 2/3 (71%) of the funnels were seen in May, June and July.

Several of the tornadoes are described briefly below because of the number of persons killed or injured or because of the extensive damage they caused.

Jackson, Miss.

One of the worst tornadoes in many years in Mississippi occurred in the late afternoon on Thursday, March 3. The tornado struck about 25 miles west-southwest of Jackson, moved through Jackson and continued its east-northeastward course for about 150 miles to the Mississippi-Alabama State line and about 50 miles into Alabama. The tornado dissipated about 50 miles west of Birmingham. The tornado flattened a shopping center in Jackson. Total damage in Mississippi was estimated at about $18 million; in Alabama less than $1/2 million. Deaths: 57 in Mississippi; 1 in Alabama. Injuries: 504 in Mississippi; 27 in Alabama.

Central Florida

Two tornadoes crossed central Florida the morning of April 4. One began near Clearwater, moved across Tampa Bay, through Carrollwood and Temple Terrace in Tampa, and continued to Gibsonia, Longham, Campbell City, and the Merritt Island area. The storm killed 11 persons and injured more than 400. The storm moved at about 60 m.p.h., which is faster than most tornadoes. Its path ranged from 200 to 500 yards wide and extended from the Gulf of Mexico to the Atlantic Ocean, a distance of about 140 miles. The tornado remained continuously in contact with the ground throughout its course. The damage due to the storm was estimated in the millions of dollars. The other tornado crossed the peninsula, beginning at Pinellas, moving across Tampa Bay, crossing the southern sections of Lakeland, and continuing to Breward County. It was not so destructive as the Tampa tornado described above and its path was intermittent, ranging from 100 to 200 yards in width while in contact with the ground.

Topeka, Kans.

One of the most damaging tornadoes of record ripped through Topeka, Kans., and vicinity on the evening of June 8. The first damage occurred 3 miles south of Dover, near the western edge of the Shawnee County line. The storm moved northeastward, reached the city limits of Topeka at 7:15 p.m., and continued through the heart of the city bringing complete destruction along a path 4 blocks wide and 8 miles long. The tornado destroyed 820 dwellings and caused major damage to 1010 and minor damage to 1925. All major structures at Washburn University were damaged and several were a total loss. Sixteen persons were killed and 406 were injured by the storm. Property damages were estimated to exceed $100 million.

Belmond, Iowa

About 1:55 p.m., October 10, a tornado struck in north-central Iowa. The storm destroyed 109 residences, caused major damage to 160 and minor damage to 308. It destroyed 75 business establishments and badly damaged 112. Six persons were killed and 172 were injured. Damages in the town were estimated at $7.5 million to $11 million. These estimates do not include the almost complete destruction of 27 farmsteads and hundreds of livestock killed and crippled. This was only one of a dozen tornadoes that struck Iowa vicinities on the afternoon of October 10. The others were less damaging. One at Ankeny caused property damage estimated at $300,000.

Figure 1 shows the average number of tornadoes and number of tornado days in each month based on the 14-year period, 1953 to 1966. The paths of the 1966 tornadoes are shown at the end of this article.

TABLE 1 - TORNADO SUMMARY 1966

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Annual
ALA.													
Number			2	1			1	1			5		10
Days			1	1			1	1			1		5
Deaths			1	0			0	0			0		1
Injuries			29	0			0	0			1		30
ALASKA (None)													
ARIZ.													
Number							2	2	1				5
Days							2	2	1				5
Deaths							0	0	0				0
Injuries							0	10	0				10
ARK.													
Number				3	1						1		5
Days				3	1						1		5
Deaths				0	0						0		0
Injuries				0	0						0		0
CALIF.													
Number							1				4		5
Days							1				1		2
Deaths							0				0		0
Injuries							0				10		10
COLO.													
Number				2	1	1	3	4					11
Days				2	1	1	3	4					11
Deaths				0	0	0	0	0					0
Injuries				0	0	0	0	0					0
CONN.													
Number								1					1
Days								1					1
Deaths								0					0
Injuries								0					0
DEL. (None)													
FLA.													
Number				4	2	9		4	7	2			28
Days				2	2	7		4	5	1			21
Deaths				11	0	0		0	0	0			11
Injuries				400	0	2		3	0	0			405
GA.													
Number		7			5	1	5	2				1	21
Days		2			3	1	4	2				1	13
Deaths		0			0	0	0	0				0	0
Injuries		3			11	1	5	2				0	22
HAWAII (None)													
IDAHO (None)													
ILL.													
Number			1	3	1	3	1	1		1			11
Days			1	2	1	1	1	1		1			8
Deaths			0	0	0	1	0	0		0			1
Injuries			0	0	0	30	0	0		20			50
IND.													
Number				3		1	6					2	12
Days				1		1	4					1	7
Deaths				0		0	0					0	0
Injuries				0		0	0					1	1
IOWA													
Number			1	4	5	11	5	1		12			39
Days			1	1	2	5	3	1		1			14
Deaths			0	0	0	0	0	0		6			6
Injuries			0	6	0	0	0	0		172			178
KANS.													
Number				1	13	15	2	2	2				35
Days				1	4	6	1	2	1				15
Deaths				0	0	17	0	0	0				17
Injuries				5	5	458	1	1	0				470
KY.													
Number						1	1	1					3
Days						1	1	1					3
Deaths						0	0	0					0
Injuries						2	0	0					2
LA.													
Number	1	3	1	1	2		2	1	1				12
Days	1	2	1	1	2		2	1	1				11
Deaths	0	0	0	0	0		0	0	0				0
Injuries	0	0	1	1	0		0	0	0				2
MAINE													
Number							1		1	1			3
Days							1		1	1			3
Deaths							0		0	0			0
Injuries							0		0	0			0
MD.													
Number		1				1							2
Days		1				1							2
Deaths		0				0							0
Injuries		0				0							0

State	Jan.	Feb.	Mar	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Annual
MASS.													
Number						2		4					4
Days						2		2					2
Deaths						0		0					0
Injuries						0		1					1
MICH.													
Number				3	2	2	2	1					11
Days				2	2	2	2	1					10
Deaths				0	0	0	0	0					0
Injuries				0	0	0	0	0					0
MINN.													
Number						6	13	3		1			23
Days						5	6	3		1			15
Deaths						1	0	0		0			1
Injuries						3	4	2		1			10
MISS.													
Number		3	1	11	2	5	2				6		30
Days		1	1	4	1	4	2				1		14
Deaths		0	57	1	0	0	0				0		58
Injuries		0	504	16	1	2	0				9		532
MO.													
Number			1	4	13	2				9		7	36
Days			1	3	5	2				1		1	13
Deaths			0	0	0	0				0		0	0
Injuries			0	0	2	0				32		2	36
MONT.													
Number							2						2
Days							2						2
Deaths							0						0
Injuries							0						0
NEBR.													
Number					5	4	1						10
Days					2	3	1						6
Deaths					0	0	0						0
Injuries					1	0	0						1
NEV. (None)													
N. H.													
Number							3	1					4
Days							3	1					4
Deaths							0	0					0
Injuries							0	0					0
N. J. (None)													
N. MEX.													
Number					5	3	1	5	1			1	16
Days					2	1	1	4	1			1	10
Deaths					0	0	0	0	0			0	0
Injuries					0	0	0	0	0			0	0
N. Y.													
Number						1							1
Days						1							1
Deaths						0							0
Injuries						0							0
N. C.													
Number		1	1	1				1			1		5
Days		1	1	1				1			1		5
Deaths		0	0	0				0			0		0
Injuries		0	0	0				0			9		9
N. DAK.													
Number					3	9	12	5					29
Days					2	3	6	1					12
Deaths					0	1	4	0					5
Injuries					0	4	10	1					15
OHIO													
Number							1		1	1			3
Days							1		1	2			4
Deaths							0		0	0			0
Injuries							0		22	3			25
OKLA.													
Number		1	8		11	13	1		2				36
Days		1	3		4	5	1		1				15
Deaths		0	0		0	0	0		0				0
Injuries		2	9		3	7	0		0				21
OREG.													
Number						1		1		1			3
Days						1		1		1			3
Deaths						0		0		0			0
Injuries						0		0		0			0
PA.													
Number				2			1	1					4
Days				1			1	1					3
Deaths				0			0	0					0
Injuries				0			0	1					1
R. I. (None)													
S. C.													
Number		1		2		1		1	4	1			10
Days		1		1		1		1	1	1			6
Deaths		0		0		0		0	0	0			0
Injuries		0		0		0		0	0	8			8

TABLE 1 - TORNADO SUMMARY 1966

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Annual
S. DAK.													
Number				2	2	13	12	1					30
Days				2	1	5	10	1					19
Deaths				0	0	0	3	0					3
Injuries				0	0	0	10	0					10
TENN.													
Number				2	2	1	1						6
Days				2	2	1	1						6
Deaths				0	0	0	0						0
Injuries				0	0	0	0						0
TEX.													
Number	4		1	21	22	15	3	8	3				77
Days	3		1	9	5	8	2	6	3				37
Deaths	0		0	0	0	0	0	0	0				0
Injuries	0		0	8	7	0	0	1	2				18
UTAH													
Number				1									1
Days				1									1
Deaths				0									0
Injuries				0									0
VT.													
								1					1
								1					1
								0					0
								0					0
VA.													
Number		2				1					3		6
Days		1				1					1		3
Deaths		0				0					0		0
Injuries		0				0					2		2
WASH.													
Number			1										1
Days			1										1
Deaths			0										0
Injuries			0										0
W. VA.													
Number								2					2
Days								2					2
Deaths								0					0
Injuries								0					0
WIS.													
Number			1	1	1	3	7	2					15
Days			1	1	1	1	4	2					10
Deaths			0	0	0	0	0	0					0
Injuries			1	0	2	0	10	2					15
WYO.													
Number						1	2	1					4
Days						1	2	1					4
Deaths						0	0	0					0
Injuries						0	0	0					0
TOTALS													
Number	[illegible]	[illegible]	[illegible] [illegible]	81	[illegible]	124	[illegible] *92	[illegible] *58	[illegible]	29	20	11	[illegible] *570
Days +	1	5	[illegible]	20	17	28	27	[illegible]	13	6	3	3	150
Deaths		0	[illegible]	12	0	21	8	0		6	0	0	105
Injuries	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	509	40	24	[illegible]	236	31	3	1884

* Corrected for boundary-crossing tornadoes.
+ Tornado Days for country as a whole.

TABLE 2 -- NUMBER AND PERCENT OF 1966 TORNADOES THAT OCCURRED IN MAY, JUNE, AND JULY IN SELECTED NORTHERN STATES

State	Number of Tornadoes		Percent in May, June, July
	in May, June, July	in 1966	
Nebraska	10	10	100
South Dakota	27	30	90
Kansas	30	35	86
North Dakota	24	29	83
Minnesota	19	23	83
Wyoming	3	4	75
Wisconsin	11	15	73
Oklahoma	25	36	69

TABLE 3 -- NUMBER OF TORNADOES, TORNADO DAYS, AND DEATHS -- 1953-66

	January			February			March			April			May			June			July		
Year	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths
1953	14	6	0	17	3	3	40	10	24	45	16	34	99	21	162	114	24	244	40	19	0
1954	2	1	0	19	9	2	69	13	10	117	22	3	97	22	8	101	26	5	46	23	0
1955	2	2	0	4	3	0	41	15	4	101	18	7	150	26	103	148	28	2	50	21	5
1956	2	2	0	47	12	8	31	7	1	87	15	67	88	24	4	66	21	0	101	26	1
1957	17	3	13	5	3	0	39	7	1	216	21	29	226	26	87	148	25	14	54	19	0
1958	12	7	0	20	5	13	15	10	0	78	19	4	69	21	0	128	27	42	119	30	1
1959	15	2	3	19	5	21	42	11	9	30	12	1	225	28	8	73	25	2	62	24	0
1960	9	4	0	28	10	0	27	10	0	70	20	7	200	26	34	123	27	3	48	22	1
1961	1	1	0	31	8	0	121	17	7	73	19	3	135	25	23	101	23	2	77	27	0
1962	11	3	1	25	7	0	37	9	17	41	8	1	201	22	3	173	29	0	75	26	0
1963	14	5	1	6	3	0	49	12	8	82	14	16	69	21	1	93	23	0	62	26	0
1964	14	3	10	2	2	0	36	11	6	161	23	15	135	20	16	144	24	0	61	23	0
1965	21	11	0	29	4	0	33	9	2	130	20	264	271	25	19	149	28	6	86	26	0
1966	1	1	0	23	5	0	10	6	58	81	20	12	98	17	0	124	28	21	92	27	8
TOTAL	135	51	28	275	79	47	590	147	147	1312	247	463	2063	324	468	1685	358	341	973	339	16
MEAN	10	4	2	20	6	3	42	11	11	94	18	33	148	23	33	120	26	24	70	24	1

	August			September			October			November			December			Annual		
Year	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths	Number	Days	Deaths
1953	26	15	0	5	4	0	6	4	0	11	6	0	20	8	49	437	136	516
1954	46	21	1	20	10	3	15	8	2	2	2	0	16	3	1	549	159	35
1955	34	18	0	16	8	2	23	7	1	20	4	1	3	2	0	593	153	125
1956	43	20	2	19	10	0	30	8	0	8	6	0	10	4	0	532	155	[illegible]
1957	26	14	0	17	10	2	17	11	2	61	11	25	38	4	18	864	154	191
1958	45	20	1	24	14	1	9	6	4	45	6	0	1	1	0	565	166	66
1959	37	18	0	54	15	14	19	10	0	11	4	0	2	2	0	589	156	58
1960	48	23	1	21	13	0	18	10	1	25	6	0	1	1	0	618	172	47
1961	25	16	0	53	16	15	13	5	0	36	7	1	16	5	0	682	169	51
1962	49	21	6	27	12	0	12	10	0	5	4	0	2	2	0	658	153	28
1963	27	13	2	33	12	3	14	5	0	12	6	0	0	0	0	461	140	31
1964	79	23	2	24	10	0	24	4	22	15	8	0	18	5	2	713	156	73
1965	60	23	2	62	20	0	15	4	0	35	6	5	7	4	0	898	180	298
1966	58	21	0	23	13	0	29	6	6	20	3	0	11	3	0	570	150	105
TOTAL	603	266	17	378	167	40	244	98	38	306	79	32	145	44	70	8729	2199	1707
MEAN	43	19	1	29	12	3	17	7	3	22	6	5	10	3	5	624	157	122

AVERAGE NUMBER OF TORNADOES AND TORNADO DAYS EACH MONTH IN THE UNITED STATES

(Based on 8,729 Tornadoes That Occurred from 1953 to 1966)

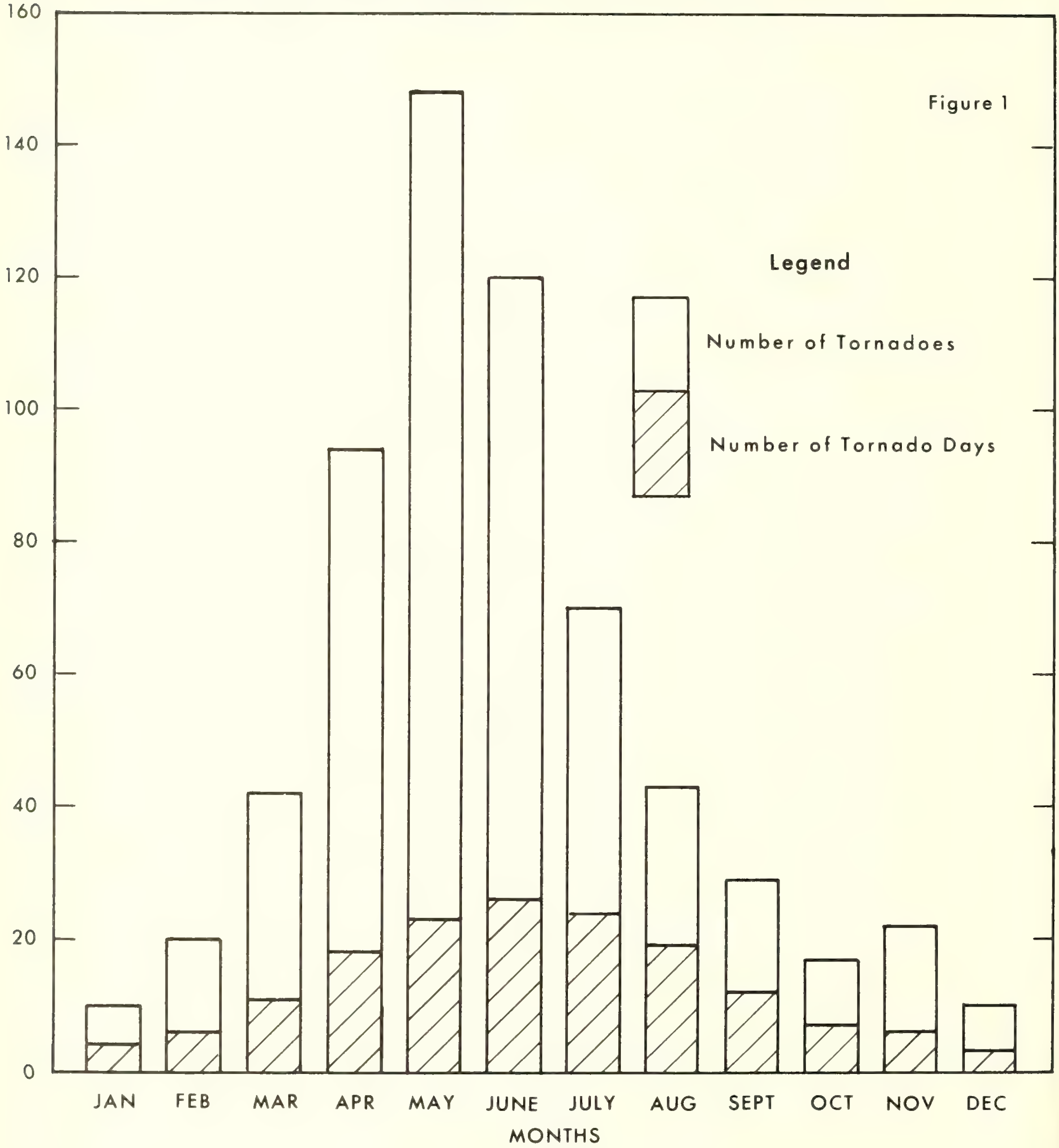


Figure 1

TABLE 4 -- NUMBER OF TORNADOES, TORNADO DAYS, AND RESULTING LOSSES BY YEARS, 1916-66

Year	Number tornadoes	Number tornado days	Total deaths	Most deaths in a single tornado	Total property losses †	Number of tornadoes causing losses † in		
						category 5	category 6	category 7 & over
1916	90	36	150	30	6	7	1	0
1917	121	38	509	101	7	21	9	0
1918	81	45	135	36	7	20	5	0
1919	64	35	206	59	7	10	2	0
1920	87	50	498	87	7	14	10	0
1921	105	55	202	61	7	22	3	0
1922	108	64	135	16	7	27	5	0
1923	102	59	109	23	6	21	1	0
1924	130	57	376	85	7	26	11	1
1925	119	65	794	689	7	34	2	1
1926	111	57	144	23	6	28	0	0
1927	163	62	540	92	7	42	9	1
1928	203	79	92	14	7	40	7	0
1929	197	74	274	40	7	48	4	0
1930	192	72	179	41	7	38	6	0
1931	94	57	36	6	6	14	1	0
1932	151	67	394	37	7	23	1	1
1933	258	96	362	34	7	46	9	0
1934	147	77	47	6	6	10	3	0
1935	180	77	70	11	6	29	0	0
1936	151	71	552	216	7	17	5	1
1937	147	75	29	5	6	24	0	0
1938	213	76	183	32	7	29	6	0
1939	152	75	87	27	7	21	3	0
1940	124	62	65	18	7	13	2	0
1941	118	57	53	25	6	24	1	0
1942	167	66	384	65	7	42	10	0
1943	152	61	58	5	7	28	8	0
1944	169	68	275	100	7	50	9	0
1945	121	66	210	69	7	21	10	1
1946	106	65	78	15	7	29	7	0
1947	165	78	313	169	7	46	7	1
1948	183	68	140	33	7	62	11	2
1949	249	80	212	58	7	54	13	0
1950	199	88	70	18	7	47	9	0
1951	272	113	34	6	7	35	11	2
1952	236	98	230	57	7	53	19	0
1953	437	136	516	116	8	63	18	7
1954	549	159	35	6	7	63	8	1
1955	593	153	125	80	7	74	13	1
1956	532	155	83	25	7	83	24	1
1957	864	154	191	44	8	129	26	3
1958	565	166	66	19	7	70	8	1
1959	589	156	58	21	7	70	4	1
1960	618	172	47	16	7	65	11	1
1961	683	169	51	16	7	103	21	1
1962	658	153	28	17	7	51	10	0
1963	461	140	31	5	7	77	15	1
1964	713	156	73	22	7	113	17	5
1965	898	180	298	44	8	126	30	11
1966	570	150	105	58	8	79	13	4
Means:								
1916-66	281	---	193	--	-	---	--	-
1953-66	624	157	122	--	-	83	16	3

NOTE.--The above estimated losses are based on values at time of occurrence.

† Storm damages in categories:

5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 and over.

This tabulation does not include funnel clouds that remained aloft or funnels on water surfaces only.

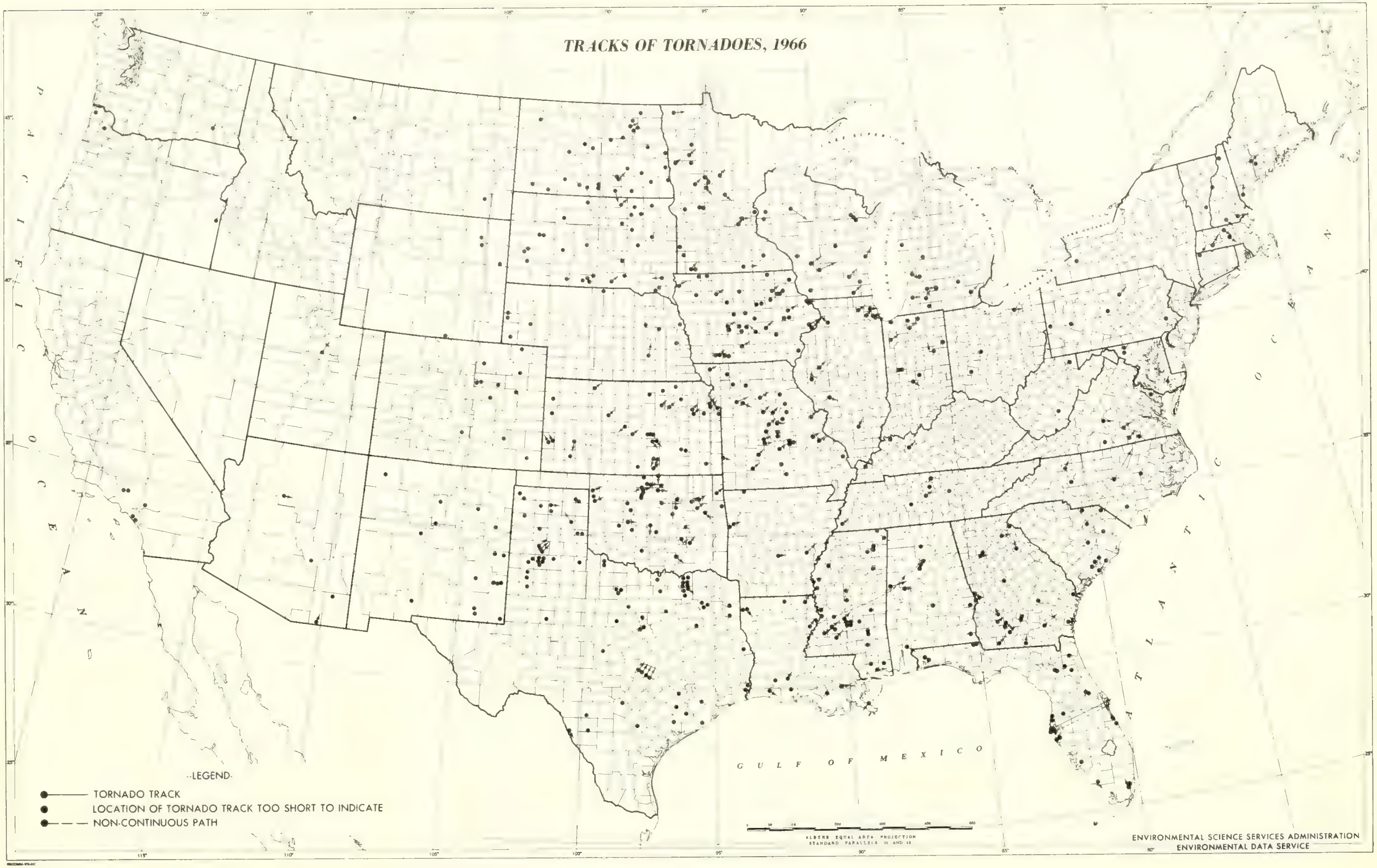
TABLE 5 -- NUMBER OF TORNADOES PER 10,000 SQUARE MILES

State	Number of Tornadoes	Number per 10,000 Square Miles
Iowa	39	6.9
Mississippi	30	6.3
Missouri	36	5.2
Oklahoma	36	5.2
Florida	28	4.8
Massachusetts	4	4.8
Kansas	35	4.3
South Dakota	30	3.9
Georgia	21	3.6
Indiana	12	3.3
Texas	77	2.9
Minnesota	23	2.7
Wisconsin	15	2.7
Illinois	11	2.0

TABLE 6 -- NUMBER OF FUNNEL CLOUDS IN 1966

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Ala.				1		1							5
Alaska													0
Ariz.										1			1
Ark.													0
Calif.													0
Colo.				10	1	2	3		2				18
Conn.							1						1
Del.													0
D.C.													0
Fla.	1	3		3	16	21	20	4	1				69
Ga.				1	6	3		3					13
Hawaii					1				1				2
Idaho													0
Ill.						7	12						19
Ind.				9	2	7	23	3					44
Iowa				4	2	5	6	2		8			27
Kans.				5	36	51	6	6	4				108
Ky.						3	1						4
La.		3	1	2	6	3	5	6					29
Maine													0
Md.													0
Mass.						2							2
Mich.				1	2	3	2	1					9
Minn.						3	17	5					25
Miss.			2	6	3	1			1				13
Mo.				2		4		1				1	8
Mont.						1	5						6
Neb.						8	6	3					17
Nev.													0
N. H.													0
N. J.													0
N.Mex.					4	3		2	1				10
N. Y.													0
N. Car.							1	1					2
N. Dak.					2	5	5	9					21
Ohio					1			2					3
Okla.		1		12	34	18		1					66
Ore.						1							1
Pa.													0
R. I.													0
S. Car.													0
S. Dak.				1		12	3	3					19
Tenn.				1			1						2
Tex.		4	5	11	20	12	4	8	6				70
Utah				3									3
Vt.													0
Va.		1			1			1					3
Wash.			1			1			1				3
W. Va.													0
Wis.							11	7					18
Wyo.							2						2
Total	1	12	9	72	137	177	134	68	20	9	0	1	640

TRACKS OF TORNADOES, 1966


PACIFIC OCEAN
ATLANTIC OCEAN
GULF OF MEXICO
LAKE SUPERIOR
LAKE MICHIGAN
LAKE ONTARIO
-LEGEND-
TORNADO TRACK
LOCATION OF TORNADO TRACK TOO SHORT TO INDICATE
NON-CONTINUOUS PATH
ALBERS EQUAL AREA PROJECTION
STANDARD PARALLELS 33 AND 45
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

HAILSTORM LOSSES FOR PAST YEARS

Year	Property (exclusive of crops)	Crops	Total
1933	-	-	7
1934	-	-	7
1935	-	-	7
1936	6	7	7
1937	6	7	7
1938	6	7	7
1939	5	6	6
1940	6	7	7
1941	6	7	7
1942	6	7	7
1943	6	7	7
1944	7	7	8
1945	6	7	7
1946	7	7	7
1947	6	8	8
1948	7	8	8
1949	7	7	7
1950	7	7	7
1951	7	7	8
1952	7	7	7
1953	7	7	7
1954	7	8	8
1955	7	7	8
1956	7	8	8
1957	7	8	8
1958	7	8	8
1959	6	7	7
1960	7	8	8
1961	8	8	8
1962	9	8	9
1963	8	8	8
1964	8	8	8
1965	8	8	8
1966	8	8	8

† Storm damages are placed in categories varying from 1 to 9 as follows:

1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000.

NOTE.--The above estimated losses are based on values at time of occurrence.

WINDSTORM LOSSES FOR PAST YEARS

(Windstorms other than tornadoes)

Year	Total loss of life	Total property loss
1916	65	7
1917	25	6
1918	79	7
1919	344	7
1920	42	6
1921	65	7
1922	133	7
1923	68	7
1924	78	7
1925	88	7
1926	357	8
1927	64	7
1928	1,947	8
1929	46	7
1930	49	7
1931	17	7
1932	306	7
1933	156	8
1934	109	7
1935	461	7
1936	121	7
1937	43	7
1938	630	8
1939	60	6
1940	251	7
1941	43	7
1942	68	7
1943	61	7
1944	448	8
1945	85	7
1946	70	7
1947	117	8
1948	52	8
1949	102	8
1950	210	8
1951	289	8
1952	137	8
1953	118	8
1954	292	9
1955	301	8
1956	196	8
1957	553	8
1958	129	8
1959	145	7
1960	85	8
1961	64	8
1962	134	9
1963	54	9
1964	64	9
1965	107	9
1966	74	8
	Total 9,602	

† Storm damages are placed in categories varying from 1 to 9 as follows:

1 Less than $50
2 $50 to $500
3 $500 to $5,000
4 $5,000 to $50,000
5 $50,000 to $500,000
6 $500,000 to $5,000,000
7 $5,000,000 to $50,000,000
8 $50,000,000 to $500,000,000
9 $500,000,000 to $5,000,000,000.

NOTE.--The above estimated losses are based on values at time of occurrence.

NORTH ATLANTIC TROPICAL CYCLONES, 1966

Richard M. De Angelis
Environmental Data Service, ESSA
Washington, D. C.

An active 1966 hurricane season bore a resemblance to the 1964 season. Eleven tropical cyclones developed in 1966 compared to twelve in 1964 (actually twelve storms were named this year but in post analysis it was decided that Kendra did not meet minimum requirements). Seven storms reached hurricane intensity, one more than in the '64 season. The '66 season lasted from June 4 through November 13 while the '64 season stretched from June 2 through November 9. The 1966 season produced five tropical cyclones before August. Since 1871 there have been only three other years when the fifth tropical cyclone developed as early as July. These were July 25, 1933 (21 tropical cyclones), July 27, 1936 (16 tropical cyclones) and July 22, 1959 (11 tropical cyclones). The season was active beyond the most recent 30-year average (1936-1965) of 9.5 tropical cyclones and 5.5 hurricanes.

Killer hurricanes Alma and Inez were the only tropical cyclones to affect the United States mainland, inflicting damage estimated at about $15.2 million. Damage from Inez was restricted to extreme southern Florida while Alma caused minor damage to the west coast of Florida and in Georgia. Fifty-four deaths, in the United States, resulted from the two hurricanes; 48 people lost their lives in Inez while 6 died in Alma. These storms also wreaked havoc outside the United States. Alma was responsible for 11 deaths and $200 million worth of damage in Cuba. Inez caused considerable loss of life and destruction throughout the West Indies and Mexico killing more than 900 people and inflicting damage estimated at more than $215 million.

Summaries of the individual tropical cyclones follow. Tracks shown in the chart and meteorological data are given in the accompanying tables.

HURRICANE ALMA, JUNE 4-14

Hurricane Alma, the first hurricane of the season and the earliest on record to cross a coastline of the United States, was spawned by a mid-latitudinal upper level trough which had fractured and drifted southward to a position over Nicaragua and Honduras on the 4th. The following day a reconnaissance plane found a tropical depression, with a central pressure of 1006 mb., (29.71 in.) over the Gulf of Honduras. This system had touched off torrential rains in Honduras and Nicaragua for several days and, late on the 5th, the town of San Rafael, Honduras reported 30 in. of rain; this resulted in 73 deaths as rivers flooded, engulfing the town in a sea of mud.

Plodding northward Alma intensified, rapidly reaching hurricane strength late on the 6th some 300 mi. south-southwest of Havana, Cuba. About this time, some 130 mi. from the storm's center, the 8,170-ton BLUE GRASS STATE reported a wind of 40 kt. and a pressure of 1009.1 mb. (29.80 in.). The hurricane continued to intensify as it drifted slowly northward. The 9,475-ton GULF TRADER, within 100 mi. of the storm's center and battling 20-ft. seas, reported a west-northwesterly wind of 47 m.p.h. and a pressure of 990 mb. (29.23 in.). Late on the 7th, Alma accelerated, reaching western Cuba the following day. The hurricane's 105 m.p.h. winds, torrential rains and resultant high tides destroyed over 47,000 acres of crops and more than 300 homes along the southern coast of Havana Province. The total estimated damage in Cuba was valued at $200 million. The institute of Meteorology in Havana reported maximum winds of 110 m.p.h. and a minimum pressure of 979.7 mb. (28.93 in.).

Accelerating northward at forward speeds up to 25 m.p.h. Alma moved into the Gulf of Mexico and along the west coast of Florida. On the afternoon of the 8th, as the storm passed 50 mi. west of Key West, Dry Tortugas, the westernmost portion of the Keys, recorded a minimum pressure of 970.2 mb. (28.65 in.) and a maximum sustained wind of 125 m.p.h. These were the extremes observed at any land station during the hurricane's existence. Gale force winds lashed exposed coastal sections in southern Florida for up to 22 hr., with rainfall averaging 5-8 in. over Dade, Broward, and Palm Beach Counties and 2-4 in. in other southern counties. Tides were less than 1 ft. above normal along the southeast coast but ran 2-3 ft. above normal from the Keys to St. Petersburg, and 3-5 ft. above normal in Tampa Bay.

Early on the 9th, Alma, moving north-northwestward, passed 50 mi. west of Tampa and by afternoon made landfall about 20 mi. east-northeast of Apalachicola. Crawfordville and Alligator Point estimated winds of 75-100 m.p.h. with an observed pressure of 984 mb. (29.06 in.), at Alligator Point. Intensity and forward speed diminished as the storm turned northeastward, moving east of Tallahassee and reaching south-central Georgia by evening. Gale force winds extended over most of northern Florida although their duration was considerably less than in the southern sections. Total rainfall amounts were generally 2-4 in. over the northern portions of the peninsula increasing to more than 6 in. in the path of the storm and decreasing rapidly over the western portion of the panhandle. The concave nature of the Florida coastline from Tampa to Apalachee Bay along with the offshore movement of the hurricane caused tides of 4-10 ft. above normal along this stretch of coastline.

Traversing southeastern Georgia late on the 9th and 10th, Alma diminished to a tropical storm, then moved north of Savannah, off the South Carolina coast, that afternoon. Gale force winds occurred in gusts along the coasts of Georgia and South Carolina, while precipitation totals averaged 2-4 in. in southeastern Georgia and along the South Carolina coast. Tides ran 2-3 ft. above normal. Alma continued moving east-northeastward out into the Atlantic and on the 11th-12th reintensified to hurricane strength for about 18 hr. On the 11th the 9,936-ton MARINE DOW-CHEM, within 50 mi. of the storm's center, reported an 86 m.p.h. wind and a 1000 mb.(29.53 in.) pressure while the 28,218-ton tanker MOBIL MERIDIAN reported a wind of 69 m.p.h. with a pressure of 1005.1 mb. (29.68 in.). The storm, however, diminished again as it swung northward. During this period coastal sections of North Carolina were battered by gale force winds, tides 2-5 ft. above normal, and 4-8 in. of rain. Gusty winds nearing gale force buffeted coastal areas from Virginia to New England as Alma continued to parallel the east coast. Early on the 13th the MARINE DOW-CHEM, racing the storm northward, reported a wind of 58 m.p.h. while about 60 mi. northwest of the storm's center. Later that afternoon the storm became extra-tropical about 120 mi. east-southeast of Atlantic City, New Jersey. The fast moving extra-tropical LOW turned northeastward late on the 13th, passing to the west of Cape Cod and out into the North Atlantic by the morning of the 14th.

Total storm damage in Florida was estimated near $10 million. A major portion of the damage resulted from tidal inundation and beach erosion. Hardest hit

TROPICAL CYCLONE DATA

HURRICANE ALMA, JUNE 4-14, 1966

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet) #		Storm Rainfall (inches)	Remarks
		Low	Time+	Fastest Mile	Time+	Gusts	Time+		Time+		
FLORIDA											
Alligator Point	9	29.06	1425	75		90		1.8			
Apalachicola WBA	9	29.34	1310	N 42	0802	N 52	0835 1112			3.78	
Bayport	9	29.51	0430					4.5		3.46	
Cedar Key	9	29.47	0600					4.5		2.90	Suffered inudation and 1,000 people were stranded when bridge to mainland washed out.
Daytona Beach WBAS	9	29.67	0250	E 37	0259	E 55	0132 0214			3.29	
Dry Tortugas	8	28.65	1315	N 125	1322						The lowest pressure and highest sustained wind reported during the hurricane.
Ft. Myers WBAS	8	29.46	1955	ESE 46	1915	ESE 64	2040	2.5	0800	2.36	Damage confined to power lines and trees blown down and plate glass damage. Several washouts on road on Captiva Island. Punta Rassa reported tides 2-3 feet above normal.
Ft. Myers Beach	8	29.45	2000	55‡		80‡		2-3			
Gainesville FAA	9	29.65	0425 1755	S 25	1458	E 48 S 48	0425 1455			2.97	
Jacksonville WBAS	9	29.63	10/0300-0400	E 48	0550	ESE 48	0535	2-3		1.40	A few power lines down.
Key West WBAS	8	29.42	1255	SE 60		SE 70	1231	2-2.5	1300-1500	3.56	Homes suffered roof damage and flooding. Wooden piers on south side, section of sea wall and concrete pier damage estimated at $350,000. Duration of gales 20 hours.
Lakeland WBO	8	29.56	09/0215	NE 34	2116	NE 45 E 45	2000 09/1228			1.97	
Miami WBAS	8	29.73	1730 1905	E 55	1200					7.70	No tides of consequence. Gusts up to 65 m.p.h. at a few exposed places on the beaches with one gust of 75 m.p.h. reported at Jupiter. One fatality and total damage near $1 million.
Miami NHC	8	29.75	1730			E 61	1225	0.8	1215	7.65	
Orlando WBAS	8	29.67	09/0308	E 38	2304	E 53	2210			2.20	Duration of gales 6 hours. No significant damage.
Pensacola WBAS	9	29.76	1630 C	N 36	1224 C					0.01	No significant damage. Egin Field, Valparaiso recorded peak gust of 48 m.p.h. and Tyndall Fields, Panama City had a peak gust of 46 m.p.h.
Punta Gorda	8	29.43				88	2200	1.5			
St. Marks	9	29.00	1600			NE 50	1500	6.0†			Eye passage at 1605.
St. Petersburg	8	29.37	2230	SE 65		SE 95	2330	3.5		4.22	
Tallahassee WBAS	9	29.15	1745	NNE 44	1510	NE 62	1657	0.5		6.90	Approximately 75 percent of all roads in county were closed due to fallen trees. Crawfordville Tower had estimated gusts over 100 m.p.h.
Tampa WBAS	8	29.42	09/0140	ESE 46	09/0057	E 68	2354	3-5		3.38	Tides north of New Port Richey to Cedar Key 7-10 feet above normal. Eye of hurricane was as close as 48 miles from Tampa (08/2342).
Tavernier	8	29.74	1555	SSE 60‡	1530			1.0		3.59	
Treasure Island	9	29.53	0240	82	08/2345	92‡	0000	2.9		5.10	
West Palm Beach WBAS	8	29.76	0256	E 39	1527	ESE 52	1830			5.18	
GEORGIA											
Savannah WBAS	10	29.50	1115	E 29	09/1338	SE 44	09/1958			2.18	Minor beach erosion at Savannah Beach. Tides 2-4 feet above normal along coast.
SOUTH CAROLINA											
Charleston WBAS	10	29.52	1700	29	0642	S 46	0637	1.4	09/1600	2.07	No crop damage; minor damage to trees and spotty erosion along the coast. A gust of 65 m.p.h. at Edisto Island unroofed a building and uprooted trees.
Columbia WBAS	10	29.67	1700			N 25				2.32	Some flooding in the Santee River Basin.
NORTH CAROLINA											
Cape Hatteras WBO	11	29.68	1345	NNE 43	1019	NNE 62	1122			5.10	Tides 4, 5-5 feet above normal reported in outer portions of Neuse River Estuary.
Wilmington WBAS	11	29.55	0145	N 35	0553	NNE 48	0558	2.0		7.80	Flash flooding accompanied heavy rains and a few homes in low places were invaded by water.
VIRGINIA											
Norfolk WBAS	12	29.97	13/0215	E 35	11/1043	N 39	1340	4.0†	1600	0.07	Only slight beach erosion. Cape Henry peak wind - N 40 m.p.h., 0636
NEW JERSEY											
Atlantic City WBAS	13	29.97		N 17	1124	NE 26	0046 0208	1.3		0.14	Atlantic City Marina peak wind N 29 m.p.h., 0840.

+ Times are Eastern Standard except Central Standard (C) and Atlantic Standard (A) where indicated.
# Tide above normal.
‡ Estimated.
† Mean low water.

was the Tampa-St. Petersburg region. Direct wind damage along the west coast was mainly to power and communication facilities, residential roofs, trees, and glass surfaces. Salt water inundation caused minor damage to roads and homes from the Keys to Apalachee Bay. Crop damage was most extensive in the northern farming areas where heavy rains and high winds damaged corn and tobacco fields. The mango crop in the southwest portion of the state and the grapefruit crop around Pinellas County were also hard hit. Storm damage in Georgia was estimated at $50,000--mostly beach erosion and tidal inundation damage--while other states suffered minor damage.

A total of 9 storm-connected tornadoes were reported during the hurricane's existence, 8 of them occurring in Florida. The tornadoes occurred at Cayman Brac, Cayman Islands (evening, June 6) southern Dade County (noon, June 8); near Miami (10:00 p.m., e.s.t., June 8); Jacksonville (afternoon, June 9). Three tornadoes occurred near Sarasota between 10:30 p.m. and 11:00 p.m. e.s.t., June 8. Two tornadoes occurred near Marianna at 6:00 a.m. and 10:00 a.m., c.s.t., June 9.

Alma claimed a total of 90 lives--6 in the United States. In Honduras 73 people were killed while 11 lost their lives in Cuba. The 6 in the United States were all in Florida.

HURRICANE BECKY, JULY 1-3

Hurricane Becky, developing at an unusually high latitude, appeared initially some 300 mi. southeast of Bermuda on July 1. Moving northeastward, the tropical storm intensified to hurricane strength near 38° N., 55° W., early on the 2d. The 6,795-ton Netherlands freighter LOPPERSUM, passing within 50 mi. of the storm's center, reported 68 m.p.h. winds with a pressure of 987 mb., (29.15 in.) at 0800. At 1245 the 7,508-ton German freighter JOHANNES RUSS recorded a pressure of 986 mb. (29.12 in.)--the lowest reported pressure in the storm's history. This ship also reported sustained 78-m.p.h. winds. Late on the 2d, as the storm turned toward the northwest, the USNS GEIGER reported winds of 63 m.p.h. gusting to 75 m.p.h. and a pressure of 991 mb., (29.26 in.). At this time Becky was located near 41° N., 54° W. On July 3 the storm, moving northwestward over the cold waters south of Newfoundland, weakened rapidly and lost its tropical characteristics. Early on the 4th Becky, now extratropical, was absorbed by a LOW moving off the southern coast of Labrador.

HURRICANE CELIA, JULY 13-21

Hurricane Celia formed about 200 mi. northeast of the Leeward Islands on July 13. Ship reports indicated winds up to 40 m.p.h. and there was evidence of an organized circulation. There had been earlier indications of disturbed weather in adjacent waters, but no history of a well-defined easterly wave or similar synoptic feature. On the 14th reconnaissance aircraft located a poorly defined cloud eye 40 mi. in diameter about 250 mi. north of San Juan, Puerto Rico. The 15,446-ton German bulk carrier JOHANN SCHULTE, some 120 mi. northeast of the storm's center, reported an east-southeast wind of 45 m.p.h. Following a west-northwesterly course for the next 4 days, Celia gradually degenerated into an area of showers, with sustained winds of less than 35 m.p.h. This area persisted, without evidence of a storm circulation, from the 15th to the 19th, passing over the Bahama Islands and turning northeastward just north of Nassau on the 19th. Early on the 20th, a ship under the southwestern edge of this cloud mass reported squalls with winds to 43 m.p.h. Intensification continued rapidly and when reconnaissance aircraft reached the area later, that same morning, winds had reached 80 m.p.h. and central pressure had dropped to 997 mb. (29.44 in.). The hurricane maintained this intensity as it raced north-northeastward at forward speeds up to 45 m.p.h. It finally began to weaken and lose tropical characteristics just before reaching western Newfoundland where it moved inland on the 22d, accompanied by squalls with winds to 45 m.p.h. The storm then became extratropical, merging with a frontal system over Labrador.

HURRICANE DOROTHY, JULY 22-31

Hurricane Dorothy was distined for a marine existence when it formed in the mid-North Atlantic, (31° N., 41° W.), 1,000 mi. from the nearest continent, on the 23d. The 21,291-ton Liberian tanker NAESS SEAFARER some 280 mi. north of the storm's center reported 45 m.p.h. winds. A satellite photograph revealed a dramatic spiral cloud pattern where only a small isolated area of clouds had existed on the previous day. After drifting slowly northward, Dorothy intensified to hurricane strength late on the 24th. Moving in a general northerly direction for the next 6 days the storm remained at minimum hurricane intensity, with a low pressure reading of 989 mb. (29.21 in.) on the 26th. Finally, early on the 29th, the hurricane decreased to tropical storm intensity about 500 mi. west-northwest of the Azores. On the 30th the storm, influenced by a huge cyclonic circulation to the west, turned toward the northwest and lost its tropical characteristics.

TROPICAL STORM ELLA, JULY 22-28

The fifth tropical cyclone of the season -- tropical storm Ella -- originated near 10° N., 35° W., on the 22d. This was only the fourth time since 1871 that five tropical cyclones developed in the North Atlantic before August. The initial circulation was discovered from ESSA 2 satellite pictures. Late on the 24th, near 17° N., 53° W., Ella reached tropical storm intensity; at this time maximum winds were 50 m.p.h. and central pressure was 1008 mb. (29.77 in.). Data from the storm were sparse during these first 3 days but subsequent reconnaissance flights on the 25th and 26th indicated the storm was developing slowly with no visual cloud eye and very poor circulation. The observed pressure never dropped below 1008 mb. (29.77 in.). Ella gradually turned from a west-northwesterly course toward the northwest with no significant change in size or intensity until midday on the 28th when it weakened into an area of squalls near 24° N., 68° W.

HURRICANE FAITH, AUGUST 21-SEPTEMBER 15

Hurricane Faith began as a poorly defined depression over the Ivory Coast of Africa on the 18th of August. Under satellite observations as it moved westward at a forward speed of about 20 m.p.h. the storm developed slowly, reaching tropical storm intensity on the 22d and hurricane strength on the following day near 15° N., 40° W. Generating winds of 85 m.p.h., Faith continued westward. Its center, passing 25 mi. north of St. Martin in the Leeward Islands on the 26th, reached a position north of the Dominican Republic the following day. The central pressure at this time was 983 mb. (29.03 in.). The storm then turned to a north-northwesterly course, slowed to a forward speed of about 5 m.p.h. and intensified rapidly.

For the next 3 days Faith held this course while winds increased to 120 m.p.h. and pressure fell to 963 mb. (29.44 in.). Late on the 31st Faith turned toward the northeast. On the 1st the storm passed about 205 mi. northwest of Bermuda generating maximum winds of 110 m.p.h. with gales extending out to 300 mi. in the southeast quadrant. The ALBERTO BENNATI, an Italian tanker located some 200 mi. west of Bermuda on the 1st (about 370 mi. from the storm's center), was crippled when 25-ft. seas generated by Faith flooded the engine room, killing one crewman.

Moving eastward Faith continued to deepen. Pressure fell to 950 mb. (28.05 in.) on the 3d, then later in the day the storm turned northeastward again, with its forward speed increasing to near 45 m.p.h. by the following day. Two men, attempting to cross the Atlantic in a row boat, drowned as the hurricane crossed their path. On the 6th Faith, now extratropical, passed over the Faeroe Islands and the following day moved inland near Nordoyan, Norway. Continuing as a deep low pressure system the storm moved across northern Norway, Sweden and Finland then turned northward over Novaya Zemlya. During the storm's trek across Scandinavia a Norweigian ferryboat, off the Denmark coast, was swamped. One person was killed. By the 12th the storm became a stationary 980-mb. (28.94 in.), LOW centered over Franz Josef Land, near 81° N., 60° E. The storm finally dissipated in the Arctic Ocean on the 15th.

TROPICAL STORM GRETA, SEPTEMBER 1-7

The circulation which spawned tropical storm Greta was first sighted by the NIMBUS 2 satellite some 600 mi. east of Barbados on September 1. An investigation by reconnaissance aircraft that same day revealed a weak circulation and an area of showers but no strong winds. The depression remained weak, generating maximum winds of 35 m.p.h. as it moved northwestward during the next 2 days. Moderate intensification occurred on the 4th as the storm passed about 200 mi. northeast of St. Martin. Reconnaissance aircraft indicated the depression had intensified to tropical storm strength as maximum winds reached 58 m.p.h. and central pressure dipped to 1004 mb. (29.65 in.)--the lowest pressure reported during the life of the storm. However, the following day the trend had reversed and Greta became very poorly organized. Highest reported surface winds were only about 35 m.p.h. in a few squalls. The system continued northwestward, still weakening, then turned to a northerly course some 300 mi. east of Nassau on the 7th. The cloud area associated with the dying surface circulation remained identifiable in satellite pictures through the 8th when it merged with a prefrontal cloud mass between the east coast of the United States and Bermuda.

TROPICAL STORM HALLIE, SEPTEMBER 20-21

Satellite photographs on the 18th indicated a large disorganized cloud mass was merging with a frontal cloud band in the southwestern Gulf of Mexico. The resulting circulation spawned tropical storm Hallie, on the 20th, some 120 mi. east-southeast of Tampico, Mexico. A. reconnaissance flight later that day reported a central pressure of 997 mb. (29.44 in.) with maximum winds of 50 m.p.h. Hallie, stationary while intensifying, began to drift southwestward late on the 20th. The Mexican coastal town of Nautla reported gusts of 40 m.p.h., heavy rain, and a minimum pressure of 1002 mb., (29.59 in.) early the following day, as the storm made landfall a few miles to the south. Once inland the storm weakened rapidly and, by late in the day, there was little evidence of circulation.

HURRICANE INEZ, SEPTEMBER 21-OCTOBER 11

Hurricane Inez, winding its way through the northern Caribbean Sea, the Straits of Florida and the Gulf of Mexico, paid unwelcome visits to Guadeloupe, Hispaniola, Cuba, the Bahamas, the Florida Keys and the Yucatan Peninsula before finally exhausting itself over the mountains of central Mexico. This great hurricane, with maximum winds of 150-175 m.p.h. and minimum pressure dropping to 927 mb. (27.38 in.) left a path of devastation, devastation which totals more than 1,000 dead and $200 million in damage.

Inez, organizing some 1,400 mi. east of the tropical island of Trinidad on September 21, spent the first 5 days of its 21-day existence in the development stage. Under the watchful eyes of reconnaissance aircraft the storm matured to hurricane strength, while maintaining a west-northwesterly track and a forward speed of about 12 m.p.h. Inez reached hurricane intensity on the 26th but it was not until the following day that its effects were first felt on land.

Generating winds up to 120 m.p.h., with a central pressure of 961 mb. (28.38 in.), hurricane Inez battered the Leeward Islands from Antigua to Dominica with hurricane force winds, as its center passed over Guadeloupe on the 27th. Strong winds, high tides and torrential rains in Guadeloupe destroyed thousands of homes as small villages were virtually swept away. Total damage has been estimated near $50 million with 27 people killed and about 600 injured.

Hurricane Inez, continuing to intensify, traversed the eastern waters of the Caribbean and by the 28th was buffeting the southern coast of Puerto Rico with gale force winds. Although the storm was generating maximum winds of 150-175 m.p.h. near its center, with a minimum pressure of 932 mb. (27.52 in.), the island was spared most of its fury when the storm's center passed about 75 mi. to the south. Maximum winds reached 30 m.p.h. with gusts to 52 m.p.h. along the southern coast. Mona Island, a short distance west of Puerto Rico, estimated winds near 70-80 m.p.h. on the evening of the 28th.

Early on the 29th Inez reached its peak intensity when the central pressure dropped to 927 mb. (27.38 in.) while generating maximum winds of 150-175 m.p.h. and hurricane force winds outward 70 mi. from the center. Lashing the southern coast of the Dominican Republic, the severe hurricane made its way to the Barahona Peninsula where winds of 115 m.p.h. or more raked the entire peninsula and tides 10-15 ft. above normal inundated the entire southern coast of the Dominican Republic. After ravaging the Barahona Peninsula, Inez turned its full fury on Haiti. Moving through the "Valley of Death," a deep trough between two mountain ranges on the Tiburon Peninsula of Haiti, the storm touched off torrential rains and local winds may have well exceeded 160 m.p.h. Accelerating northwestward Inez passed over the island of Gonave late on the 29th, pounding western Haiti with hurricane force winds, torrential rains and 10-15 ft. tides which flooded the northern shores of the Tiburon Peninsula.

TROPICAL CYCLONE DATA

HURRICANE INEZ, SEPTEMBER 21-October 11

Station	Date	Pressure (inches)		Wind (miles per hour)				Highest Tide (feet) #	Time+	Storm Surge (inches)	Remarks
		Low	Time+	Fastest Mile	Time+	Gusts	Time+				
PUERTO RICO											
Ponce (Mercedita Airport)	28			20	1300 A	30	1300 A				Eye passed 70 mi. south of Ponce at 1200 A.
Mona Island	28					80	1930 A				
BAHAMAS											
Alice Town, Bimini	3	29.16	04/0300	NNE 63	1700					6.48	
Freeport, Grand Bahama	3	29.45		ESE 64						5.19	
Green Turtle Cay, Abaco	3	29.64	1500	SE 50	04/0200					9.82	
Hope Town, Abaco	3	29.70	1900	33						5.27	
Nassau	3	29.52	1900	45		64	0737			14.31	Wind 100 in vicinity of tornado.
West End,	3	29.50	1400			90	2359			1.43	
Grand Bahama	3		1900								
FLORIDA											
Hillsboro Light	4	29.37	0400	72	0515			3.0			
Fort Lauderdale	4			45	0900	60	0830			1.53	
Port Everglades	4	29.54	0400	ESE 45	1200	ESE 55	1200			1.85	
Miami, NHC	4	29.38	0713	ENE 46	1035	ENE 60	0935	2.7	0713	2.51	Tides along the coast were about 3 ft. above normal. Three people were killed in Florida. Gales occurred intermittently for 34 hr. 45 min. at NHC.
Miami, WBAS	4	29.41	0640	NE 41	0754	NE 63	0750			3.24	Damage in Dade, Broward and Monroe Counties estimated at $5 million - $3.72 million in personal property and $1.25 million in crop.
Key Biscayne	4	29.39	0730	ENE 55	1100	ESE 65	0830			3.87	
Tamiami Trail (40-Mile Road)	4	29.54	1345	N 29	0800	NE 42	1545			1.22	
Homestead AFB	4	29.24	1135	NNE 46	0955	NNE 79	0932			0.62	
North Key Largo	4	29.04	1120	ESE 75	1215	ESE 96	1230			3.00	Eye 0915-1215.
Flamingo	4	29.04	1315	SSE 81	1800	SSE 92	1800			1.02	Eye 1645-1650.
Tavernier	4	29.11	1400	SE 90	1600	SSE 100+	1700	2.0		.97	In eye 1115-1430.
Plantation Key	4	29.22	1330	ESE 98	1645	ESE 110	1640	3.5		4.21	Florida Bay Tide 3.5 ft. above normal. In eye 1145-1300.
Grassy Key	4	29.10	1405	SSE 86	1855	SSE 92	1915	3.0		3.25	In eye 1410-1620.
Key West, WBAS	5	29.18	04/1936	SSE 84	0006	SSE 90	0013	4.25		4.15	Tides in Keys generally 2-4 ft. above normal. In eye 2000-2245.
Boca Chica, NAS	4	29.20		SE 69	2342	S 94	2342			1.19	
Ft. Meyers, WBAS	4	29.66	1600	E 35	1450	44	1450			0.09	Tides well below normal due to winds blowing offshore.
Dry Tortugas Coast Guard	5	29.15		E 92	0333	E 120	1000				
Big Pine Key	4	29.18	1700	SE 150‡	2130	SE 165‡	2130	5		3.92	In eye 1615-2020.
TEXAS											
Port Isabel	9	29.84	1830 C	ENE 17				2.20†	0400-0700 C	trace	
Brownsville	9	29.78	1555 C	N 22	1555 C					trace	
MEXICO											
Merida	7			69		81					
Tampico	10			115		127					

+ Times are Eastern Standard except Central Standard (C) and Atlantic Standard (A) where indicated.
# Tide above normal.
‡ Estimated.
† Mean low water.

Total damage in Hispaniola was estimated near $32 million -- $12 million in the Dominican Republic and $20 million in Haiti. Between 74 and 100 people lost their lives in the Dominican Republic while a rough estimate in Haiti puts the figure at 750. (In 1963 hurricane Flora moved through the same area in Haiti killing some 5,000 people and causing $125 million worth of damage.) Estimates of 1,000 people injured in Haiti and 450 seriously injured in the Dominican Republic have been reported.

After battering Hispaniola for more than 24 hr., Inez moved into the Caribbean again and reorganized for its invasion of Cuba. On the 30th of September the hurricane pushed into southeastern Cuba between Guantanamo City and Santiago. Minimum pressure at this time was near 985 mb. (29.09 in.) and Guantanamo City reported a sustained wind of 138 m.p.h. The U.S. Naval Base at Guantanamo Bay was hammered as the storm crossed Oriente Province; none of the base personnel were seriously injured. More than 125,000 people were evacuated from low-lying coastal areas and only one death was reported as 6- to 10-ft. tides swept the southeastern coast. Cuba's Sierra Maestra Mountains left Inez weak and disorganized. Drifting northwestward, the storm spread heavy rains and strong winds over most areas in Oriente Province. Early on the 1st of October Inez turned westward and moved into the Gulf of Guacanayabo. Remaining over water only briefly, the weak storm turned northward and moved inland again near Trinidad, Cuba. Poorly organized and generating below hurricane force winds, Inez drifted northward and moved off the coast north of Santa Clara early on the 2d. Maximum winds at this time were 52 m.p.h. and central pressure had risen to 994 mb. (29.35 in.).

Inez, moving into the Florida Straits, regenerated to hurricane strength late on the 2d some 95 mi. south-southeast of Miami. About this time the revitalized hurricane spawned a tornado in Nassau which killed one person and injured three others as it ripped across New Providence Island. Following a north-northeast course Inez continued to intensify; its renewed violence was felt on the 3d when a 23-ft. boat with 46 Cuban refugees aboard, sank in high seas about 35 mi. south of Miami with only one survivor. Maximum winds increased to 85 m.p.h. and pressure dipped to 985 mb. (29.09 in.) as storm-generated gales battered the southeast Florida coast and the northern Bahama Islands. Inez moved just east of the Bimini Islands (100 mi. east of Miami) where it stalled for about 8 hr. and then, unexpectedly turned west-southwestward toward the Florida Keys. Minor flooding occurred in the Bahamas as 1 ft. of water poured into Nassau's main street. Four people were killed, bringing the total in the Bahamas to five. Communication facilities were disrupted and total damage was estimated at $15.5 million.

About 60 mi. north of Nassau the 17,243-ton Liberian freighter, VERONA, was disabled in high seas and 75 m.p.h. winds, but managed to ride out the storm when Coast Guard cutters were unable to reach her. As Inez moved toward the Keys a 353-ft. Panamanian vessel, the FREIGHT TRANSPORTER was disabled 10 mi. off the mainland near Miami while an 82-ft Coast Guard Cutter, POINT THATCHER, was beached by gales and heavy surf just off Miami Beach.

The Miami area felt the brunt of the storm early on the 4th as the center passed 45 mi. southeast of the city. Maximum winds at the National Hurricane Center in Coral Gables reached 46 m.p.h. with gusts to 60 m.p.h., and the lowest pressure recorded was 995 mb. (29.38 in.) at 0713 e.s.t. Gales in the area occurred intermittently up to 35 hr., ending late on the 4th. Flamingo recorded the only sustained hurricane force wind on the mainland - south-southwest 81 m.p.h.

The Florida Keys, battered by gales early on the 4th, began to feel the full force of the storm on the afternoon of the 4th. Part of the eye passed directly over the Keys on its west-southwesterly journey. Slowly intensifying as it moved through the Keys, the storm dealt its strongest winds after the passage of the eye. Lowest recorded pressure in the Keys was 983 mb. (29.03 in.) at Islamorada. Highest measured winds were 98 m.p.h. at Plantation Key, however winds up to 150 m.p.h. were estimated at Big Pine Key.

Tides along the southeast coast of Florida and in the Keys were about 2-4 ft. above normal. Hurricane force winds in the Keys generally lasted about 4 hr. Damage in Florida -- including the Keys -- was restricted to Dade, Broward, and Monroe Counties and totaled about $5 million. Forty-eight people lost their lives; 45 were Cuban refugees in a small boat.

Located just south of Dry Tortugas early on the 5th, Inez, packing winds up to 105 m.p.h. with a central, pressure of 985 mb., (29.09 in.) headed away from the Keys on a west-southwesterly track. Once again Cuba -- this time the northwestern section -- felt the fury of hurricane Inez as the storm's center passed 60 mi. northwest of Pinar Del Rio Province early on the 6th. Havana reported 12 in. of rain in 30 hr. as coastal sections west of the capital were battered by strong winds, torrential rains and high tides. In the low-lying coastal areas of Havana Province 21,000 people were evacuated because of the flooding and 4 people lost their lives, bringing Cuba's total to 5. Thirty people were injured in Cuba and total damage was estimated at $18 million. After lashing Cuba, Inez turned toward the Yucatan Peninsula.

While Inez moved through the Bahamas to the Yucatan Peninsula many ship reports confirmed the intensity of the storm. On the 3d the TEXICO NORTH DAKOTA, about 25 mi. southeast of Miami, reported a north wind of 58 m.p.h. while the following day the P. W. THIRTLE, in the same area, reported a 98-m.p.h. easterly wind, accompanied by a pressure of 994.9 mb. (29.38 in.). Late on the 4th the ESSO LIMA passed near the eye of the hurricane and recorded a 105-m.p.h. wind with a pressure of 990.9 mb. (29.26 in.).

Intensifying slowly, the hurricane moved southwestward within 50 mi. of the extreme northeastern tip of the Yucatan Peninsula by late on the 6th. At this time central pressure was 961 mb. (28.38 in.) and maximum winds reached 105 m.p.h. Inez, changing to a westsouthwesterly course, paralleled the Yucatan coast, lashing the sparsely-populated coastal sections with hurricane force winds, high tides and torrential rains before departing late on the 7th. Evacuation of some 15,000 people from Progreso, in anticipation of the storm, held loss of life to a minimum.

By the 8th Inez was well out to sea (330 mi. southeast of Brownsville, Texas). Energized by the warm waters of the Gulf of Mexico, the storm intensified with maximum winds reaching 130 m.p.h. and pressure falling to 948 mb. (28.00 in.). The storm, continuing its erratic movement turned to a northwesterly track that threatened Texas.

For the next 24 hr. the hurricane drifted northwestward, weakening slightly, and by late on the 9th the center was located about 200 mi. southeast of Brownsville. The central pressure was 960 mb. (28.35 in.) and maximum winds were 130 m.p.h. Inez then turned toward the Mexican coast. On the 10th the hurricane moved inland about

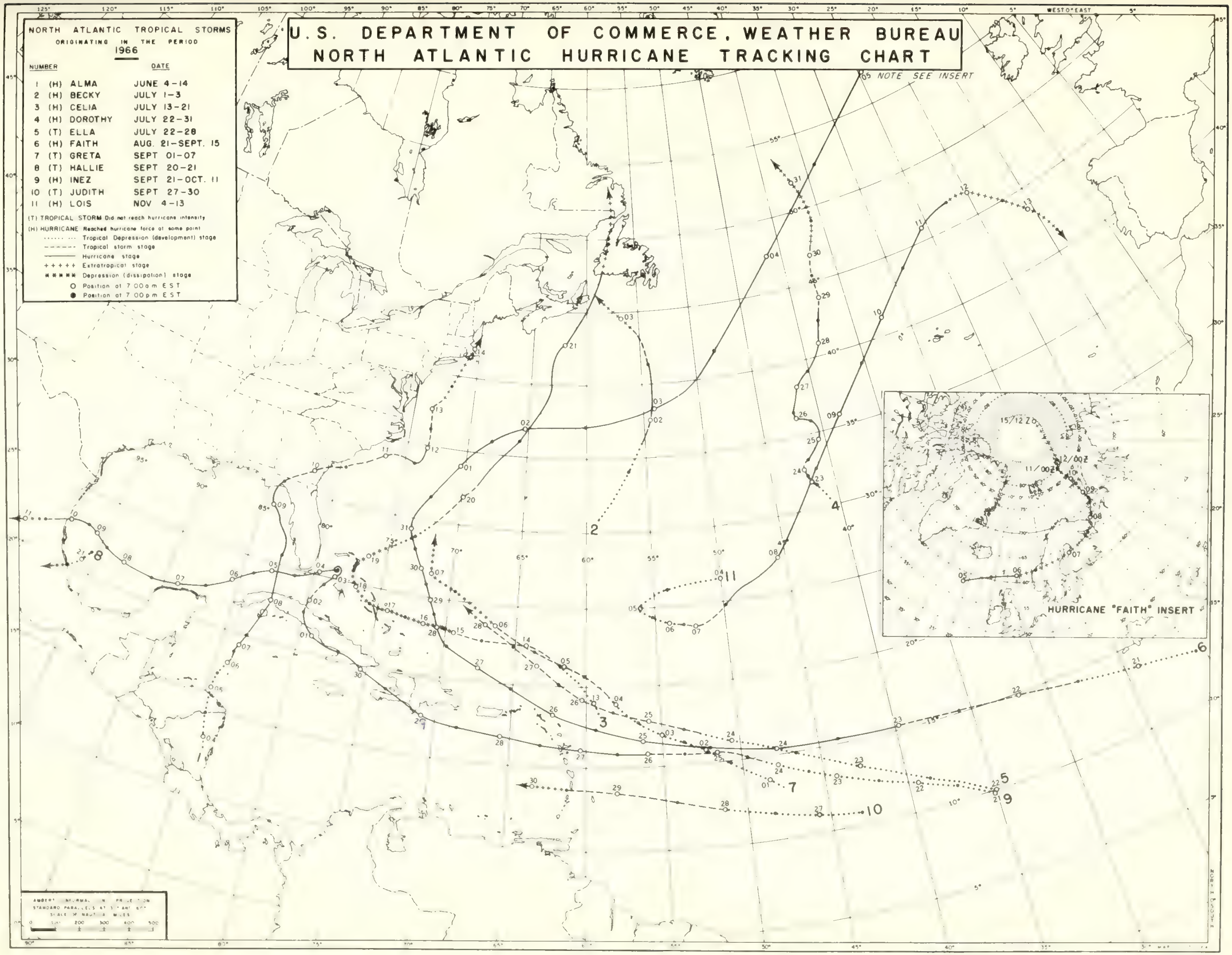
40 mi. north of Tampico -- which reported 115 m.p.h. winds with gusts to 127 m.p.h. Tides 10-12 ft. above normal pummelled the coast just north of the eye, while torrential rains touched off extensive flash flooding in the southern half of the State of Tamaulipas. Soto la Marina, midway between Tampico and Brownsville, reported 10.12 in. of rain in 24 hr. Inez, moving inland over mountainous terrain, began to dissipate and, early on the 11th, about 70 mi. west of Tampico, finally exhausted itself. Mexico, hit extremely hard, reported 65 people killed with 250 injured and damage totaling an estimated $100 million.

TROPICAL STORM JUDITH, SEPTEMBER 27-30

An area of cloudiness in the south-central North Atlantic, on the 26th and 27th, gave rise to tropical storm Judith. On the 28th Judith, with a weak circulation, reached minimal tropical storm intensity near 12° N., 52° W. Moving west-northwesterly at about 20 m.p.h. the storm neared the Windward Islands on the 29th. At this time the central pressure was 1007 mb. (29.74 in.) and maximum winds were 52 m.p.h. As the storm passed through the Island chain later that day, Martinique, about 50 mi. north of the storm's center, reported a wind of 37 m.p.h. and a ship farther north reported a 40 m.p.h. wind. Judith moved into the eastern Caribbean and degenerated to an easterly wave early on the 30th.

HURRICANE LOIS, NOVEMBER 4-13

Lois, the sixth hurricane of the season was discovered as a tropical storm on the 6th near 24° N., 54° W. The storm reached hurricane intensity the following day as it moved northeastward at a forward speed of about 12 m.p.h. Maximum winds increased to 85 m.p.h. on the 8th with gales extending 100 mi. from the center. The storm's forward speed accelerated to 26 m.p.h. as Lois continued northeastward. Early on the 10th the hurricane passed about 24- mi. west of the Azores. At this time maximum winds, near the center, were still 85 m.p.h. The following day the 6,065-ton American freighter YAKA, some 250 mi. west of the storm's center, reported a northerly wind of 45 m.p.h. Lois, slowly degenerating, continued northeastward and early on the 12th the 7,548-ton Netherlands tanker SOESTDYK, about 210 mi. northwest of the storm's center, reported a north wind of 40 m.p.h. At this time the center was located near 46° N., 22° W. Later in the day the storm degenerated to tropical storm intensity and then became extratropical. The storm stalled as it neared 48° N., 18° W. For the next 2 days the extratropical storm continued to weaken as it drifted southward, finally dissipating, on the 14th, some 250 mi. northwest of Lisbon, Portugal.


U.S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
NORTH ATLANTIC HURRICANE TRACKING CHART
NORTH ATLANTIC TROPICAL STORMS
ORIGINATING IN THE PERIOD
1966
NUMBER
DATE
1 (H) ALMA JUNE 4-14
2 (H) BECKY JULY 1-3
3 (H) CELIA JULY 13-21
4 (H) DOROTHY JULY 22-31
5 (T) ELLA JULY 22-28
6 (H) FAITH AUG. 21-SEPT. 15
7 (T) GRETA SEPT 01-07
8 (T) HALLIE SEPT 20-21
9 (H) INEZ SEPT 21-OCT. 11
10 (T) JUDITH SEPT 27-30
11 (H) LOIS NOV 4-13
(T) TROPICAL STORM Did not reach hurricane intensity
(H) HURRICANE Reached hurricane force at some point
Tropical Depression (development) stage
Tropical storm stage
Hurricane stage
+ + + + + Extratropical stage
Depression (dissipation) stage
○ Position at 7:00 a m EST
● Position at 7:00 p m EST
05 NOTE SEE INSERT
HURRICANE "FAITH" INSERT
15/12 Z
12/00Z
11/00Z
WEST 0° EAST
0 100 200 300 400 500

NORTH ATLANTIC TROPICAL CYCLONES 1966

STORM NAME	DATE	AREA WHERE FIRST REPORTED	COAST LINES CROSSED	HIGHEST REPORTED WIND SPEED	LOWEST PRESSURE REPORTED	AREA OF DISSIPATION	INTENSITY	REMARKS
1. ALMA	June 4-14	Eastern Nicaragua	Nicaragua Honduras Cuba Florida Georgia	125 m.p.h. Dry Tortugas June 8	970 mb. (28.64 in.) 70 miles west of Cedar Key Fla. June 9	North of Cape Cod	Hurricane	Damages totaled $10 million in U.S. mostly along west coast of Florida. Six deaths in U.S. all in Florida.
2. BECKY	July 1-3	300 miles southeast of Bermuda	None	75 m.p.h Johannes Russ July 2	985.5 mb. (29.11 in.) Johannes Russ July 2	East of Nova Scotia	Hurricane	
3 CELIA	July 13-21	200 miles northeast of the Leeward Islands	Bahamas	80 m.p.h Recon July 20	994 mb (29.35 in.) Recon. July 20	Labrador	Hurricane	
4 DOROTHY	July 22-31	Mid North Atlantic	None	75 m.p.h. Recon July 26	989 mb. (29.21 in.) Recon July 26	North-Central North Atlantic	Hurricane	
5. ELLA	July 22-28	South-Central North Atlantic	None	50 m.p.h Recon July 24	1008 mb (29.77 in.) July 25	East of the Bahamas	Tropical Storm	
6. FAITH	Aug. 21- Sept. 15	Ivory Coast of Africa	Faeroe Islands	111 m.p.h. TEXAS GETTY Sept. 3	950 mb (28.05 in.) Recon. Sept. 3	Arctic Ocean	Hurricane	One of the longest hurricane tracks on record
7. GRETA	Sept. 1-7	600 miles east of Barbados	None	58 m.p.h. Recon. Sept. 4	1004 mb. (29.65 in.) Recon. Sept. 4	West of Bermuda	Tropical Storm	
8. HALLIE	Sept. 20-21	Gulf of Campeche	Mexico	50 m.p.h Recon. Sept. 20	997 mb. (29.44 in.) Recon Sept 20	70 miles east of Mexico City	Tropical Storm	
9. INEZ	Sept. 21- Oct. 11	1400 miles east of Trinidad	Guadeloupe Dominican Republic Haiti Cuba Bahamas Florida Keys Mexico	150-175 m.p.h Recon. Sept. 29 South of Hispaniola	927 mb. (27.38 in.) Recon. Sept. 29	West of Tampico, Mexico	Hurricane	$5 million damage and 48 people killed in U.S.
10. JUDITH	Sept. 27-30	South-Central North Atlantic	St Lucia, Windward Islands	40 m.p.h. Sept 29	1007 mb (29.74 in.) Recon. Sept 29	Eastern Caribbean Sea	Tropical Storm	
11. LOIS	Nov. 4-13	Central North Atlantic	None	85 m.p.h. Recon. Nov 7	986 mb (29.12 in.) Recon. Nov. 7	250 miles northwest of Lisbon Portugal	Hurricane	

NORTH ATLANTIC TROPICAL CYCLONES FOR PAST YEARS

TOTAL NUMBER OF TROPICAL CYCLONES, LOSS OF LIFE AND DAMAGE

	Total Number Tropical Cyclones*		Total Number Hurricanes		Loss of Life		Damage by Categories**	
Year	All Areas	Reaching U.S. Coast	All Areas	Reaching U.S. Coast	Total All Areas	United States	Total All Areas	United States
1886	10	7	8	6				
1887	17	4	10	3				
1888	10	[illegible]	5	3				
1889	9	4	5	2				
1890	[illegible]	0	1	0				
	47	21	29	14				
1891	11	4	8	2				
1892	[illegible]	3	4	0				
1893	12	7	10	6				
1894	6	3	5	2				
1895	6	4	2	1				
	44	21	29	11				
1896	6	4	6	4				
1897	5	4	2	1				
1898	9	6	4	3				
1899	6	4	5	3				
1900	7	3	3	1		6,000		7
	33	21	20	12				
1901	10	6	3	2		10		6
1902	5	3	3	1		#		#
1903	9	2	8	2		9		6
1904	5	3	2	2		#		6
1905	5	2	[illegible]	0		#		#
	34	16	17	7				
1906	11	6	6	4		285		7
1907	4	3	0	0		#		#
1908	8	2	5	1		#		#
1909	10	7	4	3		404		7
1910	4	2	3	2		13		6
	37	20	18	10				
1911	4	2	3	2		17		6
1912	6	4	4	2		12		6
1913	4	3	3	2		#		#
1914	[illegible]	1	0	0		#		#
1915	5	4	4	3		600		8
	20	14	14	9				
1916	14	8	11	6		107		7
1917	3	1	2	1		5		5
1918	5	2	3	1		34		6
1919	3	2	1	1		287		7
1920	4	3	4	2		2		6
	29	16	21	11				
1921	6	2	4	2		5		6
1922	4	[illegible]	2	0		0		#
1923	7	4	3	2		0		4
1924	8	3	5	2		2		3
1925	2	2	[illegible]	1		6		3
	27	12	15	7				
1926	11	4	8	4		269		8
1927	7	[illegible]	4	0		0		#
1928	6	3	4	2		1,836		7
1929	3	2	3	2		3		6
1930	2	1	2	0		[illegible]		2
	29	11	21	8				
1931	9	2	2	0		0		#
1932	11	5	6	2		0		#
1933	21	7	[illegible]	5		63		7
1934	11	5	6	3		17		6
1935	6	2	5	2		414		7
	58	21	28	12				
1936	16	7	7	3		[illegible]		6
1937	9	4	3	0		0		4
1938	8	4	3	2		600		8
1939	5	3	3	1		3		3
1940	8	3	4	2		51		6
	46	21	20	8				
1941	6	4	4	2		10		7
1942	10	3	4	2	17	8	7	7
1943	10	4	5	1	19	16	7	7
1944	11	4	7	3	1,076	64	8	8
1945	11	5	[illegible]	3	29	7	8	8
	48	20	25	11				
1946	6	4	3	1	5	0	7	7
1947	9	7	5	3	72	53	8	8
1948	9	4	6	3	24	3	7	7
1949	13	3	7	2	4	4	8	8
1950	13	4	11	3	27	19	7	7
	50	22	32	12				
1951	10	[illegible]	8	0	244	0	7	6
1952	7	2	6	1	16	3	6	6
1953	14	6	6	2	3	2	7	7
1954	11	4	8	3	720+	193	9	9
1955	12	5	9	3	1,518+	218	9	9
	54	18	37	9				
1956	8	2	4	1	76	21	8	7
1957	8	5	3	1	475	395	8	8
1958	10	1	7	0	49	[illegible]	7	7
1959	11	7	7	3	57	24	7	7
1960	7	5	4	2	185	65	8	8
	44	20	25	7				
1961	11	3	8	[illegible]	345	46	8	8
1962	5	1	3	0	4	4	6	6
1963	9	1	7	[illegible]	7,218+	11	9	7
1964	12	6	6	4	266	49	9	9
1965	6	2	4	1	76	75	9	9
	43	13	28	8				
1966	11	2	7	2	1 040	54	8	7
Total	654	289	386	158				
Median	8	4	4	2				

** The Weather Bureau has for some time recognized that, without detailed expert appraisal of damage, all figures published are merely approximations to fact. Since errors in dollar estimates vary in proportion to the total damage, storms are placed in categories varying from 1 to 9 as follows

1 Less than $50	4 $5,000 to $50,000	7 $5,000,000 to $50,000,000
2 $50 to $500	5 $50,000 to $500,000	8 $50,000,000 to $500,000,000
3 $500 to $5,000	6 $500,000 to $5,000,000	9 $500,000,000 to $5,000,000,000

Blank spaces indicate no figures available.

* Including hurricanes.

# Not reported in literature, believed minor.

+ Additional deaths for which figures are not available.

NORTH ATLANTIC TROPICAL CYCLONES FOR PAST YEARS — CONT'D

Frequency of Tropical Cyclones (Including Hurricanes) by Months and Years

		May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1886			3	1	2	2	2			10
1887		1		2	2	3	6	1	2	17
1888			1	1	2	2	1	3		10
1889		1	1		1	5	1			9
1890					1					1
1891				1	2	3	4	1		11
1892			1		1	4	3			9
1893			1	1	5	3	1	1		12
1894					2	1	3			6
1895					2	1	3			6
1896				1	1	2	2			6
1897					1	2	2			5
1898					2	5	2			9
1899				1	2	1	2			6
1900					1	3	3			7
1901			1	2	2	3	2			10
1902			2			1	1	1		5
1903				1	1	4	2	1		9
1904			1			1	3			5
1905						3	2			5
1906			2		1	3	4	1		11
1907			1			2	1			4
1908	Mar. 1			1	1	3	2			8
1909			2	2	2	2	1	1		10
1910					1	2	1			4
1911					2	1	1			4
1912			1	1		1	2	1		6
1913			1		1	1	1			4
1914						1				1
1915				1	2	2				5
1916			1	2	3	4	3	1		14
1917					2	1				3
1918					3	2				5
1919				1		1		1		3
1920						4				4
1921			1			3	2			6
1922			1			1	2			4
1923					1	1	5			7
1924			1		2	2	2	1		8
1925						1		1		2
1926				1	2	5	2	1		11
1927					1	3	3			7
1928					2	3	1			6
1929			1			1	1			3
1930					2					2
1931			1	1	2	3	1	1		9
1932		1			3	3	3	1		11
1933		1	1	3	7	5	3	1		21
1934		1	1	1	2	2	3	1		11
1935					3	1	2			6
1936			3	2	6	4	1			16
1937				1	2	6				9
1938					3	1	3	1		8
1939			1		1	1	2			5
1940		1			3	2	2			8
1941						4	2			6
1942					3	3	3	1		10
1943				1	2	4	3			10
1944				3	2	4	2			11
1945			1	1	4	3	2			11
1946			1	1	1	1	2			6
1947				1	2	3	3			9
1948		1		1	2	3	1	1		9
1949					3	7	2	1		13
1950					4	3	6			13
1951		1			3	4	2			10
1952	Feb. 1				2	2	2			7
1953		1			3	4	4	1	1	14
1954			1	1	2	4	1	1	1	11
1955				1	4	5	2			12
1956			1	1	1	4	1			8
1957			2		1	4	1			8
1958			1		4	4	1			10
1959		1	2	2	1	3	2			11
1960			1	2	1	3				7
1961				1		6	2	2		11
1962					2	2	1			5
1963				1	1	5	2			9
1964			1	1	4	4	1	1		12
1965			1		2	2	1			6
1966			1	4	1	4		1		11
Totals	Feb. Mar. 1 1	10	43	50	145	222	148	30	4	654

Frequency of Tropical Cyclones Reaching Hurricane Intensity by Months and Years

		May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1886			2	1	2	2	1			8
1887				1	2	3	2	1	1	10
1888			1		2		1	1		5
1889		1			1	3				5
1890					1					1
1891				1	2	3	2			8
1892					1	2	1			4
1893			1	1	5	3				10
1894					1	1	3			5
1895					1		1			2
1896				1	1	2	2			6
1897					1	1				2
1898					2	2				4
1899				1	2	1	1			5
1900					1	2				3
1901				1	2					3
1902			1			1	1			3
1903				1	1	3	2	1		8
1904						1	1			2
1905							1			1
1906			1		1	2	2			6
1907										0
1908	Mar. 1			1		2	1			5
1909				1	1	1	1			4
1910						2	1			3
1911					2	1				3
1912						1	2	1		4
1913			1		1	1				3
1914										0
1915					2	2				4
1916			1	2	3	2	2	1		11
1917					1	1				2
1918					2	1				3
1919						1				1
1920						4				4
1921			1			2	1			4
1922						1	1			2
1923					1	1	1			3
1924					2	1	1	1		5
1925								1		1
1926				1	2	4	1			8
1927					1	3				4
1928					2	1	1			4
1929			1			1	1			3
1930					2					2
1931						2				2
1932					3	1	1	1		6
1933			1	1	3	3	1			9
1934			1	1	1	1	1	1		6
1935					2	1	2			5
1936			1	1	3	2				7
1937						3				3
1938					2	1				3
1939					1		2			3
1940					3	1				4
1941						3	1			4
1942					3			1		4
1943				1	1	2	1			5
1944				2	1	3	1			7
1945			1		1	1	2			5
1946				1		1	1			3
1947					2	1	2			5
1948					1	3	1	1		6
1949					2	4	1			7
1950					4	3	4			11
1951		1			2	3	2			8
1952					2	2	2			6
1953					2	3	1			6
1954			1		2	3	1		1	8
1955					3	5	1			9
1956				1	1	1	1			4
1957			1			2				3
1958					3	3	1			7
1959			1	2		3	1			7
1960				1	1	2				4
1961				1		5	1	1		8
1962					1	1	1			3
1963				1	1	4	1			7
1964					2	3	1			6
1965					2	1	1			4
1966			1	3	1	1		1		7
Totals	Mar. 1	2	18	29	107	143	71	13	2	386

TROPICAL CYCLONES IN THE EASTERN NORTH PACIFIC, 1966

Robert A. Baum
Weather Bureau, Environmental Science Services Administration
San Francisco, California

Seven hurricanes and six tropical storms in the Eastern North Pacific Ocean during the 1966 tropical cyclone season made the year the most active on record. In addition, five tropical depressions were identified but failed to develop to storm intensity.

Of the 13 major storms, only three were first identified in weather satellite pictures, the remainder being first indicated by merchant ships on the high seas and developing between satellite passes or in areas where pictures were unobtainable.

A total of 289 tropical cyclone advisories were issued on 56 days of the 1966 season. The storms, with winds in excess of 33 kt., were distributed as indicated in Table 1.

During one period, September 10 and 11, four tropical cyclones were active at one time in the Eastern North Pacific Ocean, while a fifth was located in the Honolulu area of responsibility. The four in the San Francisco area included Francesca, Gretchen, Helga and Ione.

Aircraft reconnaissance of storms was provided in eleven cases; aircraft were dispatched beyond their normal range on eight occasions and in only one case was a storm within the accepted range of the aircraft when reconnaissance was not attempted. In that case reconnaissance was accomplished on two previous and two successive days.

Table 1. Distribution of Tropical Cyclones, 1966, Eastern North Pacific Ocean

	May	June	July	Aug.	Sept.	Oct.	Nov.	Total
Number of Tropical Cyclones	0	1	0	4	6	2	0	13
Number of days with winds in excess of 33 kt.	0	3	0	22	26	5	0	56

The ROBERT D. CONRAD passed through the eye of Hurricane Eileen between 0745 and 0810 on August 26, near 19° 56' N., 123° 28' W. Radar presentation indicated the eye of the cyclone was elliptical in shape and about 8 by 12 mi. in size. Hurricane winds of 60 to 70 kt. with gusts to 80 were measured but were encountered only about 5 mi. before entering and after passing the eye. Torrential rain with near zero visibility occurred within about 10 mi. of the center. The barograph trace for the passage is shown in figure 1. Satellite pictures taken 10 hr. after the ship's intrusion into the eye of the storm suggested maximum sustained winds of 68 kt.

Weather satellite surveillance of tropical cyclones was more complete this year than previously. Greater areal coverage was possible through the use of near polar orbits, space oriented equipment, and infra-red night-time observations. Of the 289 advisories issued, the preparation of 96 involved the use of satellite photographs to determine the location and intensity of the storm. In 49 of these cases the satellite data was all that was available.

Cooperation with other stations with automatic picture equipment was good. Honolulu, Vandenberg Air Force Base, Point Mugu, Albuquerque and El Paso were consulted when the satellite was beyond the horizon from San Francisco.

Infrared equipment was available only at the National Environmental Satellite Center in Washington, D. C., but in three cases, telephone calls alerted San Francisco to important changes in character of storms.

The season was not without destruction. While no damage was reported to shipping either at sea or in harbors, the four storms that moved inland over Mexico brought destruction, and two of the storms cost at least 14 lives.

Hurricane Adele moved inland near 18.3° N., 103.3° W. at 0900 June 24 leaving hundreds of houses damaged or destroyed and at least 8 dead. Hurricane Helga moved inland on the coast of Baja California near 26.5° N., 113.0° W., at 1200 September 15. In a letter from Luis Salido, Amateur Radio Net Control Officer for Baja California, damage was alluded to in the following excerpt: "Fortunately little damage was done in the village of Ascencion but as all fishing boats were advised opportunely, none were taken by surprise, so we did not resent any losses."

Tropical storm Kirsten moved inland near 26.3° N., 109.3° W., at 0000 September 29. Damage included 180 houses heavily damaged or destroyed and 6 dead. Tropical storm Maggie moved onshore near 19.0° N., 104.8° W., at 0000 October 19 with no reports of damage or deaths.

Summaries of the individual tropical cyclones follow. All time references are in GMT. Tracks shown are for those cyclones which reached at least tropical storm intensity. Highlights are summarized in Table 2.

HURRICANE ADELE, JUNE 20-24, 1966

The first tropical cyclone of the year in the Eastern Pacific Ocean started in a squally area in the tropical convergence zone about 175 mi. south of Acapulco, Mexico, on June 19. The tropical depression, moving northwestward at 4 kt. developed into a tropical storm early on the 21st. Continuing its slow movement but in a more westerly direction the storm became a hurricane late on the 22d, about 150 mi. south of Manzanillo, and then made a sharp turn northeastward, to head toward the coast. Winds of 64 kt. were reported by the FLYING ENTERPRISE and 63 kt. by the KENNETH McKAY just before the storm went ashore about 100 mi. southeast of Manzanillo at 0900 June 24. The storm dissipated soon after going ashore but still caused considerable flooding and 8 deaths. No damage was reported to shipping.

HURRICANE BLANCA, AUGUST 2-12, 1966

Squalls and showers covered a large area of the Eastern Pacific Ocean during the latter part of July, and on August 2 a tropical depression formed about 180 mi. south of Clarion Island. The depression, moving west-northwestward at 10 kt., developed into a tropical storm within 6 hr. of its identification and continued on a west-northwesterly heading at about 10 kt. with maximum winds of 55 kt. By 0000 of the 5th, the storm increased to hurricane strength near 20° N., 126°W., but maintained hurricane winds for only 18 hr.; it was downgraded to a tropical storm with 60 kt. winds at 21° N., 131° W., at 1800. Continued weakening diminished the storm to a depression early on the 7th and it could not be identified as a closed circulation from ship reports or satellite pictures on the 8th. Remnants of the storm moved northwestward and regeneration became apparent on the 9th near 25° N., 147° W., when it was again identified as a tropical storm. It then moved northwestward at about 15 kt. to 31° N., 159° W., with maximum winds 40 to 50 kt. The storm again weakened to a tropical depression at 31° N., 165°W., early on the 12th. Further weakening made it impossible to find on the weather charts so the depression was dropped.

The path of Blanca was one of the longest on record for an Eastern North Pacific tropical cyclone. From its beginning as a tropical disturbance on July 31 to its final dissipation on August 12 the storm covered 4,300 mi. of ocean. It was observed by 3 different satellites each day, by Air Force reconnaissance, by civil aircraft from at least 4 nations, and by merchant vessels of diverse registry.

HURRICANE CONNIE, AUGUST 7-17, 1966

Hurricane Connie was first detected as a tropical storm early on the 7th near 14° N., 122° W. The storm, tracked by satellite as it moved westward, intensified slightly and, on the 10th, maximum winds reached 60 kt. while gale force winds extended about 100 mi. in all directions. Located near 15° N., 132° W., at 1200 on the 10th, it moved west-northwestward for the next few days, with little change in intensity. On the 13th, some 700 mi. east-southeast of Hilo, Hawaii, Connie reached hurricane intensity and began moving westward again. Winds reached 75 kt. with gales extending about 200 mi. in all directions as the storm headed toward the Hawaiian Islands at a forward speed of about 10 kt. Late on the 15th, some 400 mi. east-southeast of Hilo, Connie decreased to tropical storm intensity and winds dropped to 45 kt. The storm, continuing westward, passed about 200 mi. south of the island of Hawaii, and on the 17th degenerated to a weak depression some 430 mi. south of Oahu.

HURRICANE DOLORES, AUGUST 16-26, 1966

Hurricane Dolores was discovered as a tropical storm, some 260 mi. southwest of Acapulco, Mexico, on the 16th. During the next 2 days it moved toward the west-northwest at a forward speed of about 10 kt. Late on the 18th, the storm, after crossing the 15th parallel some 800 mi. west-southwest of Acapulco, intensified to hurricane strength and turned to a northwest heading. Winds increased to 75 kt., but within 24 hr. dropped below hurricane intensity as Dolores turned toward the west-northwest. For the next 5 days the storm, following a west-northwest course and gradually diminishing in intensity, covered a little more than 1,000 mi. before finally stalling and dissipating near 26° N., 136° W., on the 25th.

HURRICANE EILEEN, August 23-29, 1966

Eileen, the 5th hurricane of the season in the Eastern Pacific, began as a tropical depression some 600 mi. west of Acapulco, Mexico, early on the 23d. For the next 3 days the storm slowly intensified while moving west-northwestward at a forward speed of about 10 kt. On the 26th, near 20° N., 123° W., winds increased to 70 kt. and Eileen became a hurricane for some 24 hr., turning northwestward before diminishing to tropical storm intensity. The storm then recurved to the north-northeast and, early on the 29th, dissipated near 26° N., 129° W. The ALCOA MARKETER encountered 50 kt. winds on the 24th near 18.1° N., 115.4° W., and the ROBERT D. CONRAD passed through the eye of the storm near 19.9° N., 123.5° W., early on the 26th, encountering winds of 60-70 kt., with gusts to 80 kt.

HURRICANE FRANCESCA, SEPTEMBER 5-16, 1966

Hurricane Francesca was spawned about 200 mi. southwest of Acapulco, Mexico, on the 5th. Early on the 6th reports from the GARDEN CITY, the NAGARA MARU, the TRANSOCEAN MERCHANT and the AMERICAN CONTRACTOR indicated the depression deepened rapidly as it moved west-northwestward and late on the 6th had reached hurricane intensity some 600 mi. west of Acapulco. For the next 3 days Francesca, at a minimum hurricane intensity, moved toward the west at a forward speed of about 8 kt. Late on the 9th, Francesca degenerated to tropical storm intensity, moving southwestward to near 14° N., 130° W., on the 12th. It then recurved northeastward and dissipated near 21° N., 125° W., on the 16th.

TROPICAL STORM GRETCHEN, SEPTEMBER 7-11

Tropical storm Gretchen was first identified late on September 7 from satellite pictures. The storm was located near 17° N., 129° W°, with maximum winds of 48 kt. It moved west at 6 kt. through the 8th; southwest at 10 kt. through the 11th; and west at 8 kt. until dissipating late on the 11th near 13° N., 142.5° W.

HURRICANE HELGA, SEPTEMBER 9-15, 1966

Early on the 9th hurricane Helga formed about 60 mi. east of the initial location of hurricane Francesca. Intensifying slowly, the storm moved west-northwestward for the next 3 days and on the 12th was located about 900 mi. due west of Acapulco, Mexico. Turning northward Helga attained hurricane intensity late on the 12th as maximum winds reached 75 kt. Early on the 14th the storm diminished to tropical storm intensity about 300 mi. west of La Paz, Baja California. Helga then recurved eastward and, on the 15th generating winds of 50 kt., it moved inland over the Baja California peninsula and dissipated.

TROPICAL STORM IONE, SEPTEMBER 10-14, 1966

Reports from the CHUNGKING VICTORY, the POLAR STERN and the PACIFIC RELIANCE indicated that tropical storm Ione formed about 400 mi. southeast of Acapulco, Mexico, late on the 10th. In the tropical depression stage, the storm moved northwestward for 2 days, reaching tropical storm intensity late on the 12th some 150 mi. south of Acapulco. It then dissipated quickly. By the 14th a definite circulation was no longer evident.

TROPICAL STORM JOYCE, SEPTEMBER 14-20, 1966

Tropical storm Joyce, a tropical depression for all but 24 hr., formed late on the 14th some 480 mi. west-southwest of Acapulco. For the next 4 days the depression moved westward. Joyce covered a distance of some 600 mi. before recurving northward early on the 18th and reaching tropical storm intensity with maximum winds of 35 kt. Joyce turned counterclockwise to the southeast on the 19th and on the following day, dissipated near 15° N., 118° W.

TROPICAL STORM KIRSTEN, SEPTEMBER 25-29

On the 28th tropical storm Kirsten became the second storm of the month to sweep across the Baja California Peninsula, moving inland from the southwest and passing just north of La Paz. Generating 50-kt. winds as it approached the coast, the storm traversed the Gulf of California before dissipating near Navojoa, Mexico, on the 29th. Kirsten had formed some 400 mi. southwest of La Paz on the 25th and reached tropical storm intensity about 200 mi. southwest of La Paz early on the 28th. Reports from the ADELPHI VICTORY, ALLISON LYKES, APALACHEE and CONSTITUTION STATE helped forecasters track the storm.

TROPICAL STORM LORRAINE, OCTOBER 4-5, 1966

Lorraine formed October 4 at 0000 about 180 mi. west-southwest of Acapulco, Mexico, as a tropical depression moving north at 5 kt. Moderate to heavy rain and 20 - 40 kt. winds were reported by the CHARLES LYKES, NEGAMO, MONTPELIER VICTORY and SUNEK on that day. Just before 1200 on the 4th the cyclone reached tropical storm intensity. It continued moving northward, reaching the coast early on the 5th where it dissipated about 100 mi. southwest of Manzanillo, Mexico.

TROPICAL STORM MAGGIE, OCTOBER 16-19, 1966

A late season tropical depression formed October 16, 360 mi. southeast of Acapulco, Mexico. The depression was moving northwest at 10 kt. and developed into tropical storm Maggie about 100 mi. southwest of Acapulco at 0400 on the 18th. Continuing northwestward, the storm moved onshore about 20 mi. west of Manzanillo early on the 19th. Heavy rain spread inland to Guadalajara but no reports of damage have been received.

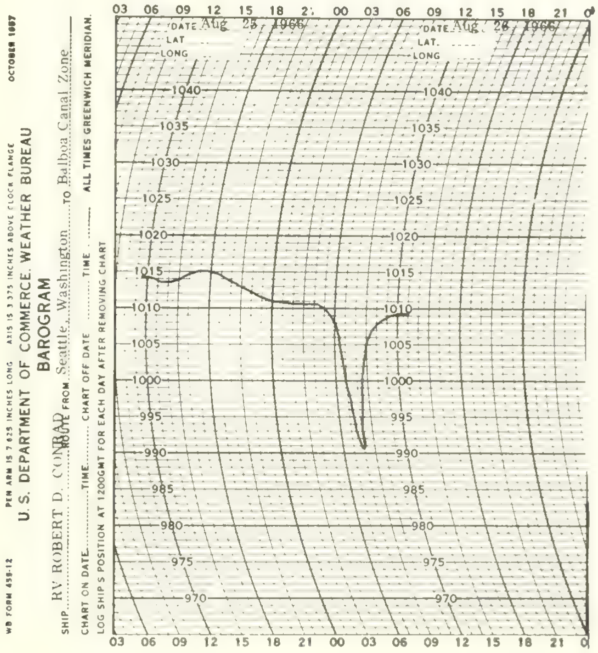
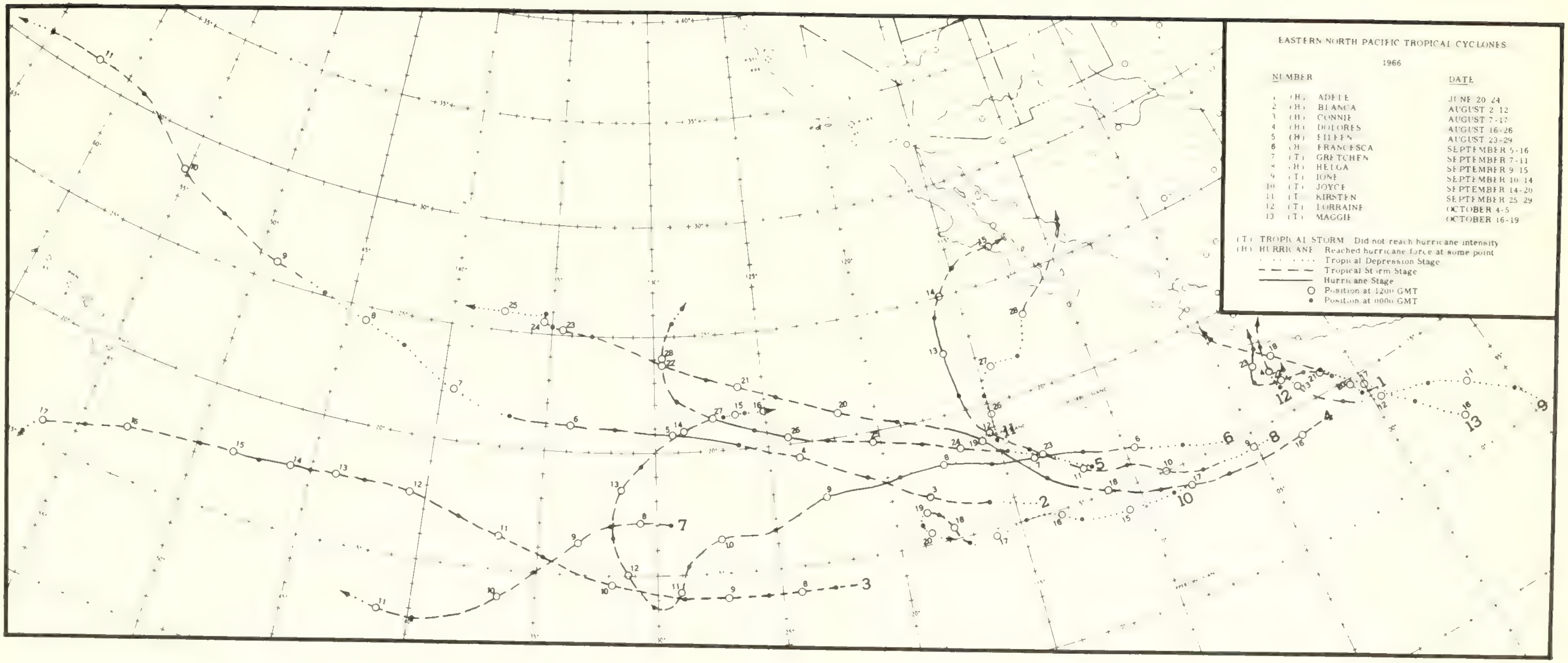


Fig. 1 Hurricane Eileen barogram from R/V ROBERT D. CONRAD August 25-26, 1966. Low barometer reading at 19°56'N., 123°28'W., at 0800 on August 26.

TABLE 2. SUMMARY OF EASTERN NORTH PACIFIC CYCLONES, 1966

No.	Greatest Intensity, Name	First Report Date, Time	Area First Reported	Highest Wind Speed Reported	Satellite Wind Speed Indicated	Lowest Pressure Reported	Lowest Pressure Indicated by Satellite Picture*	Place of Dissipation
1	Hurricane Adele	June 20 1800	14°N., 100°W. KWXR	64 kt. 231700 F. E. WEYERHAEUSER	50 kt. 211947 222050	982.1 mb. 240300 DONA OURANIA	1000 mb.	18.3°N., 103.3°W. 240900
2	Hurricane Blanca	August 2 1800	15.5°N., 114°W. Synoptic	41 kt. 090000 TROLLGAR	70 kt. 041720 021552	1004.3 mb. 030000 KYUYO MARU	990 mb.	31°N., 168°W. 120500
3	Hurricane Connie	August 7 1800	14°N., 122°W.	50 kt. 080000 SVDL	75 kt. 111815	996.7 mb. 080000 SVDL	981 mb.	15°N., 157°W. 171800
4	Hurricane Dolores	August 16 1800	14°N., 103°W.	55 kt. 170000 ITHACA ISLAND 15°N., 104°W.	75 kt. 181914	1006.8 mb. 210000	981 mb.	26°N., 139.5°W. 260000
5	Hurricane Eileen	August 23 0000	16.4°N., 111.5°W.	70 kt. 260745 WHBA	68 kt. 261754	990.0 mb. 260745 WHBA	992 mb.	26°N., 129°W. 290000
6	Hurricane Francesca	September 5 1520	15°N., 106°W.	45 kt. 120000 HOPEPEAK	68 kt. 072047	999.8 mb. 120000 HOPEPEAK	992 mb.	21°N., 125°W. 161200
7	Tropical Storm Gretchen	September 7 2100	17°N., 129°W.	35 kt. 081800 MARIPOSA	68 kt. 081709	1007.8 mb. 071800 5MVK 081800 MARIPOSA	992 mb.	13°N., 142.5°W. 111800
8	Hurricane Helga	September 9 1200	14.5°N., 104.0°W.	40 kt. 130000 EAGLE VOYAGER	68 kt. 131616 141652	1001 mb. 141800 CHARLES E. WILSON	992 mb.	27°N., 113°W. 151200
9	Tropical Storm Ione	September 10 1800	10.5°N., 94.5°W.	25 kt. 110000 STEEL CHEMIST 120000 NORTHERN STAR	53 kt. 131800	1007.1 mb. 110000 STEEL CHEMIST	999 mb.	16.5°N., 102.5°W. 140000
10	Tropical Storm Joyce	September 14 1800	14°N., 108°W.	25 kt. 141800 WGBS	Not indicated	1001.0 mb. 190000 BOLIVAR MARU	--	15°N., 118°W. 201800
11	Tropical Storm Kirsten	September 25 1800	18°N., 115°W.	55 kt. 281200 WILLIE VIRGINIA	58 kt. 272046	999.7 mb. 280000 ALLISON LYKES	997 mb.	26.3°N., 109.3°W. 290000
12	Tropical Storm Lorraine	October 4 0000	16°N., 103°W.	40 kt. 042100 041500 MONTPELIER VICTORY 040900 KFBX 041200 041500	None indicated	1002.4 mb. 041800 MONTPELIER VICTORY	--	18.3°N., 102.8°W. 050600
13	Tropical Storm Maggie	October 16 1200	11.3°N., 96.6°W.	60 kt. 180400 AMERICAN ENTERPRISE	40 kt. 182139	1002.2 mb. 190000 XFPA	1004 mb.	19.0°N., 104.8°W. 190000

*Derived from estimated satellite wind speeds.


EASTERN NORTH PACIFIC TROPICAL CYCLONES
1966
NUMBER
DATE
1 (H) ADELE JUNE 20-24
2 (H) BLANCA AUGUST 2-12
3 (H) CONNIE AUGUST 7-17
4 (H) DOLORES AUGUST 16-26
5 (H) EILEEN AUGUST 23-29
6 (H) FRANCESCA SEPTEMBER 5-16
7 (T) GRETCHEN SEPTEMBER 7-11
8 (H) HELGA SEPTEMBER 9-15
9 (T) IONE SEPTEMBER 10-14
10 (T) JOYCE SEPTEMBER 14-20
11 (T) KIRSTEN SEPTEMBER 25-29
12 (T) LORRAINE OCTOBER 4-5
13 (T) MAGGIE OCTOBER 16-19
(T) TROPICAL STORM Did not reach hurricane intensity
(H) HURRICANE Reached hurricane force at some point
Tropical Depression Stage
Tropical Storm Stage
Hurricane Stage
○ Position at 1200 GMT
● Position at 0000 GMT

TYPHOONS OF THE WESTERN NORTH PACIFIC, 1966

Based on the report of the Joint Typhoon Warning Center,
Fleet Weather Central, Guam, Mariana Islands

The 1966 typhoon season began on April 3 and extended through the final day of the year. During this period 20 typhoons, 10 tropical storms and 8 tropical depressions harried shipping in the western Pacific. Major land areas were directly in the path of 13 typhoons. Mainland China and the Ryukyu Island chain were struck 5 times.

The number of typhoons was close to the latest 10 year average (1957-1966) of 20.4 (see table). Only 3 super typhoons (maximum winds 130 kt. or more) developed this year as compared to a record number of 11 in 1965. The most intense was typhoon Kit (22-28 June) which generated maximum sustained surface winds of 170 kt. with a minimum central pressure below 914 mb. August was the most active month with six typhoons while 65 percent of the total occurred from July through September. Four typhoons developed in the South China Sea while 12 originated within 450 mi. of Guam.

In the following narrative summary of tropical cyclones that reached typhoon strength, and in the accompanying tables and figures, typhoon intensity indicates wind speeds of 64 kt. or more; tropical storm intensity, 34 to 63 kt.; tropical depression intensity, less than 34 kt. All distances are in nautical miles and all times in Greenwich Mean Time. Dates given for individual tropical cyclones indicate the periods during which warnings were issued. Storm tracks and maximum winds presented are based on post analysis.

TYPHOON FREQUENCY

10 YEAR PERIOD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL TOTAL
1957	1			1	1	1	1	2	5	3	3		18
1958	1				1	2	5	3	3	3	1	1	20
1959				1			1	5	3	3	2	2	17
1960				1		2	2	8		4	1	1	19
1961			1		2	1	3	3	5	3	1	1	20
1962				1	2		5	7	2	4	3		24
1963				1	1	2	3	3	3	4		2	19
1964					2	2	6	3	5	3	4	1	26
1965	1			1	2	2	4	3	5	2	1		21
1966				1	2	1	3	6	4	2		1	20
AVE.	.3	.0	.1	.7	1.3	1.3	3.4	4.3	3.5	3.1	1.6	.9	20.4

HESTER, APRIL 3-14

Typhoon Hester, the first North Pacific tropical cyclone of the year, was discovered in its tropical depression stage early on the 3d some 150 mi. south of Kwajalein. The initial central pressure was 1001 mb. and maximum winds were 25 kt. After remaining stationary for 12 hr. the storm moved west-northwestward accelerating to a forward speed of 19 kt. by the 5th. Maximum winds were now 35 kt. but the central pressure was still high at 1000 mb. Early on the 6th the center began to fill; central pressure rose to 1004 mb. and maximum winds diminished to 30 kt. Late in the day the original center was no longer discernible. However, a new vortex appeared in the circulation some 300 mi. to the south near 8° N., 149° E.

Hester, with new impetus, began to deepen and early on the 7th reached tropical storm, intensity 350 mi. east of Yap Island; maximum winds were 35 kt. and minimum pressure was 1001 mb. Continuing to deepen the storm moved west-northwestward at forward speeds of 15-20 kt. Hester reached typhoon strength early on the 10th some 250 mi. northeast of Mindanao in the Philippines; maximum winds were 65 kt. with a central pressure of 993 mb. The following day the typhoon reached its peak intensity generating 85-kt. winds while centered about 200 mi. east of central Luzon. The lowest central pressure - 979 mb. - was attained on the 12th as Hester was recurving northward at forward speeds of 4-6 kt. The storm then began to dissipate and fell to tropical storm intensity the following day some 200 mi. northeast of the northern tip of Luzon. By the 14th Hester dissipated about 250 mi. south of Okinawa.

IRMA, MAY 11-22

Typhoon Irma originated on the 11th some 170 mi. east of Koror, in the Palau Islands. Initial central pressure was 1004 mb. with maximum winds of 25 kt. Rapidly intensifying, the storm reached typhoon strength early the next day; maximum winds were 75 kt. and central pressure was 988 mb. as the storm passed 130 mi. northwest of Koror. On the 13th and 14th Irma fluctuated between typhoon and tropical storm intensity as it headed west-northwestward toward the Philippines.

Finally on the 15th, the storm deepened significantly when the central pressure fell to 973 mb. Generating 100-kt. winds, Irma ripped into the Islands slashing across Samar and northern Leyte. On the 16th the typhoon moved across the Visayan Sea where its 100-kt. winds churned up mountainous waves. The PIONEER CEBU, a 720-ton inter-island steamer carrying 262 passengers, encountered these waves and capsized after grounding on Malapascua Island; 5 people were reported dead and 116 missing. On the 17th, Irma attained its greatest intensity when maximum winds reached 120 kt. and minimum pressure fell to 970 mb. The typhoon continued to batter the coconut and sugar islands south of Luzon, leaving at least 13 dead ashore as well as a trail of wrecked houses and sunken fishing boats. Turning northwestward on the 18th, the storm entered the South China Sea off southwestern Luzon. Continuing to recurve, Irma moved northward along the west coast of Luzon battering coastal sections from Manila Bay to Baguio with 75-to 80-kt. winds before diminishing to tropical storm intensity late on the 19th. Reaching the Luzon Strait, the storm moved rapidly northeastward through the Philippine Sea, becoming extratropical on the 22d about 130 mi. east of Okinawa.

JUDY, MAY 25-31

On May 25 satellite pictures revealed a tropical depression had formed in the South China Sea, about 250 mi. west of Manila. Reconnaissance aircraft reports, later in the day, indicated the depression had intensified into tropical storm Judy. Heading northward, the storm reached typhoon strength late on the 26th some 170 mi. northwest of Manila. On the 27th the central pressure had deepened to 982 mb. while maximum winds reached 85 kt. About 0600 on the 27th the USNS CARD, just northeast of the storm's eye, reported 80-kt. winds and 30.5 ft. seas. The lowest pressure in the storm's history - 970 mb. - was observed near 19.2° N., 116.7° E., early on the 28th. Typhoon Judy moved north-northwestward to within 160 mi. of Hong Kong before recurving northeastward on the 29th. Turning eastward the following day, Judy began to weaken and just prior to making landfall in southern Taiwan maximum winds diminished to 60 kt. while central pressure rose to 996 mb. At Takao Ko, Taiwan the 7,198-ton Panamanian TEMPO, with its anchor snapped by the storm and leaking in all holds, was driven aground outside the northern breakwater. Once inland the tropical storm broke up in the mountainous regions of Taiwan. On the 30th the ill-defined center reappeared east of Taiwan. However, a new vortex in the circulation, discovered along the northwestern coast about 70 mi. southwest of Taipei, became the predominant center. The storm, generating 40-kt. winds with a central pressure of 996 mb., moved across northern Taiwan and into the East China Sea. On the 31st, Judy, paralleling the Ryukyu Island chain, moved northeastward finally becoming extratropical about 130 mi. south of Shikoku Island.

KIT, JUNE 22-28

Super typhoon Kit was a mere tropical depression about 130 mi. east-southeast of Yap Island on the 22d. Entering the Philippine Sea on a west-northwesterly course, Kit attained tropical storm strength early the next day. Maximum winds had increased to 40 kt. while minimum pressure had dropped to 998 mb. Late on the 23d 65-kt. winds indicated that Kit had matured to typhoon strength some 300 mi. west-northwest of Yap Island. Rapid intensification continued as the typhoon began turning northward. Early on the 25th central pressure was 965 mb. and maximum winds were 80 kt. During the next 18 hr. pressure fell 51 mb. to 914 mb. and maximum winds more than doubled, reaching 170 kt. This was the peak intensity and it occurred with the storm centered some 500 mi. east of the Philippines near 18.3° N., 130.7° E. Typhoon Kit gradually began to diminish as it turned toward the northeast at a forward speed of 15 kt. Late on the 26th, as the storm passed some 300 mi. east of Okinawa, maximum winds were measured at 150 kt. Late the following day maximum winds dropped below 100 kt. as central pressure rose above 960 mb. Continuing northeastward forward speed increased to 30 kt., as the storm passed 100 mi. east of Tokyo, around midday on the 28th. Maximum winds, at this time, were 65 kt. and both the ALLEGHENY VICTORY and the THOMPSON LYKES reported 60-kt. winds in the storm's southeast quadrant. The Tokyo-Yokohama area was hit hard; 44 people were killed, 21 were reported missing, 82 were injured, and 75 thousand were left homeless. Kit dropped to tropical storm intensity and finally became extratropical, later the same day, just south of Hokkaido. The storm was still potent in its extratropical stage, attested to by the 57-kt. winds encountered by the PHILIPPINE ADMIRAL some 200 mi. east of Hokkaido early on the 29th.

MAMIE, JULY 15-17

Typhoon Mamie developed in the western North Pacific on the 15th, some 300 mi. east of the northeast Luzon coast. Generating 30-kt. winds the storm moved west-northwestward influenced by a subtropical ridge of high pressure, which was to prevent recurvature. Early on the 16th tropical storm Mamie, with maximum winds of 45 kt. and a 992-mb. central pressure, moved over the Babuyan Islands just north of Luzon. Traversing the South China Sea it appeared that Mamie would reach land before attaining typhoon strength, but sudden intensification occurred late on the 16th. Maximum winds increased to 75 kt. and pressure fell to 987 mb. near 20.9° N., 117.1°E. Mamie was generating 85-kt. winds as it passed about 60 mi. south of Hong Kong early on the 17th. The typhoon began to weaken as it approached the South China coast, diminishing to tropical storm intensity as it moved inland near Yangchiang later in the day. Dissipation occurred rapidly following landfall.

NINA, JULY 17-20

Nina, a minimal typhoon at its peak, began as a tropical depression, near 21° N., 131° E., early on the 17th. In less than 24 hr. the storm reached typhoon intensity, when maximum winds increased to 65 kt. and central pressure fell to 995 mb., near 22.2° N., 128.2° E. However, upper level conditions became unfavorable and early on the 18th winds fell below typhoon intensity. Gradually diminishing, the tropical storm continued west-northwestward until early on the 19th when it abrubtly turned northward. At this point, about 150 mi. southeast of Taipei, Nina was generating maximum winds of 45 kt. while sporting a central pressure around 1005 mb. The storm, moving north-northwestward, continued to weaken, finally dissipating early on the 20th some 120 mi. north of Taipei.

ORA, JULY 23-26

Typhoon Ora, second of the season to originate in the South China Sea, began as a depression about 350 mi. west of Manila on the 23d. The storm remained quasi-stationary for 24 hr. while organizing and by early the next day maximum winds reached 35 kt. Moving northwestward at a forward speed of 10 kt. Ora continued to deepen during the day as maximum winds increased to 65 kt. and central pressure fell to 982 mb. The strength of the storm was attested to by the ANDREW JACKSON which encountered 30.5 ft. waves some 350 mi. east-southeast of the center. At 1800 on the 24th the PRESIDENT ARTHUR reported 48-kt. winds 250 mi. southeast of the storm's center, and 6 hr. later recorded 60-kt. winds. Generating its maximum winds -85 kt. - the 977 mb. typhoon brushed northeastern Hainan around midday on the 25th. Early the next day the degenerating storm moved inland across the Luichow Peninsula and into southern China. Once over land the storm began to weaken, finally dissipating that same day.

RITA, AUGUST 2-9

Typhoon Rita was discovered as a tropical depression, on the 2d, just north of Saipan in the Mariana Islands. Central pressure at this time was near 1003 mb. Rita, moving northward, reached tropical storm intensity just after crossing the 20th parallel late on the 3d. Maximum winds were clocked at 35 kt. while central pressure read out at 992 mb. The next significant change occurred about 170 mi. southeast of Iwo Jima, late the following day, when Rita attained typhoon strength as maximum winds reached 70 kt. and central pressure dipped to 987 mb. The typhoon, generating 80-kt. winds early on the 5th, passed about 120 mi. east of Iwo Jima moving on a north-northeasterly track. A short time later the central pressure dropped to 977 mb., lowest during the storm's history. Early on the 6th the STEEL VENDOR, some 240 mi. east-southeast of the storm's center, encountered 64-kt. winds while struggling in 30-ft. seas. Late on the 6th, however, winds began diminishing and were below 50 kt. as the storm crossed the 30th parallel near 145° E. The tropical storm moved northeastward for the next 2 days gradually acquiring extratropical characteristics. Early on the 7th the EXHIBITOR some 120 mi. east of the storm's center reported 50-kt. winds. The MARJORIE LYKES, 150 mi. southeast of the storm's center on the 8th, also reported 50-kt. winds. Generating 30-kt. winds the storm became extratropical early on the 9th near 35° N., 150° E. This still potent 988-mb. LOW remained intense as it moved east-northeastward across the North Pacific. On the 12th, still packing winds up to force 8 - and a central pressure of 990 mb. - the storm turned northeastward brushing the Aleutian Island chain before moving eastward and dissipating in the Gulf of Alaska the following day.

SUSAN, AUGUST 12-16

Early on the 12th typhoon Susan was discovered in its tropical storm stage some 300 mi. west-northwest of Manila in the South China Sea. Maximum winds were 35 kt. and minimum pressure was 1002 mb. at this time. The storm moved slowly northeastward attaining typhoon strength early on the 14th about 300 mi. northwest of Manila. Continuing to intensify maximum winds reached 80 kt. and central pressure dropped to 978 mb. just before the storm entered the Luzon Strait. The storm began to fill as it traversed the Luzon Strait on the 15th; central pressure rose to 985 mb. The NEW ZEALAND reported 40-kt. winds about 130 mi. south-southwest of the storm's center. Early on the 16th, near 23° N., 125° E., Susan was absorbed into the circulation of typhoon Tess.

TESS, AUGUST 12-17

Typhoon Tess originated as a tropical depression about 70 mi. east of Okinawa on the 12th. Generating 30-kt. winds with a 993 - mb. central pressure the storm moved westward over Okinawa early the next day. Reaching a point some 70 mi. west of Okinawa the storm stalled and began to deepen. It remained stationary for 18 hr. as winds increased to 40 kt. and central pressure fell below 988 mb. The FLYING DRAGON some 280 mi. north of the storm's center on the 13th encountered 36-kt. winds. Resuming its slow westward movement early on the 14th, Tess continued to intensify. Early the next day the storm reached typhoon strength, near 27° N., 125° E., as winds increased to 65 kt. and central pressure dipped to 976 mb. The lowest pressure - 972 mb. - was recorded late on the 15th and maximum winds reached a peak of 90 kt. early the following day. The storm finally made landfall just north of Fu-Chou, China, late on the 16th. Once inland the storm dissipated rapidly.

VIOLA, AUGUST 19-22

Typhoon Viola was initially detected as a tropical storm near 20° N., 147° E., on the 19th. Early in the day a reconnaissance aircraft reported 50-kt. winds and a 996-mb. central pressure while the LA PINTADA encountered 36 - kt. winds some 60 mi. south of the storm's center at 1200. Within 24 hr. of initial detection Viola was a full blown typhoon generating 65-kt. winds and containing a 975-mb. central pressure, the lowest pressure in the storm's history. Located near 22.5° N., 147.9° E., at 0000, the typhoon continued its northward trek. Early on the 21st, after a northwesterly turn, the storm passed 260 mi. northeast of Chichi Jima. Maximum winds were 90 kt. and central pressure was 978 mb. Accelerating to a forward speed of 25 kt., Viola began to weaken, making landfall on the coast of Japan as a tropical storm. Generating winds up to 45 kt. the storm crossed the Japanese coastline near Shizuoka (about 100 mi. southwest of Tokyo). Viola continued to weaken as it moved northwestward across rugged terrain finally becoming extratropical in the Sea of Japan, near 38.5° N., 134.5° E., late on the 22d. Damage from the storm was relatively minor since its most intense stage occurred over open water.

ALICE, AUGUST 25-SEPTEMBER 3

The initial impetus of typhoon Alice came from the combination of an easterly wave and a fractured polar trough near Guam on the 23d of August. A definite circulation was recognized early on the 25th some 300 mi. north of Guam. Maximum winds at this time were 35 kt. with a 1000-mb. central pressure. The tropical storm, moving due northward, reached typhoon strength late in the day. During the 26th through the 28th Alice moved into a loop pattern around the 145th meridian between 27° N. and 29° N. The typhoon, moving in a clockwise fashion, completed the loop late on the 28th.

Maximum winds increased to 70 kt. and minimum pressure dipped to 966 mb. during this period. From the completion of the loop until landfall typhoon Alice moved on a westerly track, at 10-12 kt., just north of the 25th parallel. Alice, generating winds up to 100 kt., was centered some 450 mi. east of Okinawa early on the 31st. Later that day the central pressure dropped to 937 mb. lowest in the storm's history. Peak winds in the super typhoon reached 130 kt. at 1200 on September 1 with the storm just 60 mi. east of Okinawa. Alice ripped through Naha, the capital city of the Ryukyu Islands, just 6 hr. later. After battering Okinawa and the surrounding islands, the slowly weakening storm continued westward across the East China Sea. Early on the 3d the typhoon passed about 70 mi. north of Taipei, Taiwan, and later in the day made landfall just south of Fou-Chou, China - very close to the point where typhoon Tess had passed less than 3 weeks before. Maximum winds were 60 kt. as Alice crossed the coastline; however, once inland the storm dissipated rapidly.

CORA, AUGUST 30-SEPTEMBER 9

Typhoon Cora was spawned just south of Guam early on the 30th. Initially a tropical depression Cora eventually attained super typhoon strength as winds roared up to 150 kt. and central pressure dipped to 917 mb. During its 11 day existence the storm traveled a distance of about 2,400 mi.

The depression, moving west-northwestward then northwestward, quickly reached tropical storm intensity as winds increased to 40 kt. and pressure dropped to 997 mb. late on the 30th. The storm continued to intensify and by early on the 1st of September, near 16° N., 137° E., Cora attained typhoon strength; maximum winds reached 75 kt. and minimum pressure fell below 965 mb. During the 1st and 2nd the typhoon continued to deepen as it moved northwestward at forward speeds of 10-12 kt. Centered near 23° N., 131° E., early on the 3d, typhoon Cora was generating 130 kt. winds around a central pressure of 934 mb. Once again the storm turned toward the west-northwest and forward speed slowed to 8 kt. Intensification continued as the typhoon approached the southern Ryukyu Islands. Generating 140-kt. winds around a 917-mb. central pressure Cora roared through the Sakishima group, late on the 4th, battering the islands with high winds, torrential rains and destructive floods. Once into the East China Sea the mighty typhoon continued to grow as maximum winds reached 150 kt. Cora moved 60 mi. north of Taipei, Taiwan, on the 6th, taking a heavy toll over northern sections of the island. Hemmed in by land the storm began to weaken but not before unleashing one more mighty blow, against the China mainland. Once again Fuo-Chou, was a prime target as Cora, still generating 140-kt. winds, made landfall less than 60 mi. northeast of Fou-Chou early on the 7th. Cora's intensity precluded quick dissipation over land and the storm turned northeastward weakening slowly. Early on the 8th, Cora, now reduced to tropical storm strength emerged from China into the Yellow Sea, about 130 mi. northwest of Shanghai. Traversing the Yellow Sea on a northeasterly course the storm continued to weaken and, with the intrusion of cold air became extratropical 30 mi. southeast of Seoul, South Korea, early on the 9th.

ELSIE, SEPTEMBER 11-18

Typhoon Elsie originated in the South China Sea, about 160 mi. west of the northern Luzon coast, late on the 11th. During these first few days of organizing the storm drifted erratically southward then northward. The MUHLENBERG VICTORY indicated the storm was intensifying rapidly when, late on the 12th, it encountered 60-kt. winds within 60 mi. of the storm's center. Early the next day a reconnaissance aircraft reported 70-kt. winds and a central pressure of 979 mb. On the 14th the typhoon began a definite north-northeasterly track. Elsie, near 20° N., 118° E., early in the day, was generating 85-kt. winds around a 969-mb. central pressure. The typhoon reached its peak intensity early on the 15th; maximum winds increased to 115 kt. and central pressure dipped to 943 mb. The storm had been moving at forward speeds of 3-5 kt. but now began to accelerate as it turned east-northeastward toward Taiwan.

Generating 100-kt. winds Elsie slashed across the southern tip of Taiwan early on the 16th. The PRESIDENT MONROE, some 120 mi. southwest of the storm's center, reported 54-kt. winds just after the storm had crossed Taiwan; at this time maximum winds were 80 kt. with a 979-mb. central pressure. The typhoon began to fill as it accelerated northeastward through the southern Ryukyu Islands into the East China Sea. By the 17th Elsie was a tropical storm, paralleling the Ryukyu Islands. The storm became extratropical on the 18th before reaching Kyushu, Japan.

FLOSSIE, SEPTEMBER 12-18

Early on the 12th a circulation was discovered, in its formative stage, near 20° N., 143° E. The tropical depression drifted westward during the day but by early on the 13th there was little evidence of an organized system. Satellite pictures showed some cloud bands during the day. Early the following day it was apparent that regeneration had occurred, near 22° N., 143° E., when reconnaissance aircraft reported winds up to 45 kt., a central pressure of 988 mb. and an eye 10 mi. in diameter.

Typhoon Flossie, after its rather unusual beginning, assumed a normal pattern of development as it accelerated northeastward. Generating 50-kt. winds around a 975-mb. pressure center, the storm crossed the 25th parallel near 146° E., late on the 15th. Flossie, moving north-northeastward, reached typhoon intensity on the 16th as maximum winds increased to 75 kt. and pressure dipped to 963 mb. After reaching this peak the storm began to weaken as it turned northeastward on the 17th. Late in the day the DEL ALBA encountered 60 kt. winds some 230 mi. northwest of the storm's center. However, the intrusion of cold air spelled the end for Flossie and, early on the 18th, the storm became extratropical near 34° N., 152° E.

IDA, SEPTEMBER 22-25

Typhoon Ida, while not the most intense storm of the year, became one of the most destructive when it roared through central Honshu on the 24th. In addition to widespread damage, estimated at $300 million, 197 people were killed with 123 more unaccounted for. Torrential rains set off huge landslides and Mt. Fuji observatory reported a wind gust of 175 kt. Ida's 100-kt. surface winds played havoc with vessels ranging in size from coastal traders to bulk carriers, causing sinkings, groundings and collisions. The 7,702-ton cargo liner, CITY OF WELLINGTON and the Japanese freighter JUTOKU MARU were driven ashore near Yokohama. The 1,193 ton KAIYA MARU capsized off Tsurumi losing one crewman with eight others missing, while the 10,208-ton Chinese freighter EVERSURENESS was stranded at the mouth of the Tsurumi River. The 3,635-ton SRI THEP ran aground off Shizuoka; nearby at Shimizu the 24,829-ton Liberian tanker GOLAR JEANNE - MARIE also ran aground.

Ida originated near 16° N., 151° E., about 300 mi. east-northeast of Saipan, early on the 22d. At this time maximum winds were 35 kt. while minimum pressure was 992 mb. Accelerating west-northwestward at a forward speed of 20 kt., the storm reached typhoon strength later in the day as winds increased to 65 kt. and central pressure dropped to 965 mb. The following day Ida began to recurve northward. The typhoon reached peak intensity early on the 24th as 100-kt. winds were generated around a 961 mb. pressure center, setting the stage for the big blow. Ida, racing northward at a 35 kt. pace, roared up Yaizu Bay and into central Honshu. Passing 60 mi. west of Tokyo the storm began to weaken and it re-entered the Pacific near 40° N., on a northeasterly heading. Maximum winds dropped to 45 kt. and Ida became extratropical about 240 mi. east of southern Hokkaido early on the 25th.

JUNE, SEPTEMBER 22-29

Typhoon June appeared initially as a tropical depression, near 11° N., 144° E., early on the 22d. At this time maximum winds were 30 kt. and central pressure was 996 mb. The depression deepened to tropical storm intensity as it moved west-northwestward during the day. Late in the day the storm turned northward. Maximum winds climbed to 60 kt. on the 23d and pressure dipped to its lowest reading - 962 mb. However, late in the day the storm began to weaken as it crossed the 15th parallel near 142° E. Intensity remained steady during the next 24 hr. as the storm moved northeastward at a forward speed to 12 kt. On the 25th the tropical storm turned in a small counter-clockwise loop near 19° N., 137° E. June reached typhoon strength, near 20° N., 139° E., early the next day. Maximum winds were clocked at 65 kt. around a 983 mb. pressure center. The typhoon, accelerating northeastward, continued to deepen and was generating 70 kt. winds as it passed 30 mi. east of Iwo Jima early on the 27th. Later in the day the GENERAL W. H. GORDON, some 240 mi. northeast of the storm's center encountered 45-kt. winds as did the PINE BLUFF VICTORY about 120 mi. southeast of the center early on the 28th. A few hours later June reached its peak intensity when winds increased to 95 kt. Still moving northeastward the forward speed increased to 40 kt. during the day and cold air began to intrude into the circulation. Finally on the 29th the storm became extratropical, near 46° N., 164° E., but was still generating 45-kt. winds as it sped northeastward.

KATHY, OCTOBER 8-20

Typhoon Kathy began as a tropical depression near 18° N., 151° E., early on the 8th. Four days later the storm reached typhoon strength only 120 mi. north of its origin. In the intervening period Kathy turned a clockwise loop near 20° N., 151° E. The typhoon turned toward the northeast and continued to intensify. By the 14th Kathy was generating 100-kt. winds around a 947-mb. center as it crossed the 25th parallel near 155° E. These were the extremes during the storm's history. Heading east-northeastward the typhoon crossed the 30th parallel near 164° E., early on the 16th. Maximum winds, at this time, were 80 kt. while central pressure was 954 mb. During the day the KYSKA, about 280 mi. from the storm's center, reported a 55-kt. wind. Remaining intense, Kathy turned northeastward again on the 18th. Maximum winds were clocked at 90 kt. around a 964-mb. pressure center. The MUHLENBERG VICTORY, some 200 mi. east of the center, reported winds of 55 kt. The storm began to weaken with the intrusion of cold air, near the 40th parallel, on the 19th. However, late in the day the PRAIRIE GROVE, 150 mi. north of the center reported 60-kt. winds while battling 30-ft. seas. Early the next day the STEEL VENDOR, some 360 mi. northwest of the storm's center, encountered 64-kt. winds while also struggling in 30 ft. seas. During the day maximum winds decreased to 55 kt. as the storm became extratropical. The LOW remained intense as it traversed the eastern Pacific, finally moving into western Canada on the 24th.

MARIE, OCTOBER 29-NOVEMBER 4

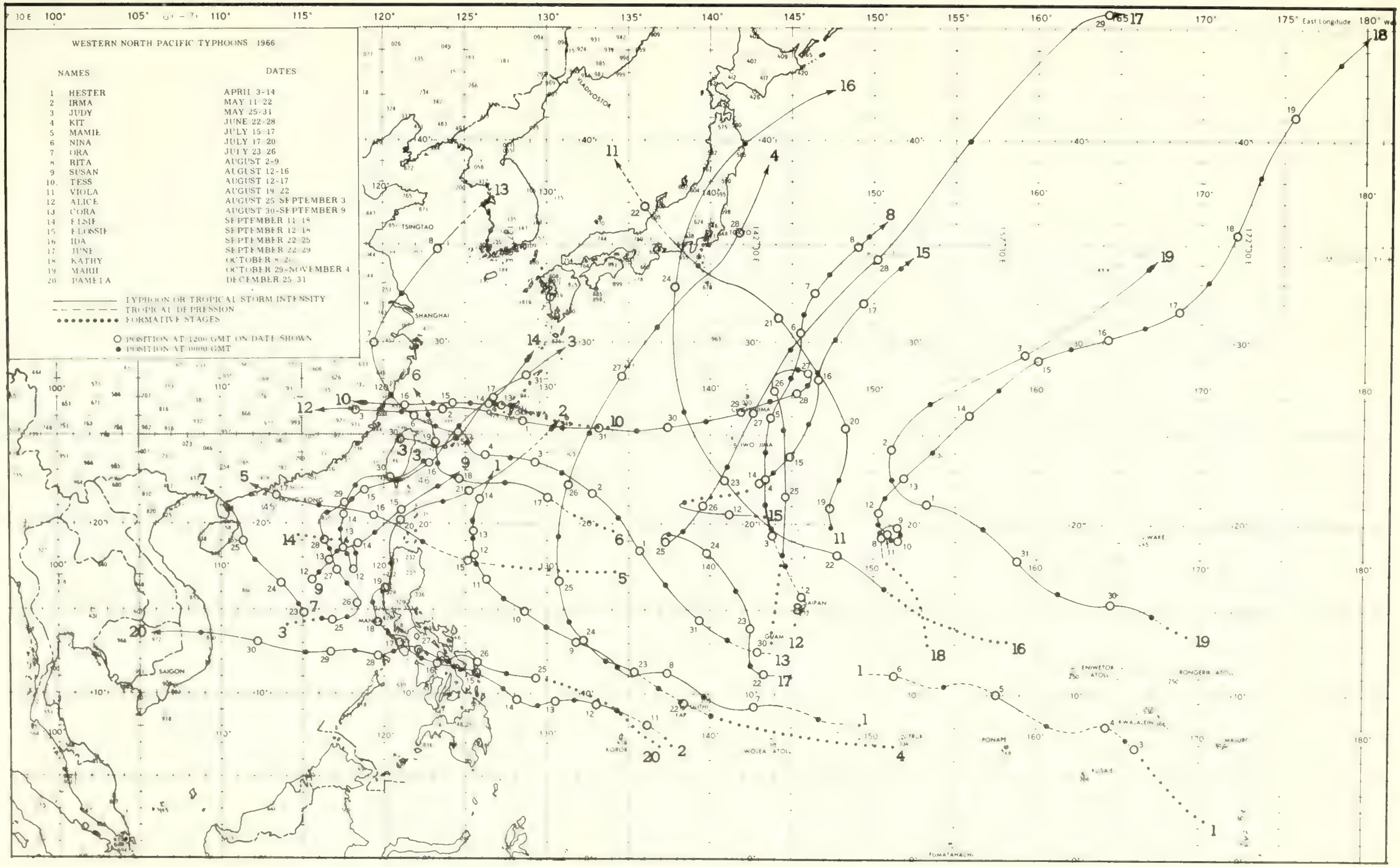
Typhoon Marie began as a tropical depression, late on the 29th, near 14° N., 168° E. Moving west-northwestward at a forward speed of about 15 kt., the depression reached tropical storm strength early the following day when maximum winds increased to 40 kt. and central pressure dropped to 995 mb. Before the day was through Marie attained typhoon intensity, generating 65-kt. winds around a 983-mb. pressure center. The typhoon continued to intensify, as it moved on a west-northwesterly course, and by early on November 1, maximum winds were up to 85 kt. while central pressure dipped to 974 mb. Late in the day Marie, generating 100-kt. winds around a 960-mb. pressure center, began to recurve northward. On the 2d, Maintaining its 100-kt. winds, the typhoon crossed the 25th parallel near 152° E., on a northeastward heading. The typhoon reached its peak intensity early on the 3d when the pressure dropped to 946 mb. while winds remained at 100 kt. The forward speed increased to 45 kt. by late in the day and, with the intrusion of cold air, the storm began to weaken. Early on the 4th near 34° N., 167° E., the storm became extratropical. The pressure was 972 mb. and the storm was still generating 75-kt. winds. However, late in the day the LOW was absorbed by a larger extratropical storm.

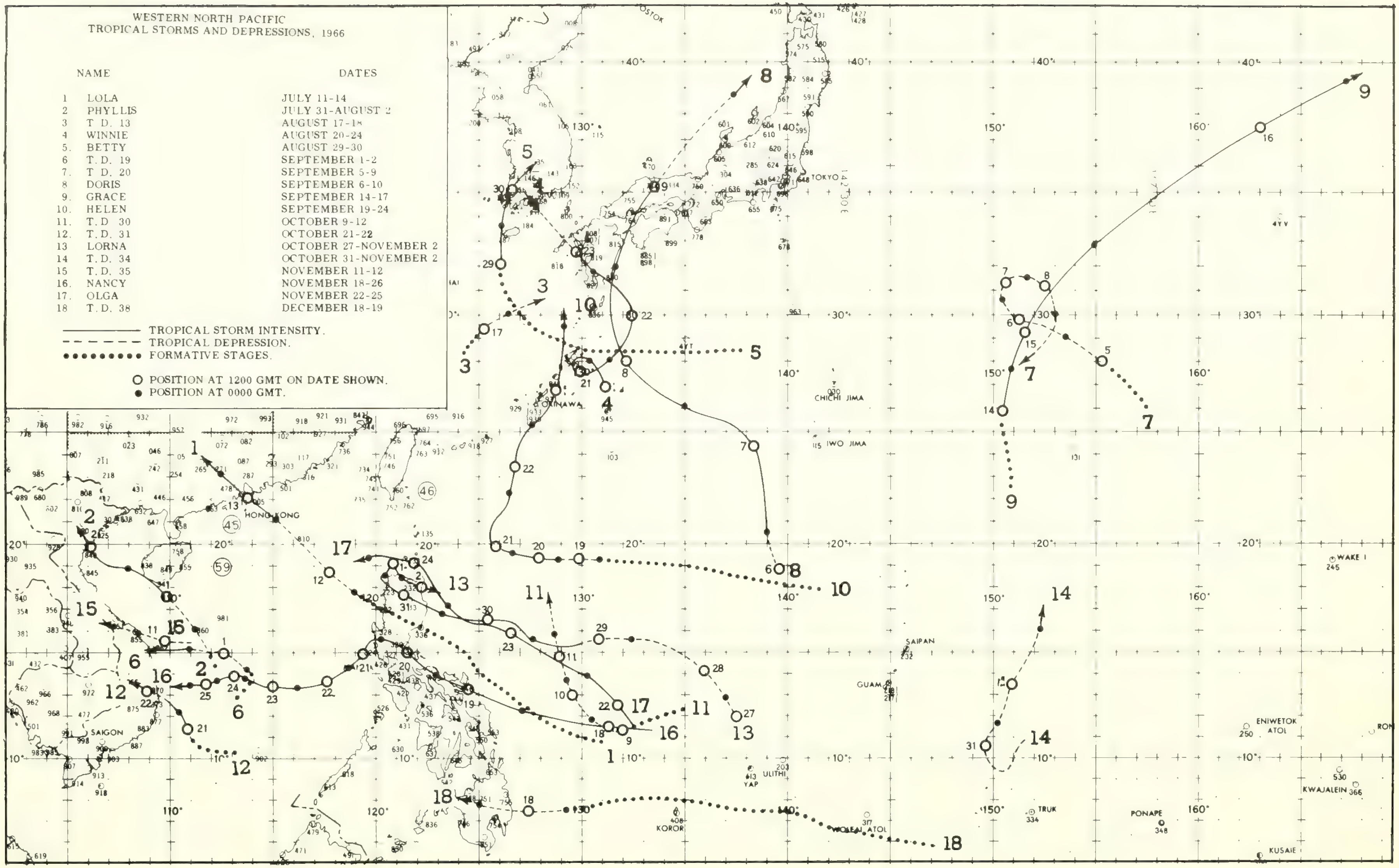
PAMELA, DECEMBER 25-31

Back in mid-May typhoon Irma, the second typhoon of the season, battered the central Philippine Islands with 120-kt. winds, causing widespread destruction and many deaths. This area was spared the fury of another typhoon until the day after Christmas when typhoon Pamela roared through the central Islands, pounding the area with 90-kt. winds. The death toll stands at 30. Damage was estimated in the millions of dollars with many fishing boats sunk and crops and property destroyed.

Typhoon Pamela organized as a tropical storm some 220 mi. east of Samar, in the central Philippines, on the 25th of December. The storm, intensifying as it moved west-northwestward, reached the Samar coast on the 26th. Maximum winds reached 90 kt. near the center just prior to landfall at Samar, later the same day. On the 27th Pamela continued to batter the central Philippines as it island-hopped westward, finally departing the Philippines via Mindoro late in the day.

The rugged island journey had exhausted much of the storm's energy and maximum winds were now at 65 kt. Pamela continued to weaken as it traversed the South China Sea on a westerly course. At 0000 on the 30th the USNS UPSHUR, 600 mi. northeast of the center recorded winds of 50 kt. and 19ft. seas. Later in the day the tropical storm staggered ashore just south of Da Nang, Vietnam, and quietly dissipated.


WESTERN NORTH PACIFIC TYPHOONS 1966
NAMES
DATES
1 HESTER APRIL 3-14
2 IRMA MAY 11-22
3 JUDY MAY 25-31
4 KIT JUNE 22-28
5 MAMIE JULY 15-17
6 NINA JULY 17-20
7 ORA JULY 23-26
8 RITA AUGUST 2-9
9 SUSAN AUGUST 12-16
10. TESS AUGUST 12-17
11 VIOLA AUGUST 19-22
12 ALICE AUGUST 25-SEPTEMBER 3
13 CORA AUGUST 30-SEPTEMBER 9
14 ELSIE SEPTEMBER 11-19
15 FLOSSIE SEPTEMBER 12-18
16 IDA SEPTEMBER 22-25
17 JUNE SEPTEMBER 22-29
18 KATHY OCTOBER 8-2
19 MARIE OCTOBER 29-NOVEMBER 4
20 PAMELA DECEMBER 25-31
TYPHOON OR TROPICAL STORM INTENSITY
TROPICAL DEPRESSION
FORMATIVE STAGES
○ POSITION AT 1200 GMT ON DATE SHOWN
● POSITION AT 0000 GMT
100°
105°
110°
115°
120°
125°
130°
135°
140°
145°
150°
155°
160°
165°
170°
175° East Longitude
180°
40°
30°
20°
10°
142°30 E
157°30 E
172°30 E
VLADIVOSTOK
TSINGTAO
SHANGHAI
HONG KONG
SAIGON
IWO JIMA
SAIPAN
GUAM
YAP
KOROR
WOLEA ATOLL
TRUK
PONAPE
KUSAIE
WAKE
ENIWETOK ATOLL
RONGERIK ATOLL
KWAJALEIN
MAJURO



WESTERN NORTH PACIFIC
TROPICAL STORMS AND DEPRESSIONS, 1966

	NAME	DATES
1	LOLA	JULY 11-14
2	PHYLLIS	JULY 31-AUGUST 2
3	T.D. 13	AUGUST 17-18
4	WINNIE	AUGUST 20-24
5.	BETTY	AUGUST 29-30
6	T.D. 19	SEPTEMBER 1-2
7.	T.D. 20	SEPTEMBER 5-9
8	DORIS	SEPTEMBER 6-10
9.	GRACE	SEPTEMBER 14-17
10.	HELEN	SEPTEMBER 19-24
11.	T.D. 30	OCTOBER 9-12
12.	T.D. 31	OCTOBER 21-22
13	LORNA	OCTOBER 27-NOVEMBER 2
14	T.D. 34	OCTOBER 31-NOVEMBER 2
15	T.D. 35	NOVEMBER 11-12
16.	NANCY	NOVEMBER 18-26
17.	OLGA	NOVEMBER 22-25
18	T.D. 38	DECEMBER 18-19

——— TROPICAL STORM INTENSITY.
– – – – TROPICAL DEPRESSION.
••••••••• FORMATIVE STAGES.

○ POSITION AT 1200 GMT ON DATE SHOWN.
● POSITION AT 0000 GMT.

RED RIVER OF THE NORTH BASIN FLOOD, MARCH - MAY 1966

Elmer R. Nelson
Office of Hydrology, Weather Bureau

Introduction

Severe flooding began in the Red River of the North Basin during March, causing considerable property damage along the smaller tributaries with near record to record crests during April. At Grand Forks, N. Dak., the main stem crested slightly higher than in 1965, but 4.6 feet lower than the record crest of 1897. At Drayton, N. Dak., the Red exceeded the previous record crest by 1.7 feet. The total damages from the flooding were estimated at $12.3 million.

Description of Basin

The Red River of the North rises in the Lake region of west-central Minnesota, not far from the headwaters of the Mississippi River. (See Figure 1). It is formed by the confluence of the Ottertail and Boise de Sioux Rivers, and then flows northward 400 miles to the Canadian border, forming the boundary between Minnesota and North Dakota. It is the largest northward flowing river in the United States. In Canada it flows generally northeastward about 155 miles into Lake Winnipeg which empties into Hudson Bay through the Nelson River.

The main river valley is very flat, varying in width from about 15 miles in the south to about 150 miles at the northern end. The slope of the river varies from about 1.3 feet per mile at the source to 0.2 foot per mile near the Canadian boundary and averages about 0.5 foot per mile. It is navigable along the greater portion of its course. On the east and west, the central plain is flanked by rougher uplands 300 to 700 feet higher.

Several tributaries flow into the Red River of the North from North Dakota and Minnesota. The most important of these are the Sheyenne and the Pembina in North Dakota (the Pembina rises in the province of Manitoba, Canada) and the Red Lake River in Minnesota.

The Red River of the North at the international boundary drains an area of about 40,200 square miles. Of this area, 21,000 square miles are in North Dakota, 16,400 in Minnesota, 800 in South Dakota, and 2,000 in Canada. The greater part of this Canadian area is drained southeastward into the United States by the Pembina River, which joins the Red River of the North, south of the Canadian border. Included in the total drainage area are 3,800 square miles of closed basins in North Dakota.

The greater portion of the Red River of the North Basin has been submerged twice beneath the sea and was once covered with an extensive glacial drift which left an immense lake called Lake Agassiz that had an outlet to the Mississippi River. The Lakes of Manitoba are the remains of this vast water body. Streams within the valley have flat slopes and channels which are generally inadequate to carry flood flows. An extensive system of drainage ditches has been constructed in North Dakota and Minnesota to assist nature in carrying away the water.

Climatology of the Basin

The Red River of the North Basin lies in the belt of prevailing westerly winds where the major rainfall occurs during the late spring and summer, with the greatest amount occurring in June. Approximately 60% of the total annual precipitation shown in Figure 1 occurs during the growing season which has an average lenght of 100 to 140 days. The winter months, December through February, are normally the driest months in the year. Approximately 15 percent of the total annual precipitation occurs during this period in the form of snow and accumulates to considerable depths in the valleys and wooded ares. The average annual precipitation varies from about 24 inches in the headwaters to 17 inches in the northern part. (Figure 1).

The mean annual temperature of the basin varies from about 43° F in the south to 36°F in the northern portion. Temperature extremes of 118° to -54° have been recorded.

The annual runoff in this part of the country is small. It averages about 3 to 4 inches per year in Minnesota to less than 1 inch in eastern North Dakota.

Previous Floods of the Basin

General

Official records for the Red River of the North Basin are sufficiently comprehensive to define all major floods since 1897. These records are antedated by approximately 70 years of documentary information in the form of newspapers and journals left by early travelers and settlers. These documents establish the fact that the flood of 1826 was the greatest of record. Francis Heron, Clerk of the Hudson's Bay Company recorded a day-by-day-account of this flood in the vicinity of Winnipeg. It appears the Red River was above bankfull from May 4 to July 5, 1826. It is quite probable the stage at Grand Forks was approximately 53.5 feet, present gage and datum. The second greatest flood of legendary record is that of 1852. It may have exceeded 51 feet at Grand Forks. Similar conditions existed in 1861. The flood of 1897 still stands as the highest of record in the reach from Wahpeton, N. Dak., to Grand Forks, N. Dak. Seasonal occurrence of floods in the Red River of the North is significant. Nine of the 12 highest floods of record at Fargo-Moorhead and 10 of the 12 highest floods of record at Grand Forks occurred during April. Table 2 shows comparative crest stage data of major floods in the basin from 1897 to 1966 and the period of flooding during 1966. Table 3, lists major floods in order of magnitude at selected locations along the Sheyenne, and Red Lake Rivers and the Red River of the North.

Causes and Development of 1966 Floods

Precipitation during the fall months (October through December) averaged generally above normal on the Minnesota side of the Red River of the North above the mouth of the Sheyenne River. Precipitation over the Wild Rice Basin was heavy and ranged to over 3 inches above normal. Across the rest of the basin, precipitation during the fall months averaged generally below normal with the greatest deficiency (up to 0.7 inch) being in the Sheyenne Basin. See Figure 2.-Total Precipitation for Period October 1965 through December 1965.

Precipitation during January and February 1966 averaged below normal over the greater portion of the Red River of the North Basin. In the Wild Rice Basin, in Minnesota, precipitation averaged up to .18 inch above normal and also slightly above normal over the Park River Basin in North Dakota. See Figure 3.-Total Precipitation for Period January and February 1966.

The depth of snow on the ground and its water equivalent in inches as of March 1, 1966 are given in Figure 4. The depth of the snow on the ground ranged from 1 inch in the headwaters to 20 inches in the northeastern portion of the basin. The water equivalent of the snow ranged from 0.5 inch in the headwaters to 5.5 inches over Two Rivers Basin in northwestern Minnesota.

One of the worst blizzards of the century to hit the Red River of the North Basin began as a low pressure area over the Northern Rockies on March 1. The deepening storm became a blizzard on March 2 as it traveled slowly across the Northern Plains accompanied by heavy snowfalls and 70 m.p.h. winds. The blizzard continued until March 5. Figure 5 shows the depth of the snow on the ground after the end of this severe snowstorm. The depth of the snow ranged from 15 inches in the headwaters to 40 inches in the northeastern portion of the basin.

Water equivalent measurements were made of the snow cover as of March 8. Figure 6 shows water equivalent of the snow ranged from 0.5 inch in the headwaters to 6.5 inches in the reach at and above Grand Forks, N. Dak., with the highest amounts being on the Minnesota side. The depth of the snow cover at the time of the survey is also shown.

Figures 7, 8 and 9 show the depth of the snow as of March 15, 25 and 31. The only snow remaining on the ground at the end of March was in the northeastern portion of the basin where depths ranged from 1 to 9 inches.

The total precipitation during March and April, compared with normal, is shown in Figures 10 and 11. During March, it averaged above normal at all points except in the extreme headwaters at Wheaton, Minn. The greatest positive departures from normal during March were 3.77 inches in the Goose River Basin in North Dakota and 3.73 inches in the Wild Rice Basin in Minnesota. During April, the precipitation averaged above normal except in the lower portion of the Sheyenne River Basin in North Dakota and in the lower portion of the Red Lake Basin in Minnesota. The greatest positive departure from normal was 2.27 inches at Park River, N. Dak.

The daily precipitation during March and April in the Red River of the North Basin is shown in Table 1. Most of the precipitation during March occurred during the severe snowstorm of March 3-5, 1966.

The daily temperatures and degree days above 32°F for selected stations during March and April 1966 is given in Table 4.

Spring Flood of 1966

Record to near record floods occurred during the spring in the Red River of the North Basin. The flood crests of 1966 were generally higher than the flood of 1965 except at and above Fargo, N. Dak., and along the Red Lake River in Minnesota.

River stage hydrographs for 9 stations during March to May 1966 are shown in Figures 12 to 14. The crest along the main stem traveled from Wahpeton, N. Dak., on March 16 to Pembina, N. Dak., by April 11-12, a distance of 391 miles. A comparison of the 1966 crests with the highest crests on record are shown in these illustrations.

March 1966

Flooding began along the main stem of the Red River of the North at Wahpeton, N. Dak., on March 14. The crest of 13.94 feet on March 16 was the 7th highest stage of record (Table 3). It was 0.4 foot lower than the 14.3 feet crest reported on April 11, 1965. As the main stem was cresting at Wahpeton, N. Dak., it began overflowing its banks at Fargo, N. Dak., (Figure 13). The following day, March 17, the Sheyenne River went out of its banks at West Fargo, N. Dak., (Figure 12). Flooding along the Red River of the North extended to Halstad, Minn., on March 20 (Figure 13) and to Grand Forks, N. Dak., by the evening of March 21 (Figure 14). The Sheyenne River crested at West Fargo, N. Dak., on March 22-23 at a stage of 21.04 feet (flood stage 16 feet). This was 0.2 foot lower than in April 1965. The main stem crested at Fargo, N. Dak., on March 23 at a stage of 30.10 feet (Flood stage, 17 feet). This was the seventh highest stage of record. A crest of 35.48 feet occurred at Halstad, Minn., on March 27. This was 11.5 feet above flood stage and slightly higher (0.1 foot) than in April 1965. The Red River of the North began overflowing at Drayton, N. Dak., on March 28 and on the Red Lake River at Crookston, Minn., on March 31. The Sheyenne, Red Lake, and the Red River of the North were still in flood at the end of March, except the Red River of the North at Wahpeton, N. Dak., where it receded within its banks on March 20. At Pembina, N. Dak., the river had risen to within 4 feet of flood stage by midnight on March 31.

April-May 1966

The Sheyenne River at West Fargo, N. Dak., was at a stage of 19.6 feet (flood stage 16 feet) on April 1 and rising slowly. It rose 0.8 foot before cresting on April 3 at a stage of 20.36 feet. This was 0.7 foot below the record crest of 21.04 feet which occurred during the previous month and 0.4 foot below the previous highest stage of record established in April 1965. It receded within its banks on the morning of April 12.

The Red Lake River at High Landing, Minn., crested at a stage of 12.43 feet on April 3. This was 2.35 feet higher than the 10.08 feet crest of the previous month and 1 foot lower than the record 13.42 feet crest of May 1950. Farther downstream at Crookston, Minn., the Red Lake River reached a crest of 24.34 feet on April 3. This was 1.5 feet lower than the record crest of 1965.

The main stem of the Red River of the North at Wahpeton, N. Dak., remained nearly stationary at 6 feet during the first 18 days of April. It began rising on April 19 and continued rising until April 30 when it reached a crest of 8.76 feet, (Flood stage, 10 feet).

In the reach from Fargo, N. Dak., to Halstad, Minn., the Red River of the North was 6 to 10 feet above flood stage and receding on April 1. The crest of 30.10 feet at Fargo on March 23, 1966 was nearly 0.5 foot lower than the crest of 1965 and 10 feet lower than the record crest of 1897. It receded below flood stage on April 6 and continued below flood stage the remainder of April and May. At Halstad, Minn., the main stem receded below flood stage (24 feet) on April 9 and reached a level near 9 feet on April 22.

At Grand Forks, N. Dak., the river continued rising until April 4 when it reached a crest of 45.63 feet. This was 17.6 feet above flood stage and 1.7 feet above the 1965 flood level. It approached within 4.6 feet of the record 1897 level. It continued receding to about 4 feet below flood stage on April 24. The main stem rose to bankfull level (28 feet) again by midnight of April 30 and crested at a stage of 29.54 feet on May 3. It receded below flood stage on May 6.

At Drayton, N. Dak., the Red River of the North rose to a record stage of 42.15 feet on April 8, (flood stage, 32 feet), exceeding the previous highest stage of 40.4 feet of April 1965. It receded below flood stage on May 11.

At Pembina, N. Dak., the river rose to a near record crest of 51.30 feet on April 11-12, 1966. This was 9.3 feet above flood stage and 1.6 feet below the previous record stage of May 1950. It receded below flood stage on April 30.

Comparison with the Floods of 1897 and 1950

Figure 15 shows a comparison of the flood of 1966 at Grand Forks, N. Dak., with the floods of 1897 and 1950. The flood crest of 1966 occurred earlier than the ones of 1897 and 1950 by 6 and 37 days,respectively. The crest of 1966 at Grand Forks was 0.02 foot higher than the one of 1950, but 4.6 feet lower than the crest of 1897. The flood of 1966 was the shortest, lasting 25 days compared to 28 days in 1897 and 54 days in 1950.

Flood Warnings Issued By ESSA, Weather Bureau

The Spring Flood Outlook for the Red River of the North was issued by ESSA, Weather Bureau on March 9, 1966, only a few days after the severe blizzard of March 3-5, 1966. This outlook indicated crest stages near those of 1965 at and below Halstad, Minn. These forecasts assumed a normal temperature pattern and light precipitation during the following 5 weeks with the absence of ice jams.

On March 15, 1966, the forecast was revised with crests in the reach at and below Grand Forks, N. Dak., expected to exceed the crests of 1965. A further refinement was made in forecasts on March 18, 20 and 21. The observed crests exceeded 1965 levels by 0.1 foot to 3.9 feet from Halstad, Minn., to Pembina, N. Dak., during the period March 27 to April 12. Ice action did influence stages from above Drayton to Wahpeton, N. Dak.

River forecasts and related data were relayed to Canadian officials under an existing cooperative agreement during the flood. Dikes in all towns and municipalities in southern Manitoba were raised in anticipation of flood crests. The forecasts issued about 3 weeks prior to the flood were valuable to the municipalities and individuals in the area.

Flood Damages

The total cost of the 1966 flood in the Red River of the North Basin has been estimated at $12.3 million. Of this total, $8 million damages occurred in North Dakota and $4.3 million in Minnesota. These preliminary figures on flood damage and cost of protection were based on estimates received from the Corps of Engineers.

Flood fighting costs were highest downstream from Fargo, N. Dak. The city of Grand Forks, N. Dak., spent $400,000 and the city of East Grand Forks, N. Dak., spent $500,000 for protection against flooding. The two cities were determined to avoid a repetition of the severe flooding of 1965. After the severe blizzard of March 3-5, 1966, an expanded program against expected high water was started immediately. In both cities the snow was removed from areas in which dikes were to be built. Sand for filling burlap bags was stockpiled for building dikes. School children, University of North Dakota students, Air Force personnel and citizens of the two cities responded to pleas to help build the dikes. Water spread across golf courses, parks, roads and rich farmlands, but the dikes throughout the Greater Grand Forks area held as did most of those throughout the valley. Many families left their homes as a precaution against a sudden break in the emergency walls, but relatively few homes were flooded. At town after town volunteers turned out to build dikes to protect the area from flood damage. At Alvarado, Minn., the Snake River overflowed its banks with such suddenness that emergency dikes could not be completed in time. Water several inches to several feet deep flowed around homes and business places throughout the village. About 2,800 persons were evacuated in 3 Manitoba towns as the flood rolled northward to Winnipeg.

Damage to rural areas, chiefly flooded land which totalled 920,000 acres, was heavy. Agricultural damage was estimated at $7.7 million. Transportation losses, such as roads and bridges, were estimated at $1.5 million for North Dakota and Minnesota. Urban damages were estimated at $3.1 million.

Savings

An estimated $1 million dollars was saved through the early issuance of the Spring Flood Outlook by the Weather Bureau. Advance warning and accurate forecasts gave municipalities the needed time to construct dikes and protect the cities against flooding. No deaths were reported as resulting from the major flooding. Canadian officials were complimentary of the assistance, data, and forecasts given them by the Weather Bureau during the flood.

Acknowledgments

Acknowledgments are due the following:

Weather Bureau, Central Region, Kansas City, Mo.

1. Verne Alexander, Regional Hydrologist, for coordination of field data.
2. E. Vernon Hendrickson, Meteorologist in Charge, Weather Bureau Office, Fargo, N. Dak., for forwarding data on the flood.

Other Governmental Agencies

1. U. S. Corps of Engineers, St. Paul, Minn., for information on flood damages.
2. U. S. Geological Survey, Bismarck, N. Dak., and St. Paul, Minn., for information on tributary flow and supplemental gage height data.

References:

1. Climatological Data for Minnesota and North Dakota for the months October 1965 through April 1966.
2. Red River of the North Basin Flood, April-June 1950, Monthly Weather Review, Vol. 79, September 1951, pp 169-178.
3. Technical Paper No. 23, Floods of 1952 - Upper Mississippi - Missouri - Red River of the North.
4. Weekly Weather and Crop Bulletin, Environmental Data Service, Vol. 53, No. 10, March 7, 1966.

TABLE 1

DAILY PRECIPITATION

RED RIVER OF THE NORTH BASIN - MARCH 1966

MINNESOTA	TOTAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	MINNESOTA 31
Ada	2.95		.25	1.19	.66	.55					T									.05						.10						.15
Angus 4NNE	1.61		.02	.37	.48	.11					T	T	T				.02		.02							.09						.50
Caribou 2S	1.34	.03		.03	1.07	.09			.05		T	.01	T				T		T	.05						T						.01
Crookston NW School	.95			.36	.28	T													.10	T						.04						.17
Detroit Lakes 1NNE	.93			.22	.23	.22	T				T	T						T	.19	.04						T	.03					
Fergus Falls	1.62		.32	.42	.32	.10			T		.03						.01	.01	.35	.03				T		.03						
Foston Power Plant	3.06		.06	1.16	.97	.17													.40	.03						.10						.17
Gonvick	1.91			*	1.30	.08													.23	.22						.08						T
Hallock	1.56	.10		*	*	1.29						.04					T	T	T	T						.13						T
Halstad																																
Hawley	1.46		.15	.39	.41	.08					T								.32	.09				T		.02						T
High Landing	4.43		.50	1.40	1.53			T																								1.00
Mahnomen	4.50		*	*	*	3.50													.53	T						.27					.20	
Red Lake Falls	1.50		T	.52	.57	.03			.03								T		.13	T						.06						.16
Red Lake Indian Agency	1.23			.15	.66	.19						T							.10	.12												.01
Roseau 1E	1.70	T		.50	.84	.12			.10		T								.14							T						
Thief River Falls AP	3.35	.08		.62	1.40	.30			.03		.15	T					T		.27							.30						.20
Washkish Ranger Station	2.65			.47	.46	.76													.51													.45
Wheaton	1.13		T	.27	.53	.21													.12							T						
NORTH DAKOTA																																NORTH DAKOTA
Abercrombie	1.48			.75	.08	.50	T				.02						T	.01	.11	T					T	T	.01					
Amenia	1.28		.25	.30	.45	.10													.15													.03
Cavalier	1.92			.02	1.05	.38			.03		.02						T	T							.14							.28
Colgate	-		.10	.64	-	-	-				T					T	T	T	.15							T						.04
Cooperstown	1.74		T	.50	.40	.43	.30											.05														.06
Devils Lake KDLR	3.21			.57	1.74	.70			T									.01	.01	T			T	T		.01	T	T				.17
Edmore 1N	-			-	-	-			.02						T											T	T					T
Fargo WB Airport	1.92		.67	.41	.54	.13			T		T	T						T	.13	T				T	T	T						.04
Forman	2.21		.32	.02	*	1.84					T							T	.03													
Grand Forks FAAAP	3.08		.26	.68	1.66	.14		.09	T		T	T				T	T		.01	T				T		.05						.19
Hannah 2N	-				1.00	-																	T	T			.05	T				.25
Hansboro 3W	-				-	-			.01						T	T	T	T	T				T			T	T					.11
Langdon Exp. Farm	2.13			.50	1.00	.20					T					.02	.20	T						.01		.02						.18
Larimore	4.55			1.01	1.62	1.65			.15												T	T				.01						.11
Lisbon	.92		.21	.31	.31	.03													.06													
Mayville	1.90		.11	.59	.72	.37			.02		T						T	T	.02	T				T		T						.07
Munich 4SW	-			-	-	-																										
Park River	1.57			.90	.40	.20											T	T	T				T			.02						.05
Petersburg 2NNW	2.34			.06	1.46	.64	T		.16				T											T		.02						
Sharon	1.89		T	.97	.90																		T	T		T						.02

TABLE 1 - CONTINUED

DAILY PRECIPITATION

RED RIVER OF THE NORTH BASIN - APRIL 1966

																														MINNESOTA		
MINNESOTA	TOTAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Ada	1.99	T			T		T		T			T			.29			T		.28				.11		.10	.62	.28	.31			
Angus 4NNE	1.36						T	T	.01						.12			.08		.17		T		.11	.03	T	.20	.47	.17			
Caribou 2S	2.46	.06			T	T	T	.02	.08							.06	.04	.08		T	.06				.10			1.90	.06			
Crookston NW School	1.25				T			.02	.03						.02	.01	.07			.01		.05		.14	.21	T	.18	.17	.34			
Detroit Lakes 1 NNE	1.75	.02					T	T	T	T									.13		.10			.25			.65	.07	.53		T	
Fergus Falls	2.66	T		T	T	T	T	.05	.01		T	.10			T			.50	T	.50	.10			.05	.09	.03	.02	.24	.65	.32		
Foston Power Plant	1.91				.02		.06	.04	.06									.08		.37	.20			.08	.11	.05	.27	.36	.21			
Gonvick	D 1.74	.30			T	T	.10	T	T									T		T	.55	T			.35	T	.22	.20	.02		T	
Hallock	2.35	.14							T						.11			.09			.02				.14			1.58	.27			
Halstad	1.75				.09	T									.24			.10	.12								T	.93	T	.27		
Hawley	2.38			T	T	T	.01	.03	T						T			.11		.07	.03			.05	.29	.12	.75	.41	.51			
High Landing	D .67						T	T							T									.12		D.05	D.40	D.10				
Mahnomen	2.20				T		.10								.04			.11	.10	.22	.19			.12	.20	.30	.38		.44			
Red Lake Falls	1.38				T	.03	T	.04	.03						.02			.03		.02	.02	.03		.16	.10	.04	.08	.64	.14			
Red Lake Indian Agency	2.23	.34			T	T	T	.02	.07						.01			.09	.01	.04	.45	.03		T	.15	T	.13	.57	.32			
Roseau 1E	1.63						T	T	.08									T		.25	.01				.11			.75	.43			
Thief River Falls AP	1.17				T		T	T	T									T		.11	.08	T		.23	.03		.12	.51	.09			
Washkish Ranger Station	2.04					.10	.04			.25					.05			.17	.02	.14	.40	.10		.07				.34	*	.36		
Wheaton	2.28	T	T		T	T	T		.01		.10	.03						.60		.45	.05		T		T			.10	.49	.37	.08	
NORTH DAKOTA																														NORTH DAKOTA		
Abercrombie	1.54	T	T		.02	T	T	T	T		T	.07	.01			T		.09		.03	.05			T	T	T	.17	.09	.93	.03	.05	
Amenia	1.48				.02						.01	.04							.01	.05				.05	.02	.20	.60	.35	.13			
Cavalier	2.66				T			.05	.02						.02								.03	.07		.03	1.47	.97				
Colgate	1.25			T	.01	T					.03	T			.01			T		.07		T		.12		.25	.33	.43	T			
Cooperstown	1.21			.03	T	T		.02	T		T	.02			T					.13		T		.10	T	.12	.26	.53				
Devils Lake KDLR	1.47				.01	T	T	T	T	T		T			.09			.03	T	T			T			.17	.08	1.08	.01			
Edmore 1N	2.57				T										.01			.01					T	.01	.03	.17	1.07	1.27				
Fargo WB Airport	1.78	.02		T	T	T	T	T	T		T	T			T			.04	.01	.23	T		T	.03	T	.48	.23	.74				
Forman	1.47				T	T			.06		.39				T			T		.16	T						.03	.58	.02	.23		
Grand Forks FAA AP	1.09	.01			.01	T	T	.01	.02					.02	T	T		.03		.06	.02			.01	T	.14	.21	.55	T			
Hannah 2N	1.48	T	T	T	T			T	T			T		.08	T			T			T	T	T	T		.10	T	1.20	.10			
Hansboro 3W	.64			T	T	T		T	.12		T	T		.07		T		T				.14		T	.01	.04	.02	.24	T		T	
Langdon Exp. Farm	1.64	.01	.02	T	.04	.02	T	.04	T			T		T	.02			T					.24	.03	T	.08	.02	1.12				
Larimore	1.85	.03				.02		T							.03					.04		.03			.06	.15	.56	.93				
Lisbon	.98				T	.01			.04		.31	.02			T					.02	.20		T	T			T	.30	.08	T		
Mayville	1.20	.02			T	T		T	T			T			T			.02		.08	T	.03		.14	T	.11	.45	.30	.05			
Munich 4SW	1.38							.05	T						.10			T				.20			.13	.05	.08	.77				
Park River	3.53		T	T	T			.05							.02					.03				.12	.54	.03	.04	2.70				
Petersburg 2NNW	2.48	.04		T	T	T	T	T	T						.02					T						.31	.12	1.32	.67			
Sharon	1.43	T			T	T			T			T								.06		T		.10		.25	.55	.47				

* Amount included in following measurement, time distribution uninown.

T Trace, an amount too small to measure.

D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of new snowfall.

COMPARATIVE CREST STAGE DATA OF MAJOR FLOODS OF THE RED RIVER OF THE NORTH

TABLE 2.

River and station	Flood stage	Above flood stages March-May 1966		Crest March-May 1966		Previous Maximum Crest of record		1965 Crest		1952 Crest		1950 Crest	
		From–	To–	Stage	Date	Stage	Date	Stage	Date	Stage	Date	Stage	Date
HUDSON BAY DRAINAGE	Ft.			Ft.		Ft.		Ft.		Ft.		Ft.	
Sheyenne: West Fargo, N. Dak.	16	Mar. 17	Apr. 12	21.04 20.36	Mar.22-23 Apr. 3	20.8	Apr. 19, 1965	20.8	Apr. 19	20.5	Apr. 9-10	20.6	May 11
Red Lake: Crookston, Minn.	15	Mar. 31 Apr. 29	Apr. 17 May. 5	24.34 15.97 15.57	Apr. 3 May 1 May 3	25.8	Apr. 13, 1965	25.8	Apr. 13	12.7	Apr. 11	25.7	May 7
Red River of the North:													
Wahpeton, N. Dak.	10	Mar. 14	Mar. 20	13.94	Mar. 16	P17.0	Apr. 1897	14.3	Apr. 11	15.0	Apr. 12	11.6 11.5	Apr. 2 May 10
Fargo, N. Dak. †	17	Mar. 16	Apr. 6	30.10 23.76	Mar. 23 Mar. 31	P40.1	Apr. 7, 1897	30.6	Apr. 16	34.65	Apr. 16	27.2	Apr. 8
Halstad, Minn.	24	Mar. 20	Apr. 8	35.48	Mar. 27	P38.5	-- - 1897	35.4	Apr. 17	29.8	Apr. 18		
Grand Forks, N. Dak.	28	Mar. 21 May 1	Apr. 19 May 6	45.63 29.54	Apr. 4 May 3	50.2	Apr. 10, 1897	44.9	Apr. 17	33.6	Apr. 21	43.9 45.6	Apr. 25 May 12
Drayton, N. Dak.	32	Mar. 28	May 11	42.15	Apr. 8	A40.0	May 12, 1950	40.4	Apr. 22	28.8	Apr. 26	A39.3 A40.0	Apr. 26 May 12
Pembina, N. Dak.	42	Apr. 2	Apr. 30	51.30	Apr.11-12	52.9	May 14, 1950	47.4	Apr. 25			51.7 52.9	May 1 May 14
Emerson, Manitoba	81.5	Apr. 3	Apr. 28	89.3	Apr. 12	P91.2	Apr. 18, 1897	85.19	Apr. 26	73.0	Apr. 14	90.6 90.89	Apr. 30 Mar 13

Continued

River and station	1948 Crest		1947 Crest		1943 Crest		1920 Crest		1916 Crest		1897 Crest	
	Stage	Date	Stage	Date	Stage	Date	Stage	Date	Stage	Date	Stage	Date
	Ft.		Ft.		Ft.		Ft.		Ft.		Ft.	
Sheyenne: West Fargo, N. Dak.	18.5	May 7	20.5	Apr. 18	19.4	Apr. 1						
Red Lake: Crookston, Minn.	18.1	Apr. 8	18.1	June 12	16.9	Apr. 8	23.3	Mar. 25	21.8	Apr. 17	25.2	Apr. 11
Red River of the North:												
Wahpeton, N. Dak.	8.6	Apr. 6	11.9	Apr. 12	H14.8	Apr. 2			H14.8	Apr. --	P17.0	Apr. --
Fargo, N. Dak. †	18.0	Apr. 10	28.9	Apr. 15	34.3	Apr. 7	23.6	Mar. 28	31.2	Apr. 6	P40.1	Apr. 7
Halstad, Minn.			34.0	Apr. 17							P38.5	Apr. --
Grand Forks, N. Dak.	41.7	Apr. 16	40.7	Apr. 22	38.2	Apr. 12	41.0	Mar. 29	41.0	Apr. 17	50.2	Apr. 10
Drayton, N. Dak.	A38.5	Apr. 22	A31.5	Apr. 28	A32.1	Apr.17-19					A39.4	Apr. --
Pembina, N. Dak.	48.5	Apr. 27										
Emerson, Manitoba	87.41	Apr. 27	75.5	May 1	77.0	Apr.20-21			85.2	Apr. 24	P91.2	Apr. 18

† Formerly published as Moorhead, Minn.
A Adjusted to present datum
H High water mark
P Previous to gage records

TABLE 3.

MAJOR FLOODS IN ORDER OF MAGNITUDE

Red River of the North Basin

SHEYENNE RIVER

West Fargo, N. Dak.
Zero of gage - 877.19 feet
Drainage area - 8,870 square miles a/
Flood Stage - 16 feet
Period of record - 37 years (referred to present site and datum 1929-1966)

Crest Stage	Date
Feet	
21.04	March 22-23, 1966
20.75	April 19, 1965
20.61	May 11, 1950
20.53	April 18, 1947
#20.5	April 9-10, 1952
20.36	April 3, 1966
19.35	April 1, 1943
18.83	June 20, 1953
18.46	May 7, 1948

RED LAKE RIVER

High Landing, Near Goodridge, Minn.
Zero of gage - 1,141.57 (1912 adj.)
Drainage area - 2,300 square miles
Flood stage -
Period of record - 1930-1966 (referred to present site and datum)

Crest Stage	Date
Feet	
13.42	May 11, 1950
12.43	April 3, 1966
12.08	April 12, 1965
10.08	March 18, 1966
9.20	April 11, 1944
9.20	April 20, 1948
8.38	April 16, 1947

Crookston, Minn.

Zero of gage - 832.72 feet
Drainage area - 5,280 square miles
Flood stage - 15 feet
Period of record - 1901-1966

Crest Stage	Date
Feet	
25.8	April 13, 1965
25.70	May 7, 1950
25.2	April 11, 1897
24.34	April 3, 1966
23.3	March 25, 1920
21.5	April 17, 1916
21.1	July 5, 1919
23.3	March 25, 1920
20.32	April 24, 1904
18.08	June 12, 1947
18.08	April 8, 1948

RED RIVER OF THE NORTH

Wahpeton, N. Dak.
Zero of gage - 942.97 feet (1929 adj.)
Drainage area - 4,010 square miles
Flood stage - 10 feet
Period of record - 1943-1966

RED RIVER OF THE NORTH (Cont'd.)

Wahpeton, N. Dak. (Cont'd.)

Crest Stage	Date
Feet	
17.0 (1)(2)	April 1897
15.0	April 12, 1952
14.8 (1)	Spring 1916
14.8 (1)	April 2, 1943
14.3	April 11, 1965
14.0	April 7, 1951
13.94	March 16, 1966
12.1	June 6, 1944
11.9	April 12, 1947
11.6	April 2, 1950
11.5	May 10, 1950

Fargo, N. Dak.
Zero of gage - 861.8 feet (1929 adj.)
Drainage area - 6,800 square miles
Flood stage - 17 feet
Period of record - 1901-1966

Crest Stage	Date
Feet	
40.1 (1)	April 7, 1897
37.8 (1)	April 11, 1882
34.65	April 16, 1952
34.3	April 7, 1943
31.2	April 6, 1916
30.55	April 16, 1965
30.10	March 23, 1966
29.8	March 30-31, 1907
28.9	April 15, 1947
28.6	July 12, 1916
27.8	April 12, 1951
27.2	April 8, 1950

Halstad, Minn.
Zero of gage - 826.65 feet
Drainage area - 21,800 square miles a/
Flood stage - 24 feet
Period of record - 1936-1937; 1942-1960; 1961-1966

Crest Stage	Date
Feet	
38.5 (2)	1897
35.48	March 27, 1966
35.35	April 17, 1965
34.0	April 17, 1947
29.78	April 18, 1952

Grand Forks, N. Dak.
Zero of gage - 778.35 feet (1929 adj.)
Drainage area - 30,100 square miles (5)
Flood stage - 28 feet
Period of record - 1882-1966

Crest Stage	Date
Feet	
50.2 (3)	April 10, 1897
49.5	April 21, 1882
45.63	April 4, 1966
45.61	May 12, 1950
45.5	April 24, 1893
44.9	April 17, 1965

TABLE 3. (Cont'd.)

RED RIVER OF THE NORTH (Cont'd.)

Grand Forks, N. Dak. (Cont'd.)

Crest Stage Feet	Date
41.7	April 16, 1948
41.0	April 17, 1916
41.0	March 29, 1920
40.7	April 22, 1947
40.6	April 27, 1904 and April 28, 1883

Drayton, N. Dak.
Zero of gage - 755.00 feet (1929 adj.)
Drainage area - 34,800 square miles a/
Flood stage - 32 feet
Period of record -

Crest Stage Feet	Date
42.15	April 8, 1966
40.4	April 22, 1965
39.99 b/	May 12, 1950
39.4 b/	April --, 1897

RED RIVER OF THE NORTH (Cont'd.)

Drayton, N. Dak. (Cont'd.)

Crest Stage Feet	Date
39.3 b/	April 26, 1950
38.46 b/	April 22, 1948
32.1 b/	April 17-19, 1943
31.5 b/	April 28, 1947
27.2 b/	April 26, 1952

Pembina, N. Dak.
Zero of gage -
Drainage area -
Flood stage - 42 feet
Period of record -

Crest Stage Feet	Date
52.9	May 14, 1950
51.7	May 1, 1950
51.3	April 11-12, 1966
48.5 (4)	April 27, 1948
47.4	April 25, 1965

a/ Includes 3,800 square miles in closed basins
b/ Adjusted to present datum
Highest reported
(1) From high water mark
(2) Prior to gage records
(3) Legendary Flood of 1852 probably was higher by 3/10 foot or more
(4) Estimated from data for Emerson, Manitoba
(5) Excludes 3,800 square miles in closed basins

TABLE 4

RED RIVER OF THE NORTH BASIN

Station		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Average
MINNESOTA																																	
Ada	MAX.	40	32	30	27	22	22	28	40	45	40	38	40	51	48	42	46	48	42	40	46	50	45	23	24	33	35	40	40	52	58	55	39.4
	MIN.	10	20	25	16	2	-10	-20	20	20	34	28	22	21	31	32	30	32	27	22	28	30	23	9	4	20	11	17	19	39	32	40	20.5
	D.DAYS	0	0	0	0	0	0	0	0	1	5	1	0	4	8	5	6	8	3	0	5	8	2	0	0	0	1	0	0	14	13	16	
	ACCUM.	0	0	0	0	0	0	0	0	1	6	7	7	11	19	24	30	38	41	41	46	54	56	56	56	56	57	57	57	71	84	100	
Angus	MAX.	38	30	26	22	18	6	18	37	38	36	38	32	41	39	39	41	38	37	31	45	47	35	17	22	30	35	38	44	50	53	48	34.5
	MIN.	8	8	21	17	1	-14	-22	17	15	31	30	19	22	18	29	32	32	21	20	25	28	17	5	1	20	6	13	21	27	32	36	17.3
	D.DAYS	0	0	0	0	0	0	0	0	0	2	2	0	0	0	2	5	3	0	0	3	6	0	0	0	0	0	0	1	7	11	10	
	ACCUM.	0	0	0	0	0	0	0	0	0	2	4	4	4	4	6	11	14	14	14	17	23	23	23	23	23	23	23	24	31	42	52	
Crookston, N.W. School	MAX.	37	33	30	24	25	7	20	38	43	41	37	35	45	43	39	45	43	40	29	45	50	45	19	21	30	37	36	45	49	52	50	36.5
	MIN.	12	9	23		1	-13	-23	9	19	33	32	17	23	28	25	33	31	24	19	23	28	18	5	2	20	8	14	23	27	30	37	17.9
	D.DAYS	0	0	0	-	0	0	0	0	0	5	3	0	2	4	0	7	5	0	2	7	0	0	0	0	0	0	0	2	6	9	12	
	ACCUM.	0	0	0	-	0	0	0	0	0	5	8	8	10	14	14	21	26	26	28	35	35	35	35	35	35	35	35	37	43	52	64	
Detroit Lakes	MAX.	36	35	30	30	22	10	23	39	43	40	36	42	47	45	43	42	49	39	27	49	51	49	24	27	27	33	39	49	50	57	56	38.4
	MIN.	13	20	25	21	5	-12	-22	18	19	34	30	20	19	30	31	36	38	25	21	21	26	23	8	2	21	0	12	22	29	29	39	19.5
	D.DAYS	0	0	0	0	0	0	0	0	0	5	1	0	0	6	5	7	12	0	0	3	7	4	0	0	0	0	0	4	8	11	16	
	ACCUM.	0	0	0	0	0	0	0	0	0	5	6	6	6	12	17	24	36	36	36	39	46	50	50	50	50	50	50	54	62	73	89	
Fergus Falls	MAX.	40	35	34	33	24	14	23	41	45	39	41	46	47	49	45	45	50	43	31	54	53	50	25	29	33	38	41	52	53	60	56	40.9
	MIN.	19	25	25	20	6	-6	-11	20	23	35	32	28	22	34	32	35	43	29	23	25	28	25	10	5	23	12	20	22	30	31	40	22.7
	D.DAYS	0	0	0	0	0	0	0	0	2	5	5	5	3	10	7	8	15	4	0	3	9	6	0	0	0	0	0	15	10	14	16	
	ACCUM.	0	0	0	0	0	0	0	0	2	7	12	17	20	30	37	45	60	64	64	67	76	82	82	82	82	82	82	97	107	121	137	
Foston Power Plant	MAX.	33	33	27	25	23	10	26	36	51	43	35	39	53	49	45	48	48	39	35	48	49	49	22	24	33	34	38	52	49	56	54	38.9
	MIN.	7	18	24	18	3	-10	-19	19	19	34	31	24	26	32	31	35	35	24	20	23	32	21	5	1	19	7	16	23	28	33	37	19.9
	D.DAYS	0	0	0	0	0	0	0	0	3	7	1	0	8	9	6	10	10	10	0	4	9	3	0	0	0	0	0	6	7	13	14	
	ACCUM.	0	0	0	0	0	0	0	0	3	10	11	11	19	28	34	44	54	64	64	68	77	80	80	80	80	80	80	86	93	106	120	
Hallock	MAX.	32	30	32	23	19	11	6	27	35	38	39	37	37	43	39	40	42	38	29	35	45	44	18	13	23	30	32	34	42	49	49	32.6
	MIN.	10	3	9	13	4	-13	-16	-11	17	20	33	18	21	28	29	31	31	28	20	20	28	17	4	-4	3	4	10	23	25	30	36	15.2
	D.DAYS	0	0	0	0	0	0	0	0	0	0	4	0	0	4	2	4	5	1	0	0	5	0	0	0	0	0	0	0	2	8	11	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	4	4	4	8	10	14	19	20	20	20	25	25	25	25	25	25	25	25	27	35	46	
Hawley	MAX.	36	35	31	29	23	7	23	42	44	40	38	40	48	48	42	44	54	43	29	51	49	48	24	26	31	35	40	54	52	59	58	39.5
	MIN.	12	22	25	18	3	-8	-16	9	24	35	32	25	28	32	34	36	35	28	22	22	32	23	6	4	21	11	16	18	29	33	40	21.0
	D.DAYS	0	0	0	0	0	0	0	0	2	6	3	0	1	8	6	8	13	4	0	5	9	4	0	0	0	0	0	4	9	14	17	
	ACCUM.	0	0	0	0	0	0	0	0	2	8	11	11	12	20	26	34	47	51	51	56	65	69	69	69	69	69	69	73	82	96	113	
Mahnomen 1W	MAX.	38	30		18	12	8	22	38	48	38	37	37	47	47	45	46	48	45	32	49	48	43	20	25	30	34	34	49	49	55	53	37.5
	MIN.	10	14	16	12	4	-11	-19	20	17	34	30	22	23	29	31	34	38	22	20	24	30	20	8	4	21	8	11	24	28	34	38	19.2
	D.DAYS	0	0	-	0	0	0	0	0	1	4	2	0	0	6	6	8	11	2	0	5	7	0	0	0	0	0	0	5	7	13	14	
	ACCUM.	0	0	-	0	0	0	0	0	1	5	7	7	7	13	19	27	38	40	40	45	52	52	52	52	52	52	52	57	64	77	91	
Red Lake Falls	MAX.	36	31	28	25	21	8	24	38	45	38	36	36	48	44	43	45	41	39	34	48	56	46	20	24	29	33	38	46	48	55	51	37.2
	MIN.	14	13	22	17	2	-12	-20	20	19	34	32	23	23	29	31	34	33	22	30	23	32	18	5	1	20	1	14	22	28	33	36	19.0
	D.DAYS	0	0	0	0	0	0	0	0	0	4	2	0	0	5	5	8	5	0	0	0	12	0	0	0	0	0	0	2	6	12	12	
	ACCUM.	0	0	0	0	0	0	0	0	0	4	6	6	6	11	16	24	29	29	29	29	41	41	41	41	41	41	41	43	49	61	73	
Red Lake Indian Agency	MAX.	38	32	32	26	25	15	11	32	41	51	38	41	41	54	38	42	51	51	31	38	48	53	32	20	22	30	31	34	52	46	48	37.2
	MIN.	17	10	14	21	3	-11	-22	-14	16	22	31	30	24	30	30	32	39	30	22	8	34	26	8	0	4	-1	5	16	24	30	38	16.6
	D.DAYS	0	0	0	0	0	0	0	0	0	5	3	4	1	10	2	5	13	9	0	0	9	8	0	0	0	0	0	0	6	6	11	
	ACCUM.	0	0	0	0	0	0	0	0	0	5	8	12	13	23	25	30	43	52	52	52	61	69	69	69	69	69	69	69	75	81	92	
Roseau 1E	MAX.	28	28	28	20	19	12	20	33	35	37	37	37	37	35	41	40	39	39	32	41	43	41	18	20	26	31	34	42	44	43	43	33.0
	MIN.	12	-7	16	16	-1	-16	-25	15	9	30	30	25	18	25	27	33	32	25	20	18	26	16	1	-8	15	-2	4	16	23	31	39	14.9
	D.DAYS	0	0	0	0	0	0	0	0	0	2	2	0	0	0	2	5	4	0	0	0	3	0	0	0	0	0	0	0	2	5	9	
	ACCUM.	0	0	0	0	0	0	0	0	0	2	4	4	4	4	6	11	15	15	15	15	18	18	18	18	18	18	18	18	20	25	34	
Thief River Falls AP	MAX.	33	32	28	23	23	8	20	35	42	39	35	37	47	45	40	45	39	38	38	46	48	43	20	22	29	35	36	44	45	52	48	36.0
	MIN.	10	7	20	16	0	-10	-21	19	11	30	30	26	20	22	30	32	32	20	21	23	25	17	4	-1	15	5	13	21	27	33	35	17.2
	D.DAYS	0	0	0	0	0	0	0	0	0	3	1	0	2	0	3	7	4	0	0	0	0	0	0	0	0	0	0	1	4	11	10	
	ACCUM.	0	0	0	0	0	0	0	0	0	3	4	4	6	6	9	16	20	20	20	20	20	20	20	20	20	20	20	21	25	36	46	
Waskish Ranger Sta.	MAX.	32	30	26	28	27	21	27	42	39	41	40		46	40	43	54	40	34	34	39	36	37	28	17	32	31	30	38	40	51	46	35.6
	MIN.	18	19	24	21	19	5	-25	5	30	34	29		-	33	34	35	34	23	26	28	28	24	4	-7	4	-	-	-	28	33	34	20.8
	D.DAYS	0	0	0	0	0	0	0	0	3	6	3	-	-	5	7	13	5	0	0	2	0	0	0	0	0	-	-	-	2	10	8	
	ACCUM.																																
Wheaton	MAX.	42	38	35	35	20	10	24	39	44	40	45	45	49	53	52	48	55	52	39	56	55	55	30	28	37	37	38	56	57	62	59	43.1
	MIN.	23	28	27	20	6	-3	-7	5	38	35	34	32	31	32	29	36	37	32	27	29	30	30	11	8	23	20	26	26	31	32	38	24.7
	D.DAYS	1	1	0	0	0	0	0	0	9	6	8	7	8	11	9	10	14	10	4	11	11	11	0	0	0	0	0	9	12	15	17	
	ACCUM.	1	2	2	2	2	2	2	2	11	17	25	32	40	51	60	70	84	94	98	109	120	131	131	131	131	131	131	140	152	167	184	

TABLE 4

DAILY TEMPERATURE AND DEGREE DAYS ABOVE 32°F

RED RIVER OF THE NORTH BASIN

NORTH DAKOTA
March 1966

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
NORTH DAKOTA																																	
Amenia	MAX.	40	35	28	25	23	15	21	38	39	38	49	49	43	43	43	42	45	43	33	45	54	46	22	25	32	35	38	52	56	57	57	39.1
	MIN.	17	24	24	6	10	-8	-13	20	18	33	32	29	29	30	29	30	33	30	26	27	29	20	8	6	24	23	15	30	32	30	36	21.9
	D.DAYS	0	0	0	0	0	0	0	0	0	4	9	7	4	5	4	4	7	5	0	4	10	1	0	0	0	0	0	9	12	12	15	
	ACCUM.	0	0	0	0	0	0	0	0	0	4	13	20	24	29	33	37	44	49	49	53	63	64	64	64	64	64	64	73	85	97	112	
Cavalier	MAX.	39	30	23	17	17	11	18	42	38	36	44	43	40	39	36	37	43	41	32	50	50	37	22	23	29	32	35	46	54	50	54	35.7
	MIN.	16	3	10	3	0	-8	-4	14	12	23	32	23	22	20	18	28	32	21	19	28	29	15	4	-1	20	10	10	24	32	35	43	17.2
	D.DAYS	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	6	6	0	0	7	8	0	0	0	0	0	0	3	11	11	17	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	6	7	7	7	7	13	19	19	19	26	34	34	34	34	34	34	34	37	48	59	76	
Colgate	MAX.	39	31	25						41	39	49	53	53	39	38	40	44	39	35	51	48	43	21	27	33	34	37	53	54	57	53	41.4
	MIN.	13	22	18						22	31	32	24	26	29	26	25	33	29	25	31	29	21	7	2	23	10	20	27	28	32	34	23.8
	D.DAYS	0	0	0	-	-	-	-	-	0	3	9	7	8	2	0	1	7	2	0	9	7	0	0	0	0	0	0	8	9	13	12	
	ACCUM.	0	0	0	-	-	-	-	-	0	3	12	19	27	29	29	30	37	39	39	48	55	55	55	55	55	55	55	63	72	85	97	
Cooperstown	MAX.	40	35	25	15	14	18	24	37	39	38	45	47	51	43	40	41	44	39	40	51	54	47	36	30	33	34	41	58	57	62	57	39.8
	MIN.	13	21	13	8	5	-8	-9	21	25	31	31	25	30	33	32	28	34	30	25	29	30	23	8	3	25	13	23	27	26	31	41	21.5
	D.DAYS	0	0	0	0	0	0	0	0	0	3	6	0	9	6	4	3	5	3	11	8	10	3	0	0	0	0	0	11	10	15	17	
	ACCUM.	0	0	0	0	0	0	0	0	0	3	9	9	18	24	28	31	36	39	50	58	68	71	71	71	71	71	71	82	92	107	124	
Devils Lake KDLR	MAX.	33	37	25	13	13	14	15	32	38	37	42	50	43	45	42	49	51	41	31	38	53	49	26	21	31	30	35	50	52	59	63	37.4
	MIN.	13	16	9	5	6	-7	-13	15	19	28	29	26	27	31	29	29	30	29	24	30	30	21	6	3	20	18	20	28	28	31	40	20.0
	D.DAYS	0	0	0	0	0	0	0	0	0	1	4	6	3	6	4	5	9	3	0	2	10	3	0	0	0	0	0	7	7	13	20	
	ACCUM.	0	0	0	0	0	0	0	0	0	1	5	11	14	20	24	29	38	41	41	43	53	56	56	56	56	56	56	63	70	83	103	
Edmore	MAX.	33	32	20	-	14	15	21	35	35	34	43	43	43	42	39	47	42	38	35	47	45	41	20	26	33	28	36	47	52	56	52	36.5
	MIN.	4	9	7	-	4	-13	-12	15	14	20	29	19	37	28	28	27	32	23	21	23	28	20	11	-1	22	10	12	27	25	29	39	17.9
	D.DAY	0	0	0	-	0	0	0	0	0	0	4	0	8	3	2	5	5	0	0	3	5	0	0	0	0	0	0	5	7	11	14	
	ACCUM.	0	0	0	-	0	0	0	0	0	0	4	4	12	15	17	22	27	27	27	30	35	35	35	35	35	35	35	40	47	58	72	
Fargo WB Airport	MAX.	37	29	31	21	16	7	26	35	40	39	40	39	44	46	44	51	50	36	31	53	49	36	20	26	33	34	37	53	53	60	58	37.9
	MIN.	16	25	21	15	0	-12	-18	23	26	34	30	24	30	29	28	33	34	25	25	29	31	16	9	6	20	16	20	28	30	33	41	21.5
	D.DAYS	0	0	0	0	0	0	0	0	1	5	3	0	5	6	4	10	10	0	0	4	8	0	0	0	0	0	0	9	10	15	18	
	ACCUM.	0	0	0	0	0	0	0	0	1	6	9	9	14	20	24	34	44	44	44	48	56	56	56	56	56	56	56	65	75	90	108	
Grand Forks FAA AP	MAX.	36	30	26	18	16	9	25	35	36	34	36	36	39	36	35	39	41	36	31	49	47	33	17	26	30	31	34	46	51	52	53	34.3
	MIN.	18	16	14	14	3	-14	-17	24	21	32	31	25	23	31	26	29	33	25	25	28	33	15	10	7	21	15	22	29	31	32	38	20.6
	D.DAYS	0	0	0	0	0	0	0	0	0	1	2	0	0	2	0	2	5	0	0	7	8	0	0	0	0	0	0	6	9	10	14	
	ACCUM.	0	0	0	0	0	0	0	0	0	1	3	3	3	5	5	7	12	12	12	19	27	27	27	27	27	27	27	33	42	52	66	
Hannah 2N	MAX.	29	18	17	12																	45	32	14	26	28	25	36	47	50	56	51	-
	MIN.	3	-5	5	4																	10	10	3	0	17	14	12	28	28	30	39	-
	D.DAYS	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	6	7	11	13	
	ACCUM.																																
Hansboro 3W	MAX.	40	29	16	15	13	20	21	40	36	36	48	46	44	42	45	51	42	34	39	50	45	38	18	25	31	29	41	54	55	67	60	37.7
	MIN.	8	9	3	1	-1	-6	-2	20	21	25	32	25	22	25	31	30	31	24	21	30	28	14	-1	0	-2	16	22	31	29	33	39	18.0
	D.DAYS	0	0	0	0	0	0	0	0	0	0	8	4	1	2	6	9	5	0	0	8	5	4	0	0	0	0	0	11	10	18	23	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	8	12	13	15	21	30	35	35	35	43	48	52	52	52	52	52	52	63	73	91	114	
Langdon Exp. Farm	MAX.	34	31	19	12	13	15	18	33	32	34	40	39	38	34	35	44	39	35	35	45	48	38	22	25	30	30	34	47	49	55	53	34.1
	MIN.	3	2	4	3	2	-18	-14	13	16	22	30	13	23	19	28	27	31	22	18	25	26	16	2	-5	20	21	13	26	23	30	37	15.4
	D.DAYS	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	3	0	0	3	5	0	0	0	0	0	0	5	4	11	13	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	7	10	10	10	13	18	18	18	18	18	18	18	23	27	38	51	
Larimore	MAX.	39	40	30	20	18	13	21	38	37	38	47	47	47	40	38	41	43	44	35	52	53	48	23	26	28	33	38	51	54	53	55	38.4
	MIN.	15	15	15	8	5	-7	-12	17	21	28	31	24	27	29	26	27	32	25	22	26	31	18	4	1	20	11	14	26	28	33	34	19.2
	D.DAYS	0	0	0	0	0	0	0	0	0	1	7	0	5	3	0	2	6	3	0	7	10	1	0	0	0	0	0	7	9	11	13	
	ACCUM.	0	0	0	0	0	0	0	0	0	1	8	8	13	16	16	18	24	27	27	34	44	45	45	45	45	45	45	52	61	72	85	
Mayville	MAX.	38	33	26	18	18	13	19	38	39	38	48	45	42	40	38	41	44	42	34	51	52	43	21	24	30	35	38	54	54	57	54	37.6
	MIN.	16	21	18	12	6	-5	-11	18	20	33	33	29	27	30	28	28	34	28	25	27	33	21	9	6	22	15	20	28	29	31	40	21.6
	D.DAYS	0	0	0	0	0	0	0	0	0	4	9	5	3	3	1	3	7	3	0	7	11	0	0	0	0	0	0	9	10	12	15	
	ACCUM.	0	0	0	0	0	0	0	0	0	4	13	18	21	24	25	28	35	38	38	45	56	56	56	56	56	56	56	65	75	87	102	
Munich 4 SW	MAX.	32	31	19	13																		32	23	26	28	29	34	46	50	57	56	-
	MIN.	2	12	4	0																		16	3	0	14	15	14	20	25	30	38	-
	D.DAYS	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	1	6	12	15	
	ACCUM.																																
Park River	MAX.	39	35	21	22	15	15	20	39	38	35	45	45	42	35	36	37	44	42	34	51	50	44	20	25	28	35	35	49	53	52	55	36.6
	MIN.	14	13	12	10	8	-6	-7	12	18	27	32	26	30	28	28	28	33	26	23	27	35	18	7	2	22	10	15	27	31	34	38	20.0
	D.DAYS	0	0	0	0	0	0	0	0	0	0	7	4	4	0	0	1	7	2	0	7	11	0	0	0	0	0	0	6	10	20	15	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	7	11	15	15	15	16	23	25	25	32	43	43	43	43	43	43	43	49	59	79	94	
Petersburg 2NNW	MAX.	32	34	24	15	15	11	16	27	31	35	35	42	43	42	34	38	43	40	33	37	47	49	23	18	27	30	31	37	49	51	56	33.7
	MIN.	13	15	15	10	6	-12	-10	0	22	27	31	21	26	30	30	29	31	32	24	25	31	23	10	0	0	10	15	20	26	26	32	18.0
	D.DAYS	0	0	0	0	0	0	0	0	0	0	1	0	3	4	0	1	5	4	0	0	7	4	0	0	0	0	0	0	6	7	12	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	1	1	4	8	8	9	14	18	18	18	25	29	29	29	29	29	29	29	35	42	54	
Sharon	MAX.	37	32	22	13	14	12	19	35	36	35	45	44	48	38	36	39	43	37	35	50	50	42	20	26	30	30	35	52	55	56	54	36.1
	MIN.	13	18	13	8	4	-9	-7	17	25	29	30	25	30	30	26	28	31	25	23	25	31	17	5	1	20	10	18	26	26	32	41	19.7
	D.DAYS	0	0	0	0	0	0	0	0	0	0	6	3	7	2	0	2	5	0	0	6	9	0	0	0	0	0	0	7	9	12	16	
	ACCUM.	0	0	0	0	0	0	0	0	0	0	6	9	16	18	18	20	25	25	25	31	40	40	40	40	40	40	40	47	56	68	84	

TABLE 4

DAILY TEMPERATURES AND DEGREE DAYS ABOVE 32°F

RED RIVER OF THE NORTH BASIN

MINNESOTA
APRIL 1966

Station		Day of Month																															Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
MINNESOTA																																	
Ada	MAX.	55	52	46	38	39	39	38	34	39	46	46	56	56	58	55	68	62	46	33	41	52	56	60	65	50	40	41	-	38	37		47.8
	MIN.	35	29	30	29	30	28	27	28	25	25	29	32	32	-	29	32	34	23	25	15	27	29	45	31	34	32	31	-	28	25		29.3
	D.DAYS	13	9	6	2	3	2	1	0	0	4	6	12	12	9	10	18	16	3	0	0	8	11	21	16	10	4	4	-	1	0		
	ACCUM.	13	22	28	30	33	35	36	36	36	40	46	58	70	79	89	107	123	126	126	126	134	145	166	182	192	196	200	200	201	201		
Angus	MAX.	46	46	44	35	37	37	34	32	36	42	49	50	50	51	52	64	58	34	32	38	50	62	60	60	50	41	37	35	37	35		44.5
	MIN.	36	35	29	28	29	27	28	25	25	24	32	30	30	31	31	39	33	23	25	19	28	32	43	38	33	26	30	24	24	24		29.4
	D.DAYS	9	9	5	10	1	0	0	0	0	1	9	8	8	9	10	20	14	0	0	0	7	15	20	17	10	2	2	0	0	0		
	ACCUM.	9	18	23	33	34	34	34	34	34	35	44	52	60	69	79	99	113	113	113	113	120	135	155	172	182	184	186	186	186	186		
Crookston N.W. School	MAX.	47	46	39	34	38	36	35	34	37	44	49	51	51	49	51	65	56	-	33	38	50	61	60	59	54	43	37	37	37	37		45.1
	MIN.	34	29	28	28	29	26	-	26	26	27	32	31	32	33	30	35	-	-	25	17	15	31	45	37	34	25	27	24	26	24		28.7
	D.DAYS	9	6	2	0	2	0	-	0	0	4	9	9	10	9	9	18	-	-	0	0	1	14	21	16	12	2	0	0	0	0		
	ACCUM.	9	15	17	17	19	19	19	19	19	23	32	41	51	60	69	87	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Detroit Lakes	MAX.	53	53	49	37	34	34	35	34	42	42	48	53	54	50	54	62	61	38	35	34	44	60	59	60	58	36	39	38	36	33		45.5
	MIN.	35	24	23	28	31	27	29	29	27	27	36	32	30	31	22	35	33	21	24	14	17	29	43	37	30	30	31	24	24	23		28.2
	D.DAYS	12	7	4	1	1	0	0	0	4	3	10	11	10	9	6	17	16	0	0	0	0	13	19	17	12	1	3	0	0	0		
	ACCUM.	12	19	23	24	25	25	25	25	29	32	42	53	63	72	78	95	111	111	111	111	111	124	143	160	172	173	176	176	176	176		
Fergus Falls	MAX.	52	51	47	37	35	34	37	36	41	41	48	52	53	51	54	67	60	43	35	40	46	57	62	64	55	41	45	41	40	39		46.8
	MIN.	33	25	28	27	30	26	27	26	22	26	32	30	30	35	27	37	-	25	26	14	21	34	44	38	35	34	33	23	27	15		28.6
	D.DAYS	11	6	6	0	1	0	0	0	0	2	8	9	10	11	9	20	E15	2	0	0	2	14	21	19	13	6	7	0	2	0		
	ACCUM.	11	17	23	23	24	24	24	24	24	26	34	43	53	64	73	93	108	110	110	110	112	126	147	166	179	185	192	192	194	194		
Foston Power Plant	MAX.	49	51	47	36	35	35	35	34	35	44	49	51	52	51	55	65	62	39	35	38	47	62	60	60	52	43	41	39	36	35		45.8
	MIN.	33	26	28	27	28	25	26	25	23	24	30	33	30	36	30	40	33	23	25	11	22	35	44	38	33	27	26	23	26	24		28.5
	D.DAYS	9	7	6	0	0	0	4	0	0	2	8	10	9	12	11	21	16	0	0	0	13	17	20	17	11	3	2	0	0	0		
	ACCUM.	9	16	22	22	22	22	26	26	26	28	36	46	55	67	78	99	115	115	115	115	128	145	165	182	193	196	198	198	198	198		
Hallock	MAX.	49	47	45	35	35	42	33	34	32	36	49	51	52	53	52	53	62	38	35	32	37	48	58	64	55	47	36	37	35	35		43.9
	MIN.	38	32	29	29	28	27	28	24	21	23	32	31	31	34	33	38	33	22	25	23	47	30	36	43	34	28	26	23	20	21		29.0
	D.DAYS	12	9	5	0	0	3	0	0	0	0	9	9	10	12	11	14	16	3	0	0	0	7	15	22	13	6	0	0	0	0		
	ACCUM.	12	21	26	26	26	29	29	29	29	29	38	47	57	69	80	94	110	113	113	113	113	120	135	157	170	176	176	176	176	176		
Hawley	MAX.	53	51	48	36	35	36	36	35	39	41	47	51	52	51	53	66	65	41	34	38	48	61	60	63	59	39	41	41	35	36		46.4
	MIN.	34	28	29	28	30	26	27	26	22	26	32	31	32	31	27	40	33	24	26	13	24	34	46	37	35	31	30	24	28	23		29.2
	D.DAYS	12	9	7	0	1	0	0	0	0	2	8	9	10	9	8	21	17	1	0	0	4	16	21	18	15	3	4	1	0	0		
	ACCUM.	12	21	28	28	29	29	29	29	29	31	39	48	58	67	75	96	113	114	114	114	118	134	155	173	188	191	195	196	196	196		
Mahnomen 1W	MAX.	53	46	43	36	35	35	34	31	36	41	46	49	51	49	53	64	59	33	33	35	46	61	61	61	50	40	40	35	35	33		44.1
	MIN.	34	28	28	28	28	26	27	21	24	29	31	31	31	34	30	38	32	25	25	22	23	34	45	37	33	32	28	22	27	24		29.2
	D.DAYS	12	5	4	0	0	0	0	0	0	3	7	8	9	10	10	19	14	0	0	0	3	16	21	17	10	4	2	0	0	2		
	ACCUM.	12	17	21	21	21	21	21	21	21	24	31	39	48	58	68	87	101	101	101	101	104	120	141	158	168	172	174	174	174	176		
Red Lake Falls	MAX.	46	48	44	35	38	37	35	33	39	45	50	51	52	52	52	65	60	37	34	38	50	63	60	61	49	40	39	39	37	35		45.5
	MIN.	33	22	28	28	28	25	28	25	25	23	29	29	30	33	30	39	33	23	25	17	22	30	44	38	31	18	22	22	25	24		27.6
	D.DAYS	8	3	4	0	1	0	0	0	0	2	8	8	9	11	9	20	15	0	0	0	4	15	20	18	8	0	0	0	0	0		
	ACCUM.	8	11	15	15	16	16	16	16	16	18	26	34	43	54	63	83	98	98	98	98	102	117	137	155	163	163	163	163	163	163		
Red Lake Indian Agency	MAX.	44	43	44	40	37	35	33	36	33	42	45	47	52	54	50	50	62	38	35	30	35	48	58	60	58	43	38	42	35	35		43.4
	MIN.	33	25	27	26	27	19	20	23	24	18	30	28	28	33	24	38	34	20	26	17	15	28	37	40	30	22	26	25	25	25		26.4
	D.DAYS	7	2	4	1	0	0	0	0	0	0	6	6	8	12	5	12	16	0	0	0	0	6	16	18	12	1	0	2	0	0		
	Accum.	7	9	13	14	14	14	14	14	14	14	20	26	34	46	51	63	79	79	79	79	79	85	101	119	131	132	132	134	134	134		
Roseau 1E	MAX.	43	46	42	34	37	36	34	31	34	46	46	51	58	51	55	60	60	32	32	32	45	59	57	57	53	39	39	38	32	30		43.6
	MIN.	32	25	24	27	26	25	27	23	22	21	28	28	28	32	28	35	31	22	26	19	19	31	37	40	30	25	24	24	20	21		26.7
	D.DAYS	6	4	1	0	0	0	0	0	0	2	5	8	11	10	10	16	14	0	0	0	0	13	15	17	10	0	0	0	0	0		
	ACCUM.	6	10	11	11	11	11	11	11	11	13	18	26	37	47	57	73	87	87	87	87	87	100	115	132	142	142	142	142	142	142		
Thief River Falls AP	MAX.	46	46	44	45	37	36	34	31	37	43	48	50	50	51	51	62	58	36	33	36	49	62	59	58	52	41	38	34	35	33		44.2
	MIN.	34	28	27	23	28	25	27	25	25	24	30	28	28	31	30	39	33	22	25	17	28	29	40	38	34	26	27	26	24	23		28.1
	D.DAYS	8	5	4	0	1	0	0	0	0	2	7	7	7	9	9	19	14	0	0	0	7	14	18	16	11	2	1	0	0	0		
	ACCUM.	8	13	17	17	18	18	18	18	18	20	27	34	41	50	59	78	92	92	92	92	99	113	131	147	158	160	161	161	161	161		
Washkish Ranger Station	MAX.	52	44	40	37	38	35	36	36	37	44	47	50	50	52	60	61	61	35	-	34	43	55	60	-	46	46	44	42	35	34		44.8
	MIN.	22	20	28	32	26	28	27	25	20	18	28	22	22	32	32	40	23	22	-	15	11	32	49	30	30	25	22	25	33	16		26.0
	D.DAYS	15	0	2	3	0	0	0	0	0	0	6	4	4	10	14	19	10	0	-	0	0	12	23	-	6	4	1	2	2	0		
	ACCUM.	15	15	17	20	20	20	20	20	20	20	26	30	34	44	58	77	87	87	87	87	87	99	122	-	-	-	-	-	-	-		
Wheaton	MAX.	58	51	49	39	39	38	44	42	41	40	41	51	53	54	55	69	69	45	35	40	50	60	63	65	62	60	42	43	45	40		49.4
	MIN.	37	29	30	28	31	28	29	29	26	32	31	31	31	36	28	36	36	26	26	20	21	32	40	41	35	35	35	28	29	19		30.5
	D.DAYS	16	8	8	2	3	1	5	4	2	4	4	9	10	13	10	21	21	4	0	0	4	14	20	21	17	16	7	9	5	0		
	ACCUM.	16	24	32	34	37	38	43	47	49	53	57	66	76	89	99	120	141	145	145	145	149	163	183	204	221	237	244	253	258	258		

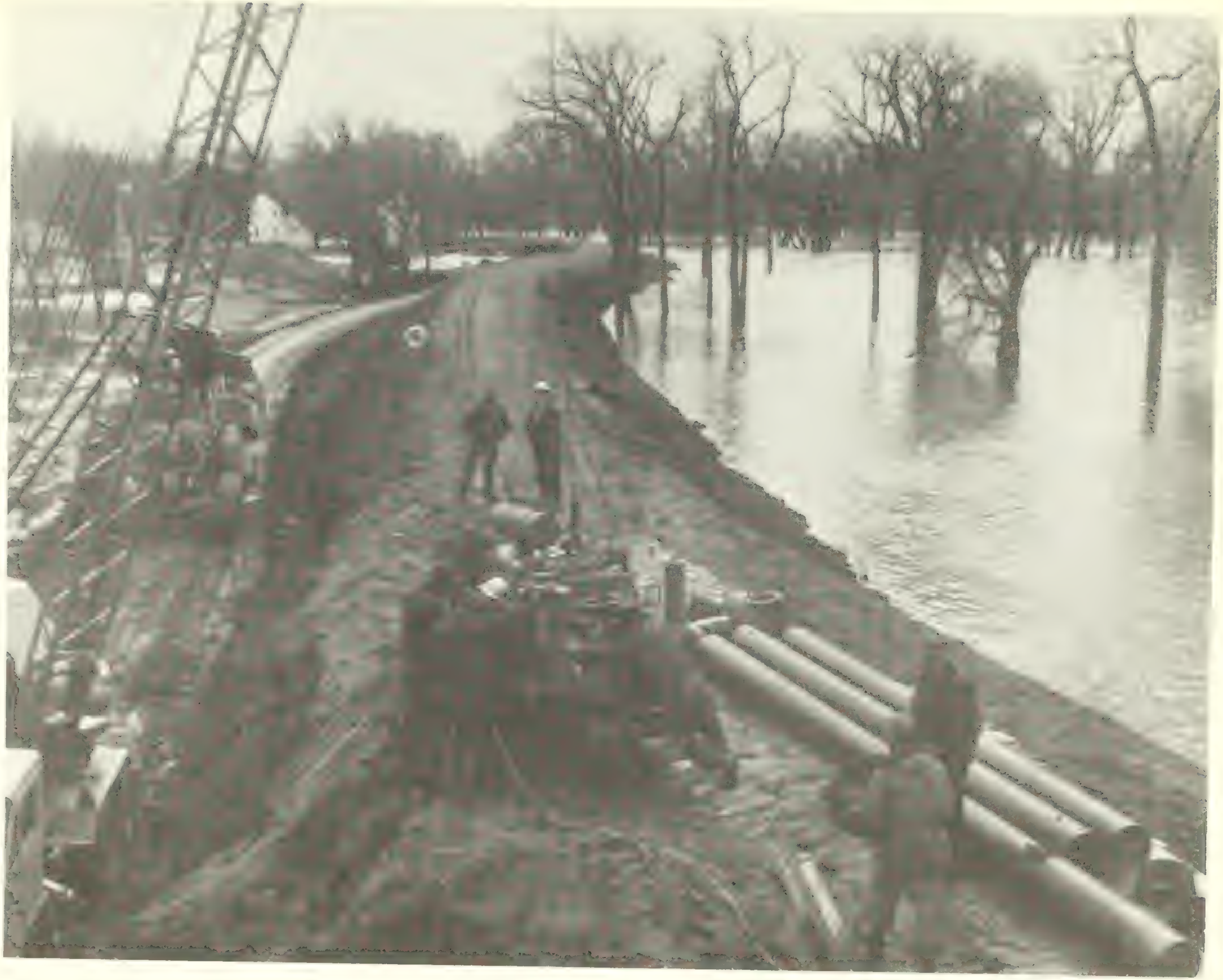
DAILY TEMPERATURES AND DEGREE DAYS ABOVE 32°F

TABLE 4

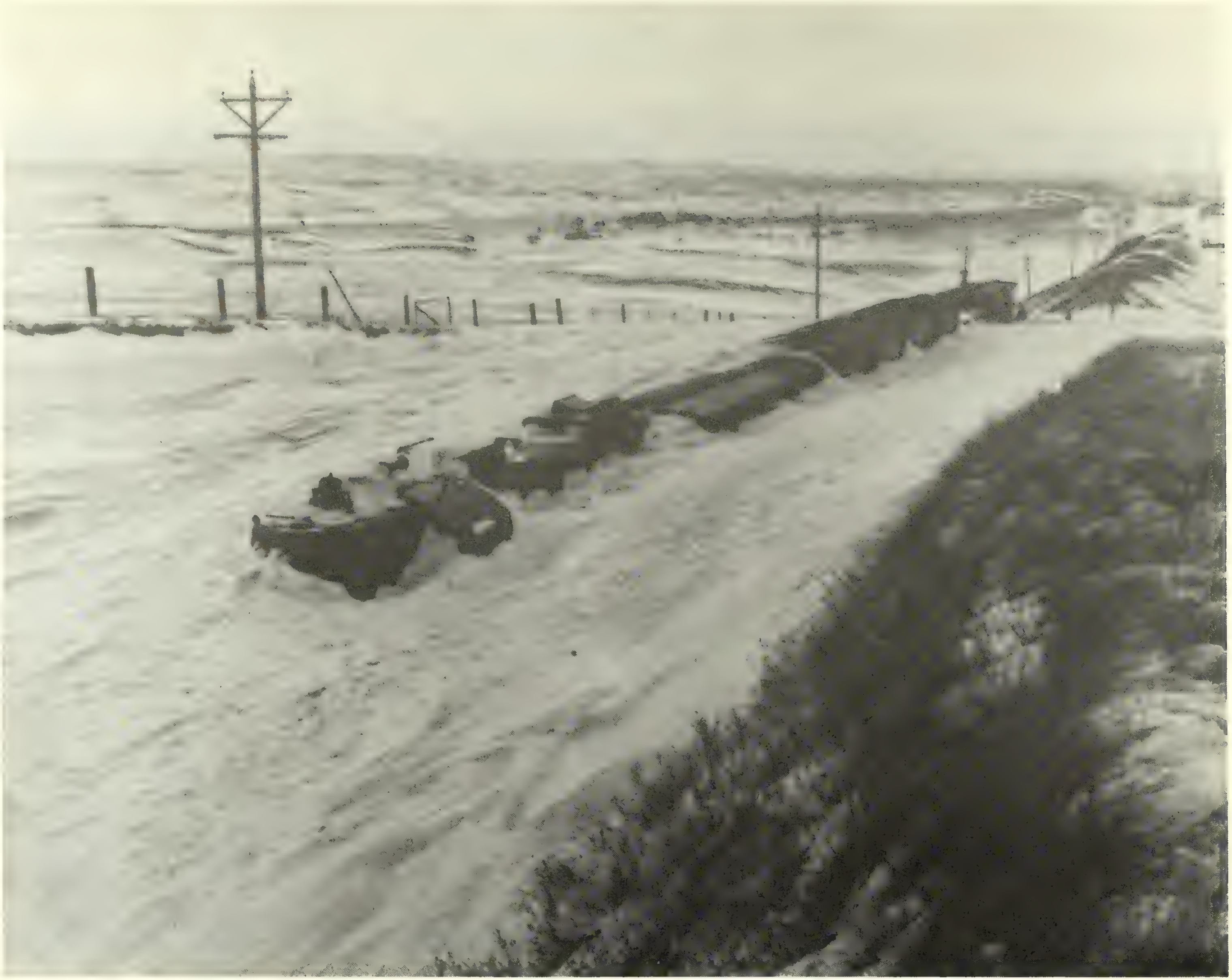
RED RIVER OF THE NORTH BASIN

NORTH DAKOTA
APRIL 1966

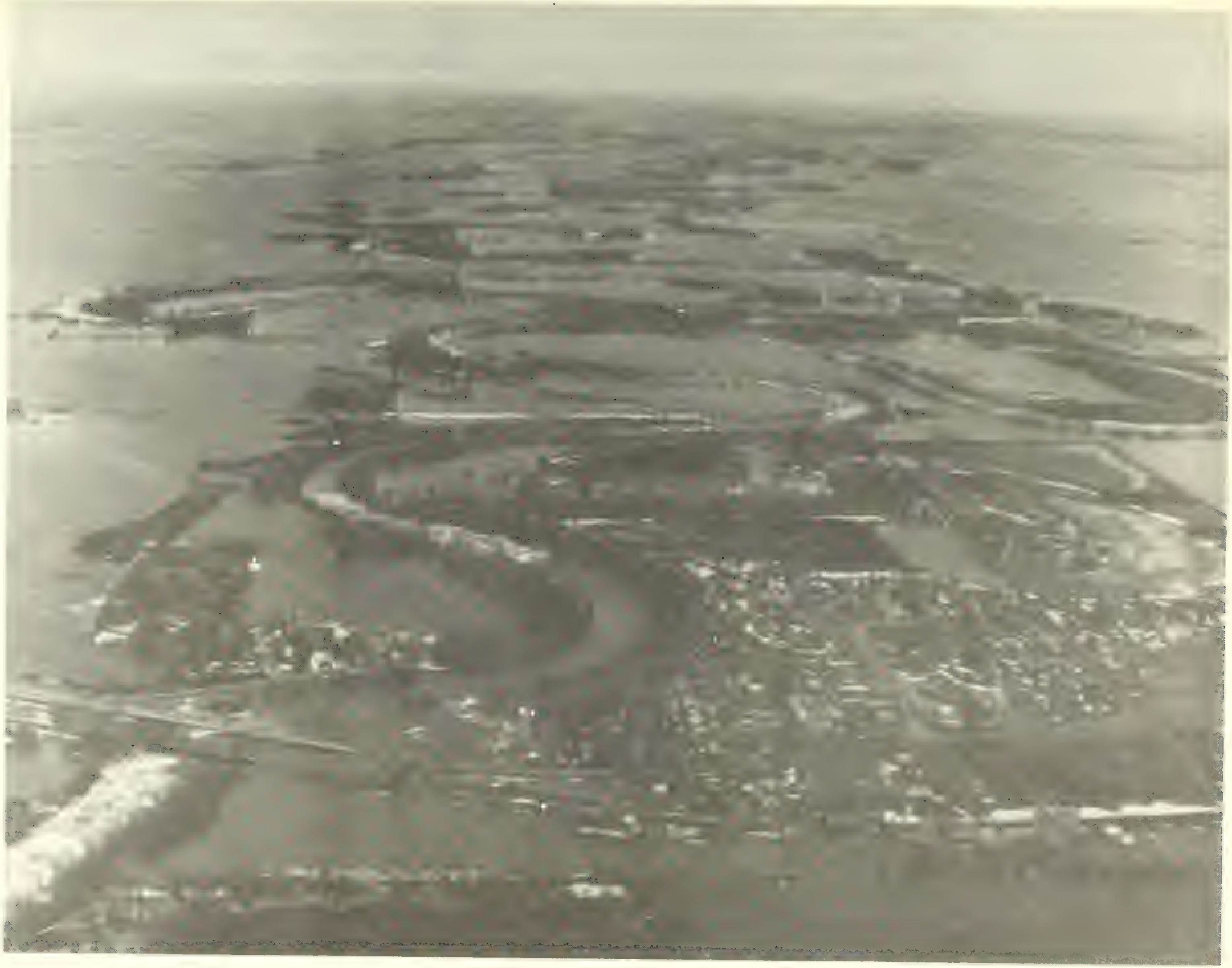
Station		Day of Month																														Average
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
NORTH DAKOTA																																	
Amenia	MAX.	55	50	49	36	37	37	41	39	40	39	45	52	54	52	54	69	69	35	33	40	55	63	67	67	52	36	39	38	38	38		47.3
	MIN.	35	28	30	28	28	27	27	28	25	28	30	30	30	29	28	37	34	23	25	11	22	30	42	40	35	31	31	24	28	25		29.0
	D.DAYS	13	7	8	0	1	0	2	2	0	2	6	9	10	9	9	21	20	0	0	0	7	15	23	22	17	2	3	0	1	0		
	ACCUM.	13	20	28	28	29	29	31	33	33	35	41	50	60	69	78	99	119	119	119	119	126	141	164	186	203	205	208	208	209	209		
Cavalier	MAX.	52	50	48	35	42	39	34	34	37	43	50	51	52	53	53	63	61	38	36	39	45	62	65	59	47	43	37	37	37	36		45.9
	MIN.	36	28	28	28	29	26	27	24	18	19	29	32	29	31	28	34	31	19	23	20	27	31	42	39	29	26	30	30	17	18		27.6
	D.DAYS	12	7	6	0	4	1	0	0	0	0	8	10	9	10	9	17	14	0	0	0	4	15	22	17	6	3	2	2	0	0		
	ACCUM.	12	19	25	25	29	30	30	30	30	30	38	48	57	67	76	93	107	107	107	107	111	126	148	165	171	174	176	178	178	178		
Colgate	MAX.	51	49	45	34	37	36	39	35	38	37	42	51	53	48	53	65	60	35	31	41	55	62	65	65	55	32	37	36	36	37		45.3
	MIN.	34	30	29	28	27	25	27	24	23	26	31	31	32	30	27	34	34	19	23	15	21	30	44	37	32	28	29	27	26	23		28.2
	D.DAYS	10	8	5	0	0	0	1	0	0	0	5	9	11	7	8	18	15	0	0	0	6	14	23	19	12	0	2	0	0	0		
	ACCUM.	10	18	23	23	23	23	24	24	24	24	29	38	49	56	64	82	97	97	97	97	103	117	140	159	171	171	173	173	173	173		
Cooperstown	MAX.	55	50	47	39	40	39	41	37	43	40	41	51	52	50	55	66	62	46	34	43	56	65	65	65	61	47	37	35	37	36		47.8
	MIN.	34	31	28	26	27	25	28	25	17	28	32	32	32	32	28	33	34	20	22	18	22	30	45	36	32	27	28	22	25	22		28.0
	D.DAYS	13	9	6	1	2	0	3	0	0	2	5	10	10	9	10	18	16	1	0	0	7	16	23	19	15	5	1	0	0	0		
	ACCUM.	13	22	28	29	31	31	34	34	34	36	41	51	61	70	80	98	114	115	115	115	122	138	161	180	195	200	201	201	201	201		
Devils Lake KDLR	MAX.	55	54	50	35	35	40	40	40	35	41	41	46	50	48	47	54	63	36	35	37	41	59	64	67	64	36	34	35	33	34		45.0
	MIN.	33	30	29	26	27	25	27	24	19	26	32	33	32	31	32	32	29	19	22	19	24	28	37	34	31	24	27	20	19	18		27.0
	D.DAYS	12	12	8	0	0	1	2	0	0	2	5	8	9	8	8	11	14	0	0	0	1	12	19	19	16	0	0	0	0	0		
	ACCUM.	12	24	32	32	32	33	35	35	35	37	42	50	59	67	75	86	100	100	100	100	101	113	132	151	167	167	167	167	167	167		
Edmore	MAX.	50	49	45	32	39	38	34	33	38	39	45	49	50	49	52	60	58	34	32	38	47	64	67	60	46	34	34	31	31	30		43.6
	MIN.	32	30	28	26	27	25	27	23	16	23	30	31	31	29	31	34	26	16	22	19	21	26	35	31	28	23	23	19	15	13		25.3
	D.DAYS	9	8	10	0	1	0	0	0	0	0	6	8	9	7	10	15	10	0	0	0	2	13	19	14	5	0	0	0	0	0		
	ACCUM.	9	17	27	27	28	28	28	28	28	28	34	42	51	58	68	83	93	93	93	93	95	108	127	141	146	146	146	146	146	146		
Fargo WB Airport	MAX.	53	53	41	36	37	34	38	33	39	41	46	52	53	49	55	70	52	34	30	40	53	64	67	65	44	35	41	39	37	38		45.6
	MIN.	31	28	28	29	31	38	38	27	26	25	34	34	34	29	26	42	27	20	22	11	23	29	45	35	32	32	28	25	26	25		28.7
	D.DAYS	10	9	3	1	2	0	1	0	1	1	8	11	12	7	9	24	8	0	0	0	6	15	24	18	6	2	3	0	0	0		
	ACCUM.	10	19	22	23	25	25	26	26	27	28	36	47	59	66	75	99	107	107	107	107	113	128	152	170	176	178	181	181	181	181		
Grand Forks FAA AP	MAX.	50	48	38	34	38	33	34	30	36	43	46	50	49	48	50	63	45	34	32	40	50	60	60	60	43	35	35	35	35	32		42.9
	MIN.	33	31	31	31	32	28	30	27	27	27	31	32	30	32	31	37	30	25	26	22	25	32	43	37	32	27	28	25	26	25		29.8
	D.DAYS	10	8	3	1	3	0	0	0	0	3	7	9	8	8	9	18	6	0	0	0	6	14	20	17	6	0	0	0	0	0		
	ACCUM.	10	18	21	22	25	25	25	25	25	28	35	44	52	60	69	87	93	93	93	93	99	113	133	150	156	156	156	156	156	156		
Hannah 2N	MAX.	50	48	37	33	39	35	33	31	36	38	45	47	49	49	51	58	54	34	31	36	41	60	64	55	40	39	35	32	31	33		42.1
	MIN.	33	31	27	26	27	25	27	25	17	23	30	32	32	29	33	33	25	15	21	21	22	29	39	31	29	23	28	20	7	3		25.4
	D.DAYS	10	8	0	0	1	0	0	0	0	0	6	8	9	7	10	9	8	0	0	0	0	13	20	11	3	0	0	0	0	0		
	ACCUM.	10	18	18	18	19	19	19	19	19	19	25	33	42	49	59	68	76	76	76	76	76	89	109	120	123	123	123	123	123	123		
Hansboro 3W	MAX.	52	57	46	35	42	41	40	33	40	39	44	55	46	53	55	61	54	34	30	37	46	63	67	58	44	35	31	33	34	30		44.5
	MIN.	32	29	25	23	26	23	24	18	12	19	30	32	32	30	32	30	21	12	18	19	20	30	35	38	30	21	21	19	13	12		24.2
	D.DAYS	0	11	4	0	2	0	0	0	0	0	5	12	7	10	10	14	5	0	0	0	1	15	19	16	5	0	0	0	0	0		
	ACCUM.	0	11	15	15	17	17	17	17	17	17	22	34	41	51	61	75	80	80	80	80	81	96	115	131	136	136	136	136	136	136		
Langdon Exp. Farm	MAX.	48	49	40	33	38	35	33	32	36	37	43	47	45	49	52	58	56	35	33	38	41	63	64	60	47	32	32	32	33	32		42.4
	MIN.	30	30	27	23	24	22	25	21	12	20	29	30	29	27	31	34	24	14	19	18	19	28	35	32	27	22	23	19	11	9		23.8
	D.DAYS	7	8	2	0	0	0	0	0	0	0	4	7	5	6	10	14	8	0	0	0	0	13	18	14	5	0	0	0	0	0		
	ACCUM.	7	15	17	17	17	17	17	17	17	17	21	28	33	39	49	63	71	71	71	71	71	84	102	116	121	121	121	121	121	121		
Larimore	MAX.	52	50	47	35	40	41	36	35	38	43	48	52	52	49	54	66	63	38	32	42	47	64	64	64	51	35	36	36	37	36		46.1
	MIN.	33	29	30	25	27	24	26	24	19	22	29	29	29	32	26	32	33	19	22	17	20	28	38	36	29	23	26	22	22	21		26.4
	D.DAYS	11	8	7	0	2	1	0	0	0	1	7	9	9	9	8	17	16	0	0	0	2	14	19	18	8	0	0	0	0	0		
	ACCUM.	11	19	26	26	28	29	29	29	29	30	37	46	55	64	72	89	105	105	105	105	107	121	140	158	166	166	166	166	166	166		
Mayville	MAX.	51	52	46	34	39	35	38	35	40	40	47	52	52	49	51	67	62	35	31	42	55	64	63	64	55	39	37	36	36	38		46.2
	MIN.	33	28	32	28	30	27	29	26	26	27	33	32	30	32	27	37	35	23	25	18	20	30	45	38	33	28	29	24	27	26		29.3
	D.DAYS	10	8	7	0	3	0	7	0	11	2	8	10	9	9	7	20	17	0	0	0	6	15	22	19	12	2	1	0	0	0		
	ACCUM.	10	18	25	25	28	28	35	35	46	48	56	66	75	84	91	111	128	128	128	128	134	149	171	190	202	204	205	205	205	205		
Munich 4 SW	MAX.	40	37	32	33	38	38	34	32	37	38	43	48	48	50	48	58	55	34	32	37	43	60	65	57	44	34	33	31	30	31		41.3
	MIN.	21	24	26	25	26	23	23	23	17	23	30	31	23	30	29	31	25	11	22	20	22	29	35	30	29	24	23	21	10	10		23.9
	D.DAYS	0	0	0	0	0	0	0	0	0	0	5	8	0	8	7	13	8	0	0	0	1	13	18	12	5	0	0	0	0	0		
	ACCUM.	0	0	0	0	0	0	0	0	0	0	5	13	13	21	28	41	49	49	49	49	50	63	81	93	98	98	98	98	98	98		
Park River	MAX.	53	51	47	36	43	40	36	35	38	43	47	50	51	51	51	63	61	38	36	40	49	63	66	62	45	39	35	34	35	34		45.7
	MIN.	35	32	31	28	29	26	27	25	17	22	29	30	30	34	30	35	31	18	23	20	21	30	38	38	31	28	26	23	20	18		27.4
	D.DAYS	12	10	7	0	4	1	5	0	0	1	6	8	9	11	9	17	14	0	0	0	3	15	20	17	6	2	4	0	0	0		
	ACCUM.	12	22	29	29	33	34	39	39	39	40	46	54	63	74	83	100	114	114	114	114	117	132	152	169	175	177	181	181	181	181		
Petersburg 2 NNW	MAX.	50	48	49	37	32	38	34	34	30	37	39	38	50	51	47	51	63	37	34	30	39	51	63	65	60	37	31	34	31	31		42.4
	MIN.	32	30	29	25	25	24	26	24	16	23	26	26	26	31	31	32	30	18	18	20	22	24	31	36	29	21	25	19	20	18		25.2
	D.DAYS	9	7	7	0	0	0	0	0	0	3	1	0	6	9	7	10	15	0	0	0	0	6	15	17	13	0	0	0	0	0		
	ACCUM.	9	16	23	23	23	23	23	23	23	26	27	27	33	42	49	59	74	74	74	74	74	80	95	112	125	125	125	125	125	125		
Sharon	MAX.	51	50	43	33	37	36	38	35	40	39	42	50	49	48	51	63	59	34	32	40	52	60	61	64	43	32	35	32	32	31		43.7
	MIN.	32	30	29	26	25	24	27	23	17	23	30	29	29	30	28	32	32	18	20	17	18	30	42	34	30	23	25	20	22	20		26.2
	D.DAYS	10	8	4	0	0	0	1	0	0	0	4	8	7	7	8	16	14	0	0	0	3	13	20	17	5	0	0	0	0	0		
	ACCUM.	10	18	22	22	22	22	23	23	23	23	27	35	42	49	57	73	87	87	87	87	90	103	123	140	145	145	145	145	145	145		



Dike in East Grand Forks, Minnesota, March 31, 1966. (Furnished through the courtesy of the North Dakota State Highway Commission, Bismarck, N. Dakota).



Scene showing one of several trains stranded in snow storm two miles north of Linton, North Dakota, March 9, 1966. (Furnished through the courtesy of the North Dakota State Highway Commission, Bismarck, North Dakota).



Red River of the North at Oslo, Minnesota - Looking northward with flooding over the Level Valley in North Dakota and Minnesota) - Crest 37.1, April 5, 1966 - Flood Stage 28 Feet. (Furnished through the courtesy of the North Dakota State Highway Commission, Bismarck, North Dakota.)

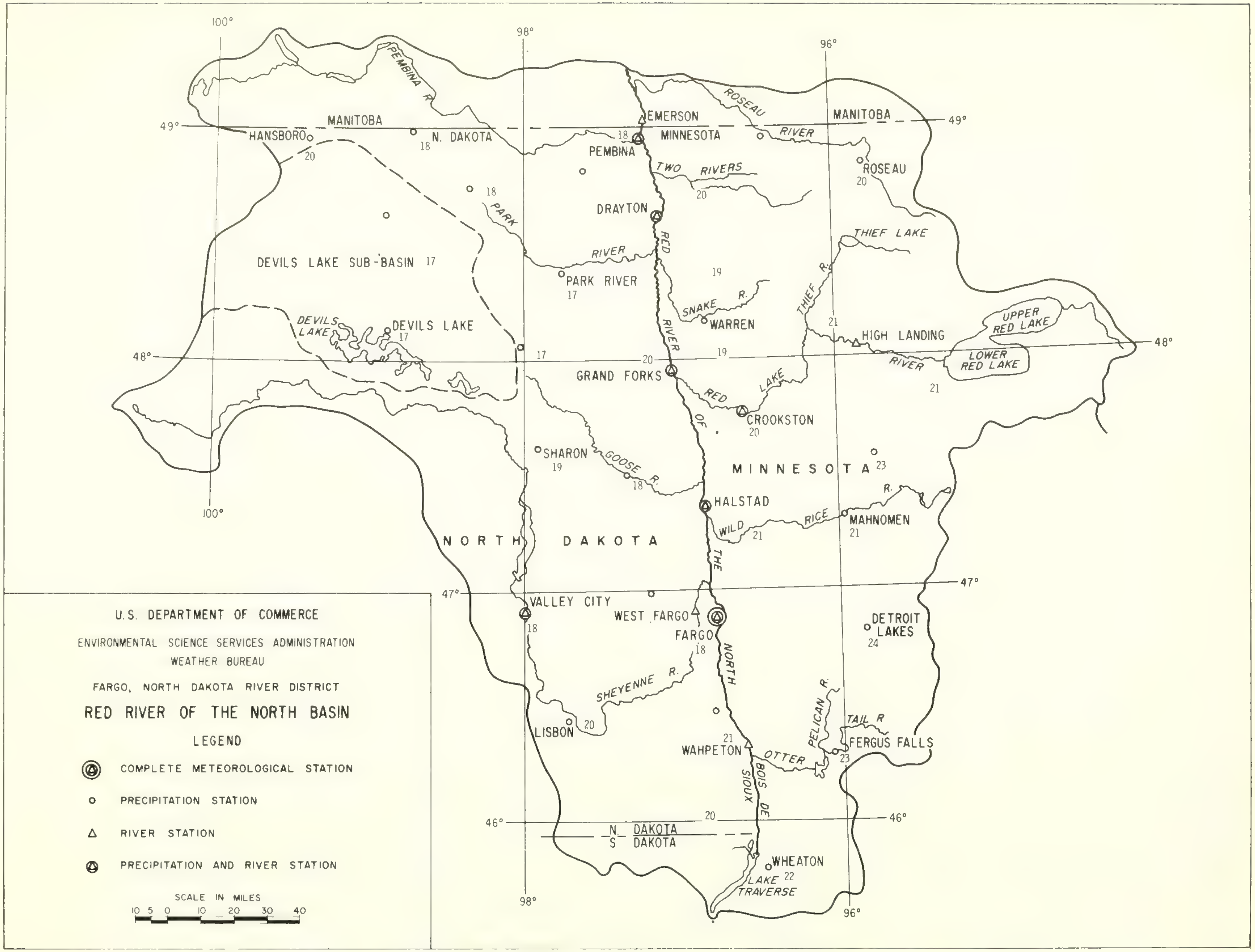


FIGURE 1. - MAP SHOWING PRINCIPAL STREAMS IN THE RED RIVER OF THE NORTH BASIN. THE PLOTTED NUMBERS ARE AVERAGE ANNUAL PRECIPITATION IN INCHES.

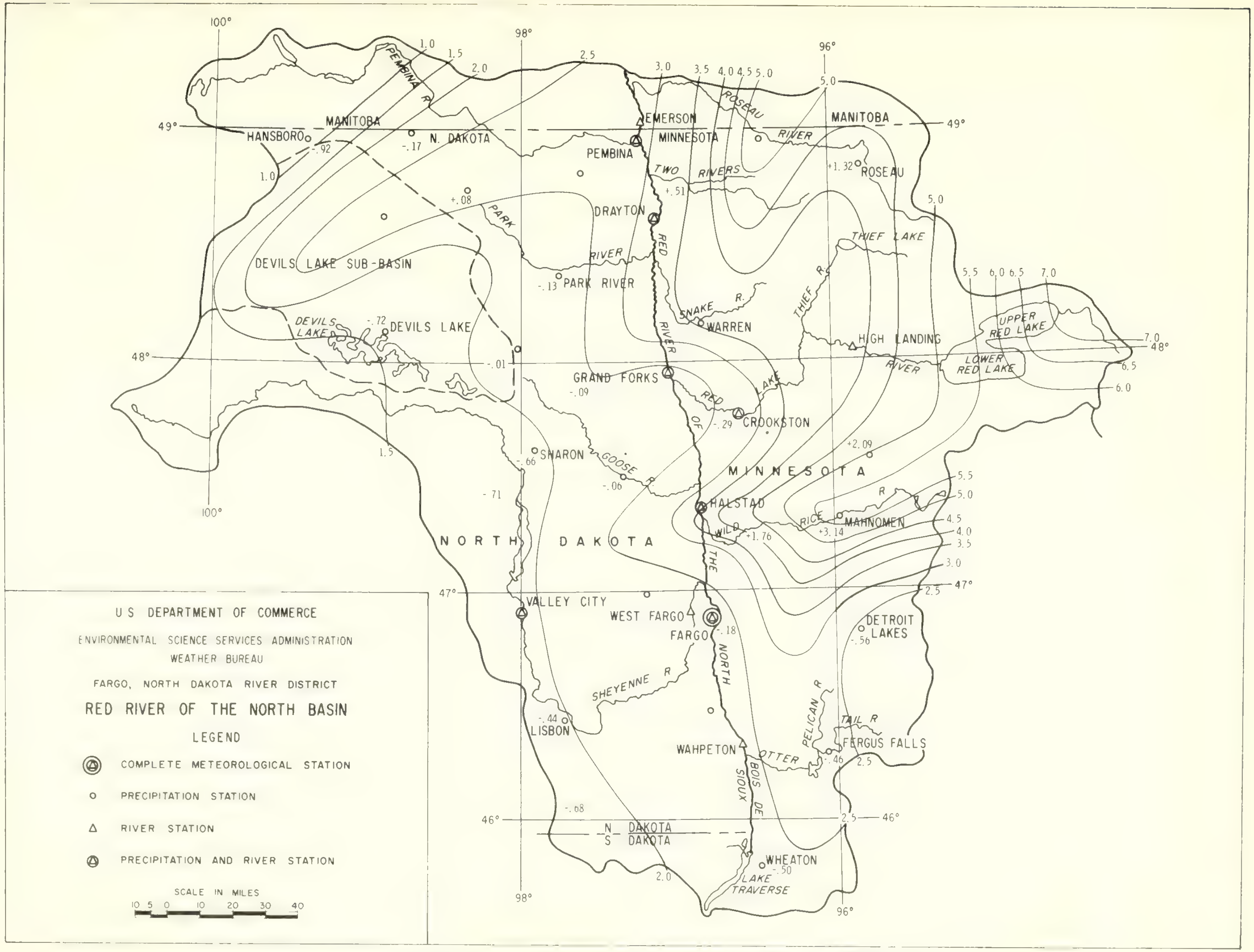


FIGURE 2. - TOTAL PRECIPITATION FOR PERIOD OCTOBER 1965 THROUGH DECEMBER 1965.
PLOTTED FIGURES SHOW DEPARTURE FROM NORMAL IN HUNDREDTHS OF AN INCH.

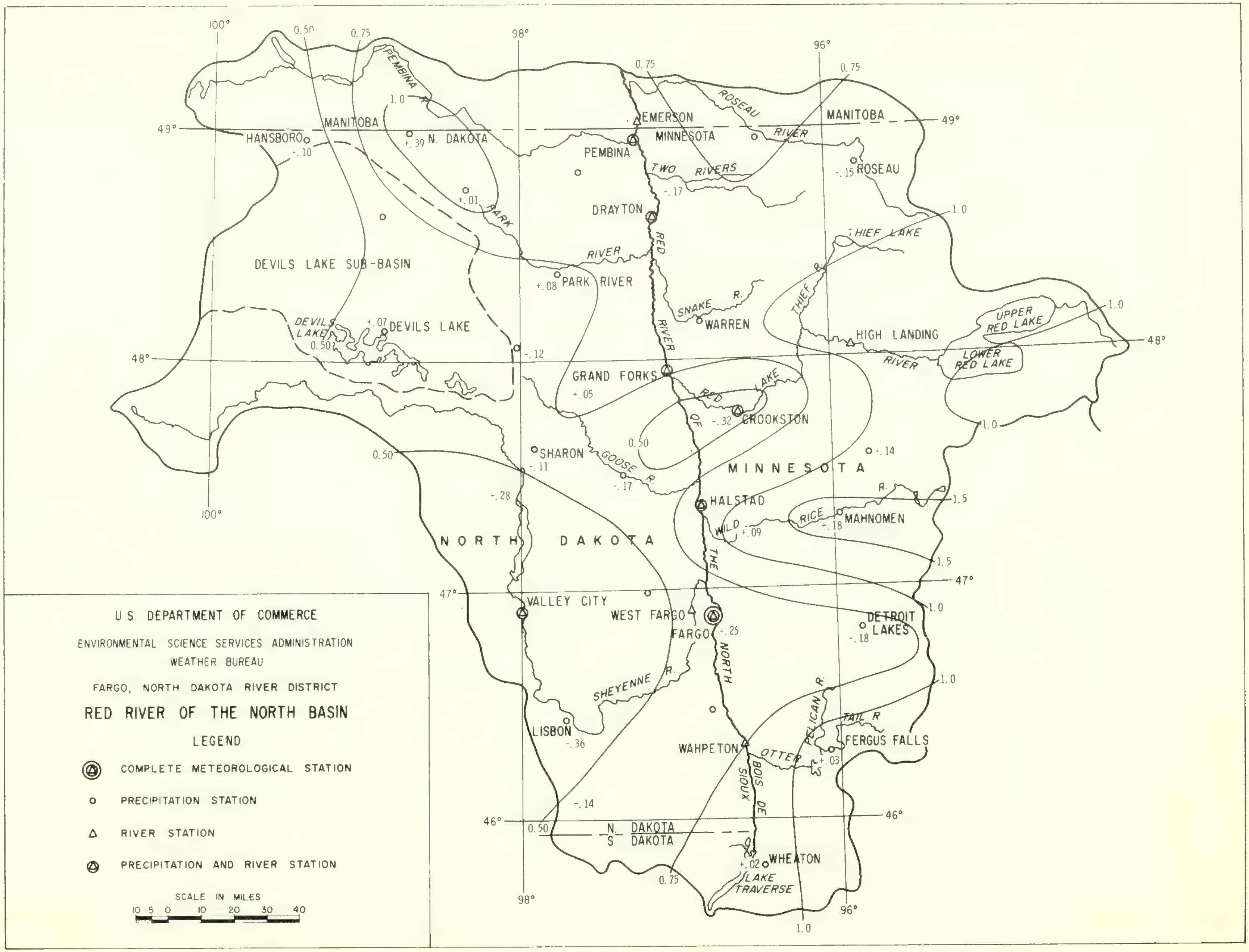


FIGURE 3. - TOTAL PRECIPITATION FOR PERIOD JANUARY AND FEBRUARY 1966. PLOTTED FIGURES SHOW DEPARTURE FROM NORMAL IN HUNDREDTHS OF AN INCH.

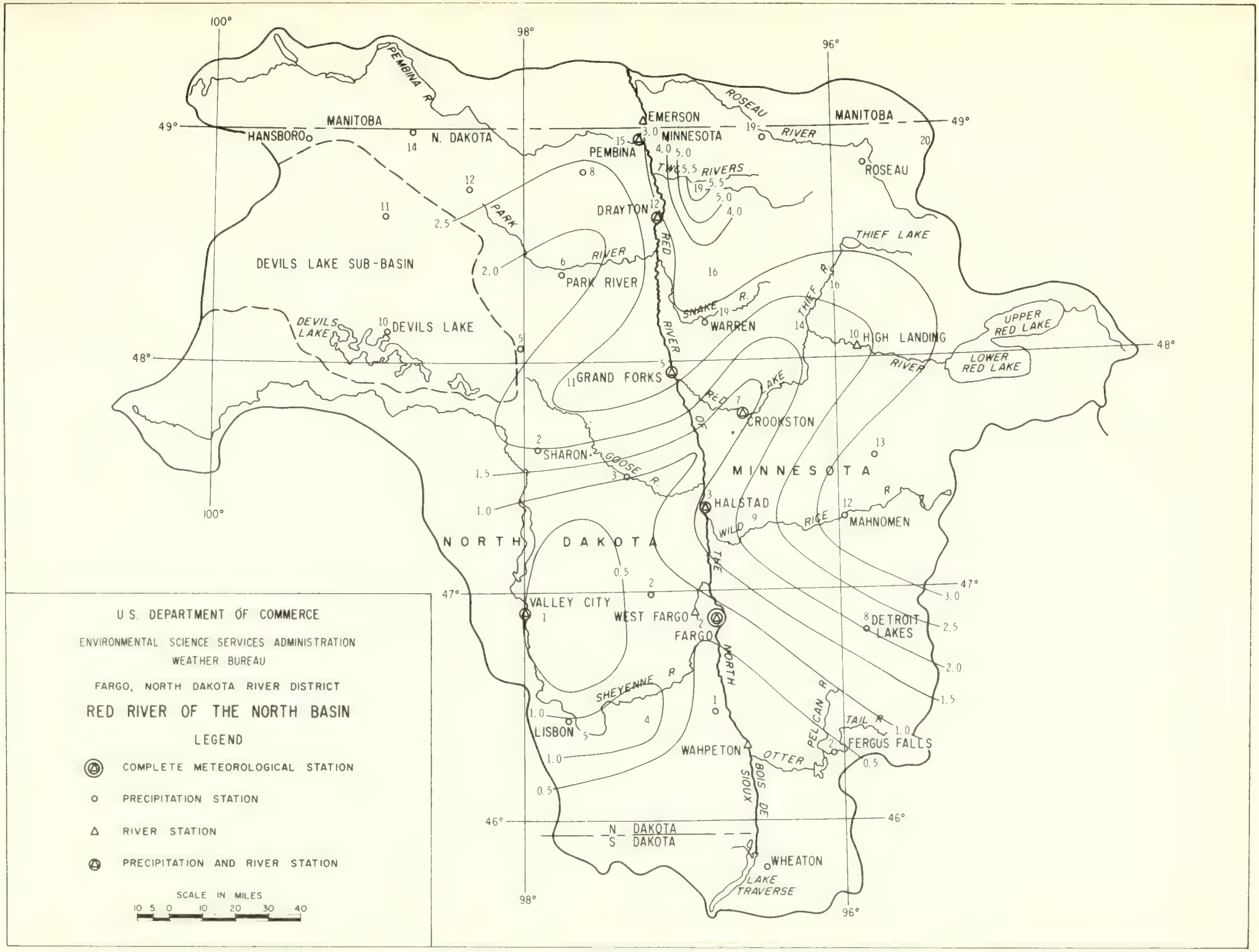


FIGURE 4. - WATER EQUIVALENT OF SNOW ON GROUND IN INCHES AS OF MARCH 1, 1966. THE PLOTTED WHOLE NUMBERS ARE DEPTH OF SNOW ON GROUND IN INCHES.

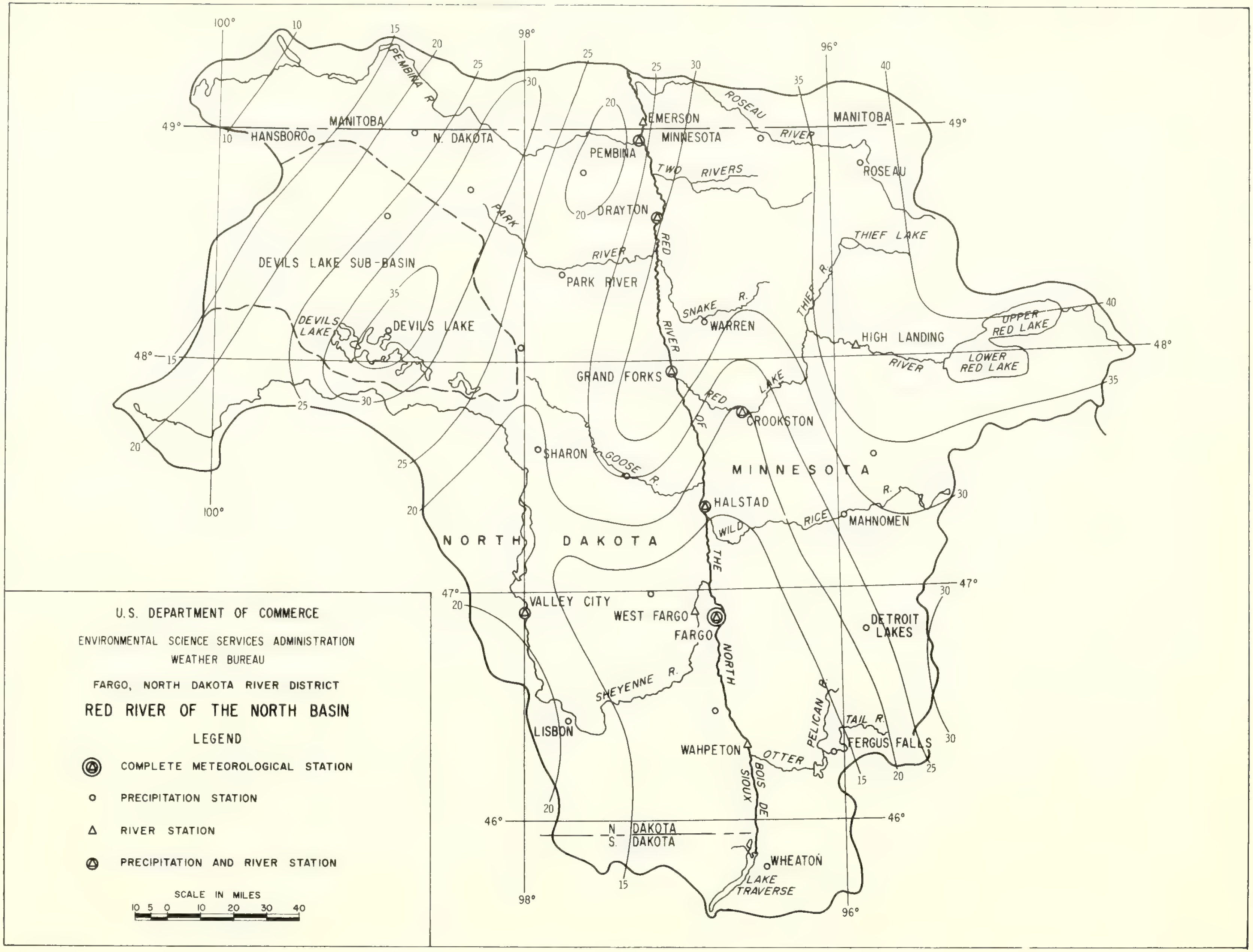


FIGURE 5. - DEPTH OF SNOW ON GROUND IN INCHES AS OF MARCH 5, 1966.

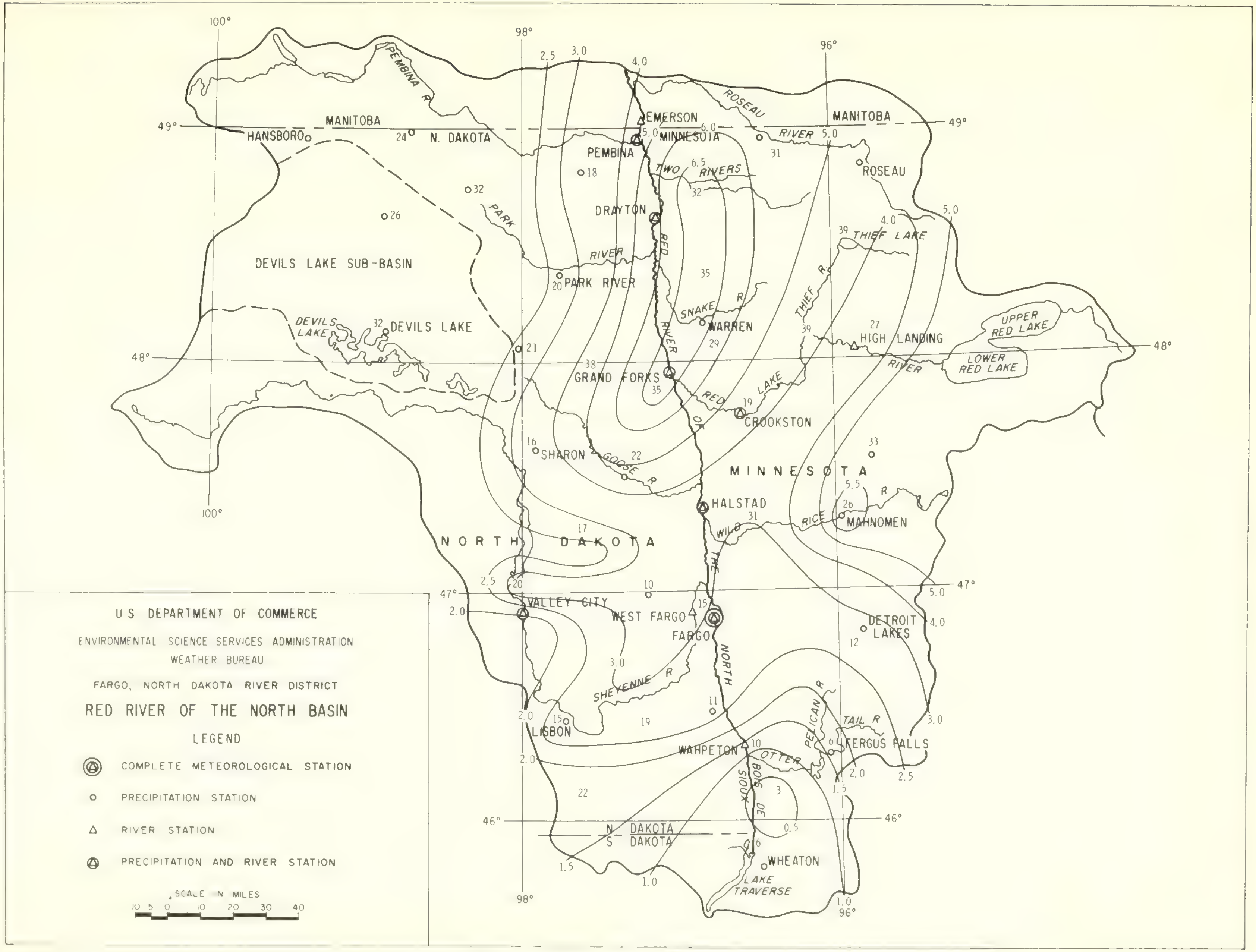


FIGURE 6. - WATER EQUIVALENT OF SNOW ON GROUND IN INCHES AS OF MARCH 8, 1966. THE PLOTTED WHOLE NUMBERS ARE DEPTH OF SNOW ON GROUND IN INCHES.

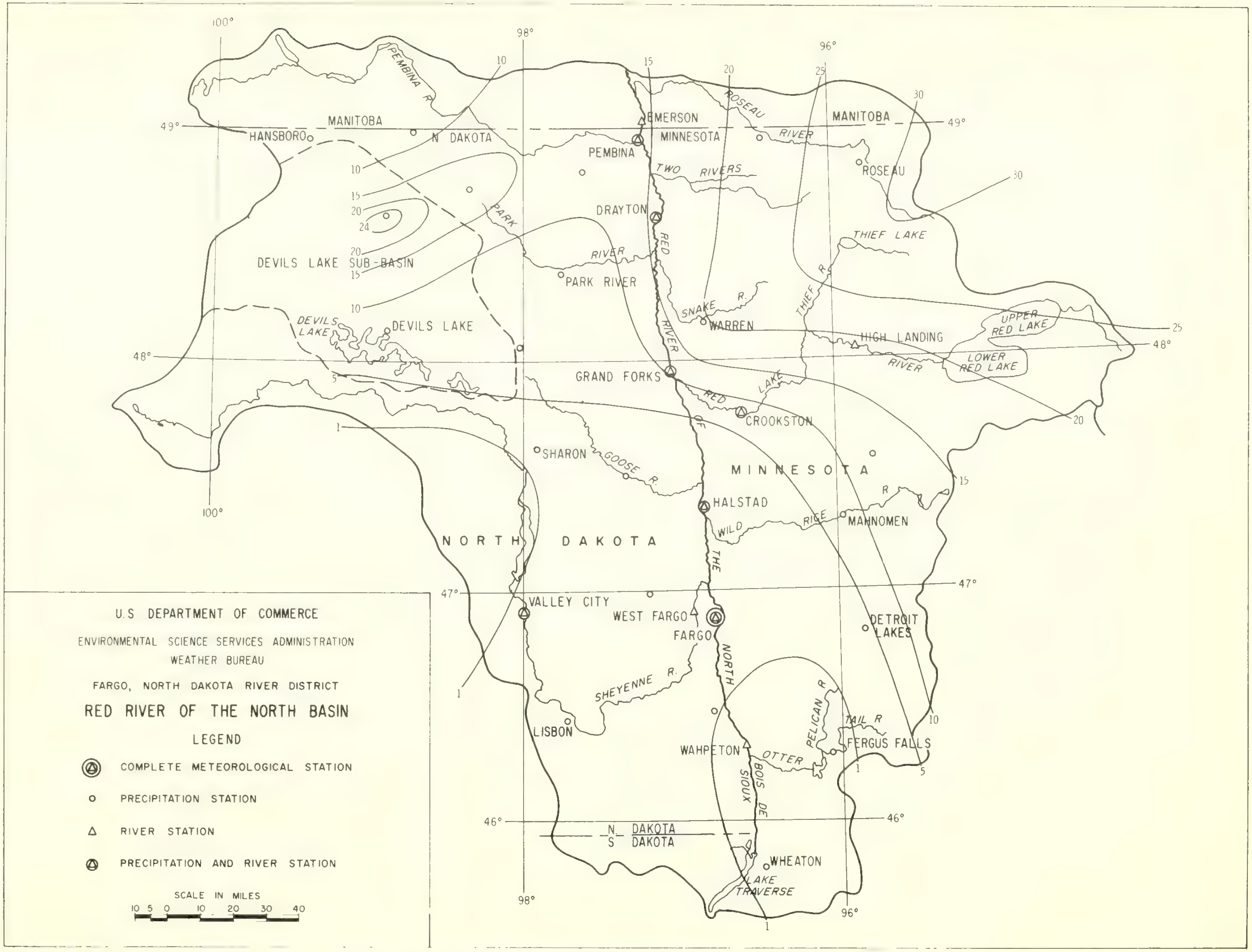


FIGURE 7. - DEPTH OF SNOW ON GROUND IN INCHES AS OF MARCH 15, 1966.

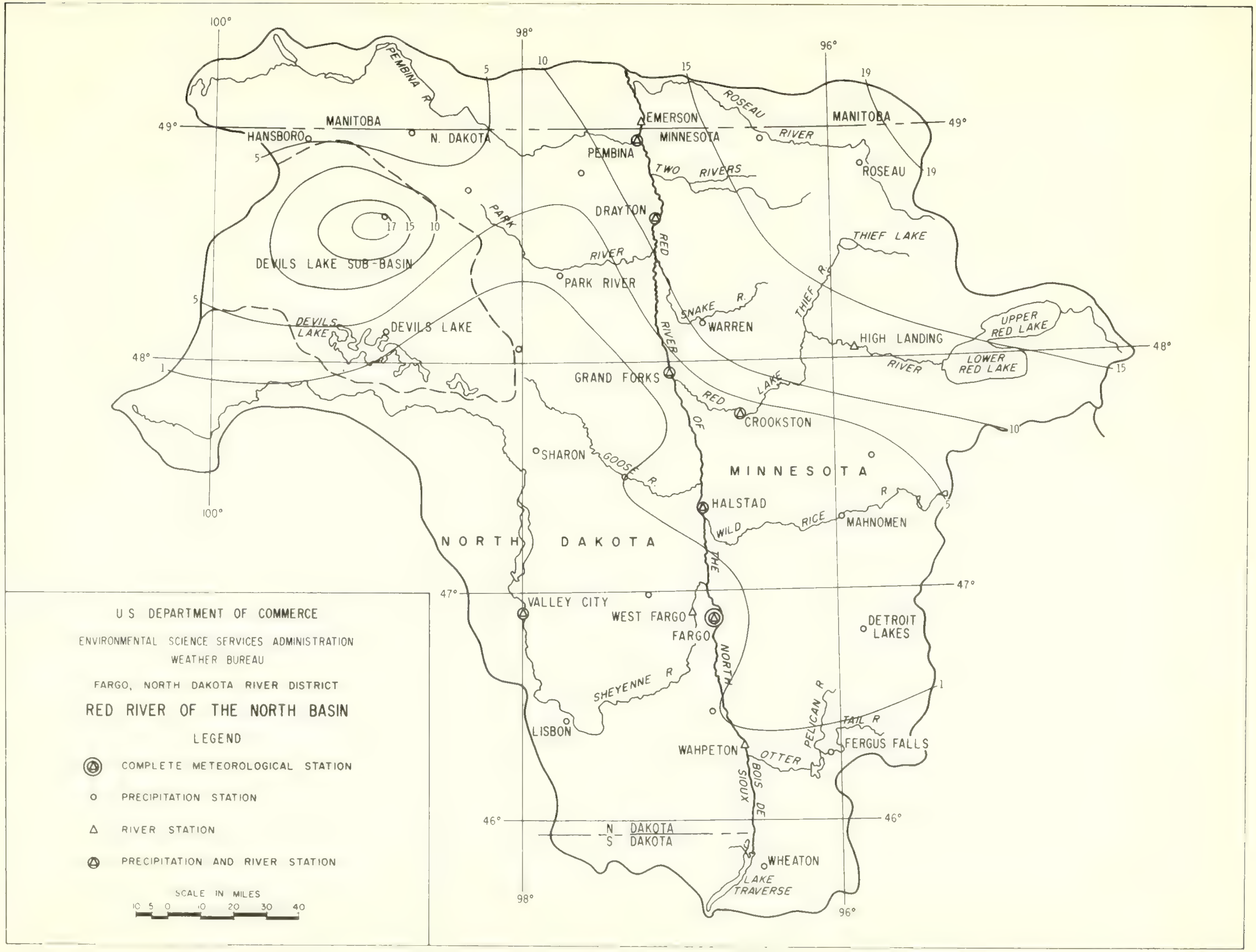


FIGURE 8. - DEPTH OF SNOW ON GROUND IN INCHES AS OF MARCH 25, 1966.

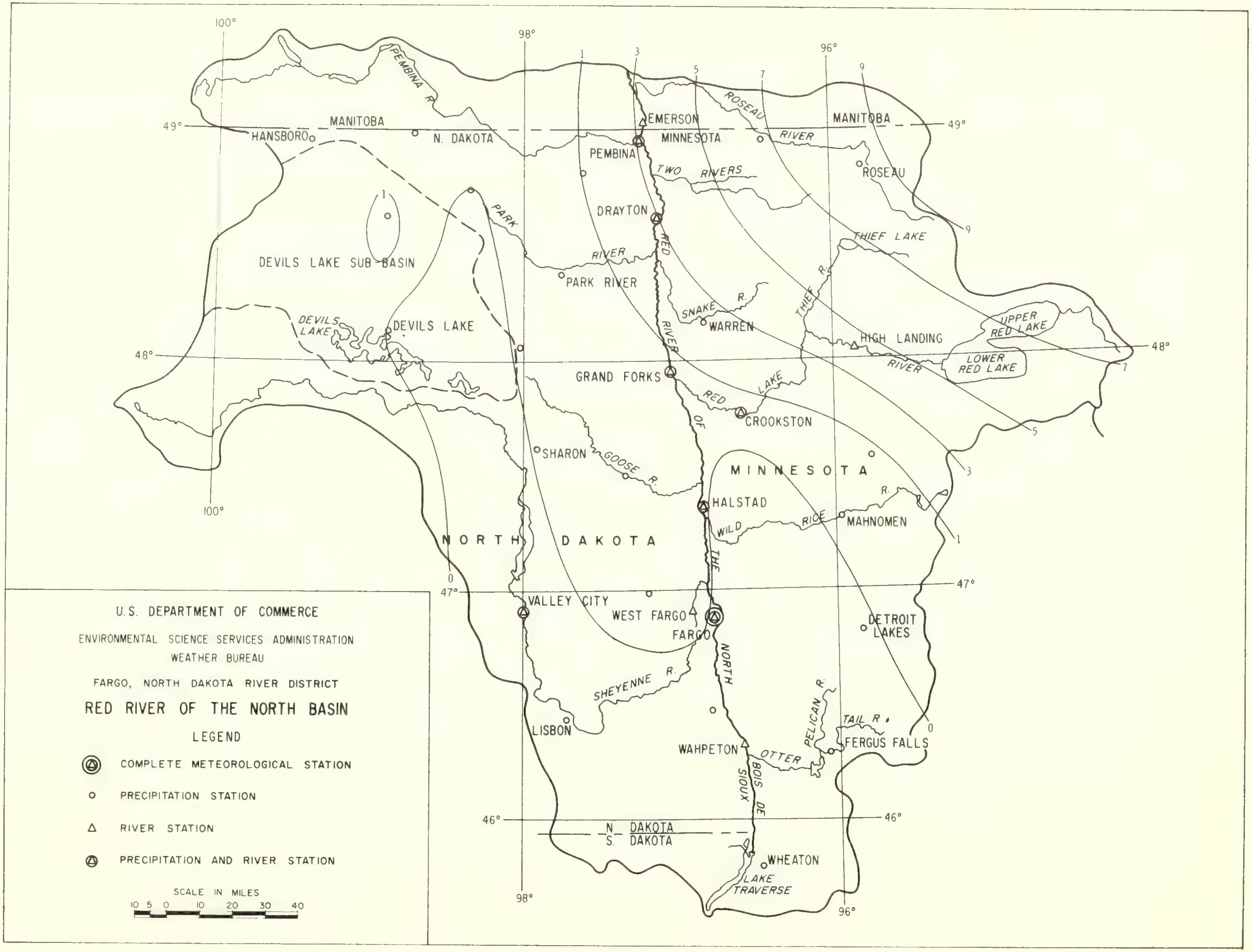


FIGURE 9. - DEPTH OF SNOW ON GROUND IN INCHES AS OF MARCH 31, 1966.

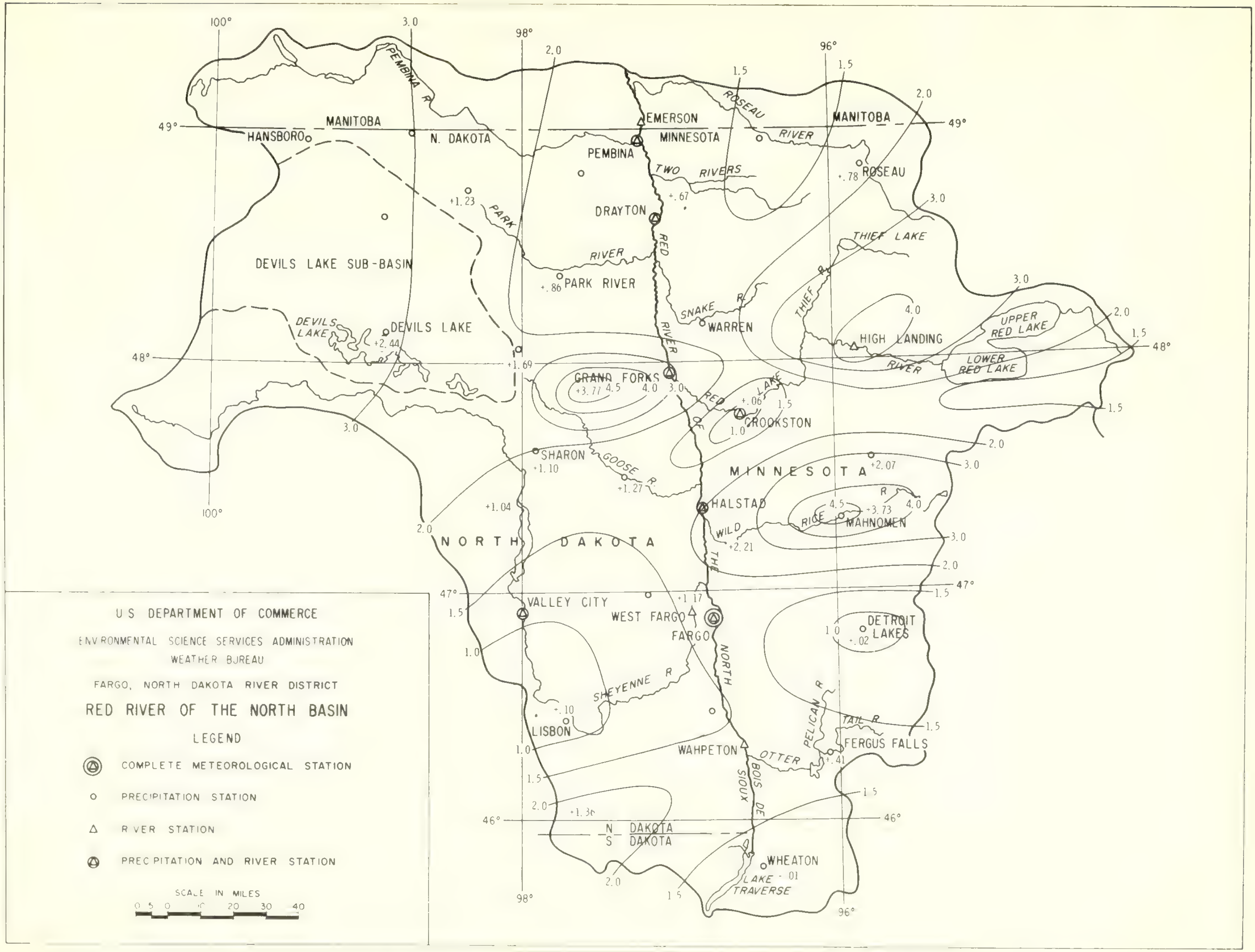


FIGURE 10. - TOTAL PRECIPITATION FOR MARCH 1966. PLOTTED FIGURES SHOW DEPARTURE FROM NORMAL IN HUNDREDTHS OF AN INCH.

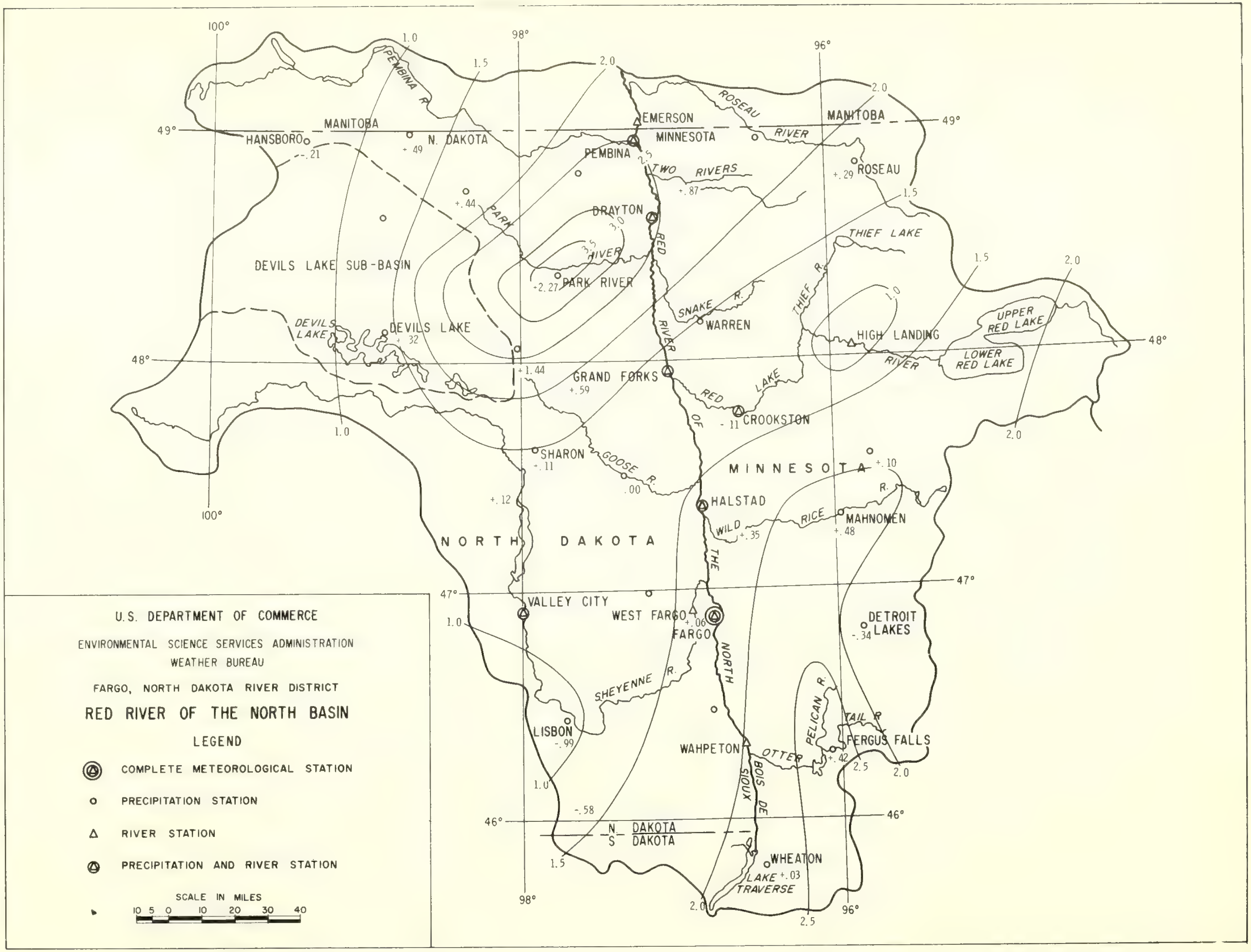


FIGURE 11. - TOTAL PRECIPITATION FOR APRIL 1966. PLOTTED FIGURES SHOW DEPARTURE FROM NORMAL IN HUNDREDTHS OF AN INCH.

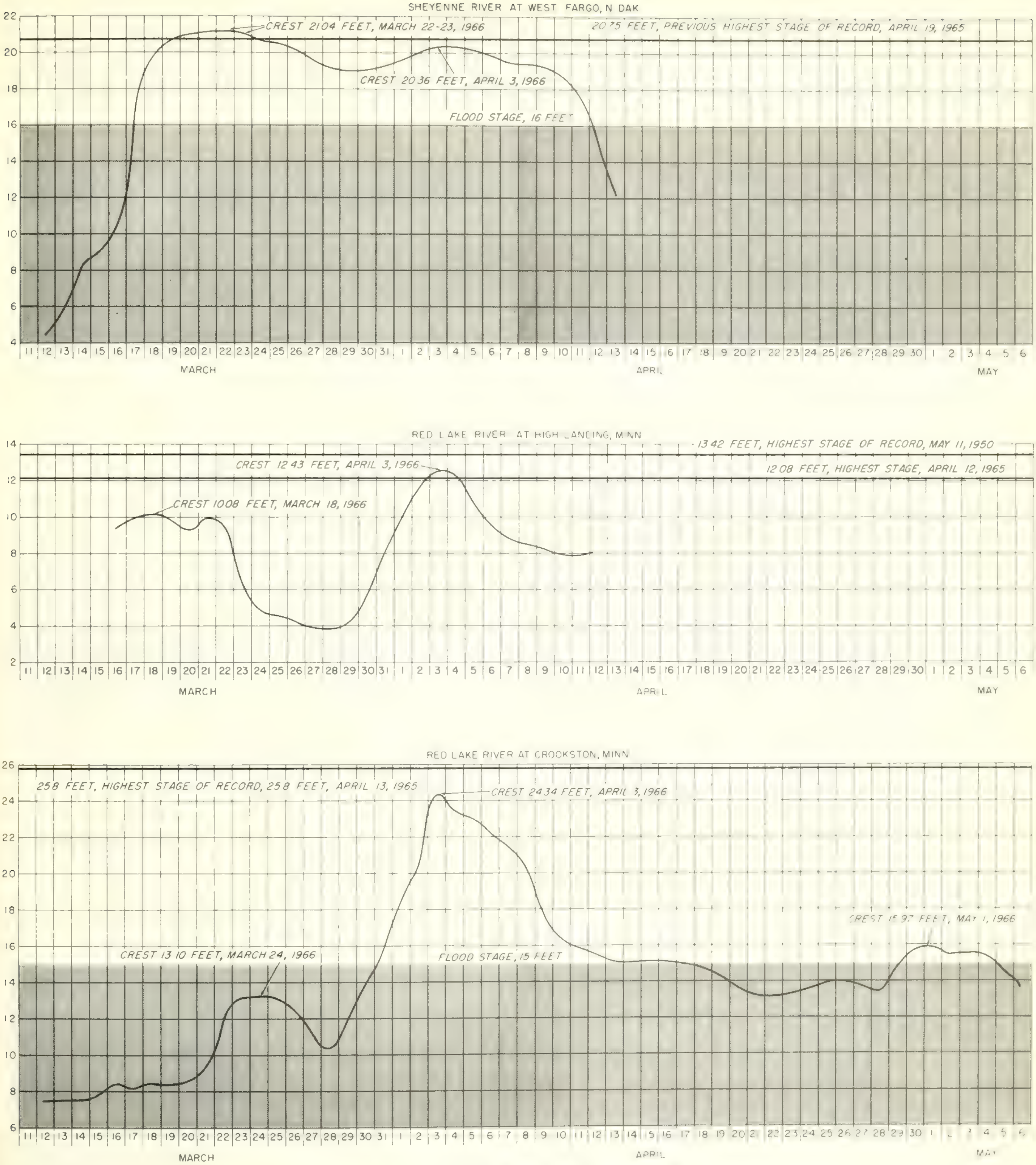


FIG 12 RIVER STAGE HYDROGRAPHS, MARCH MAY 1966

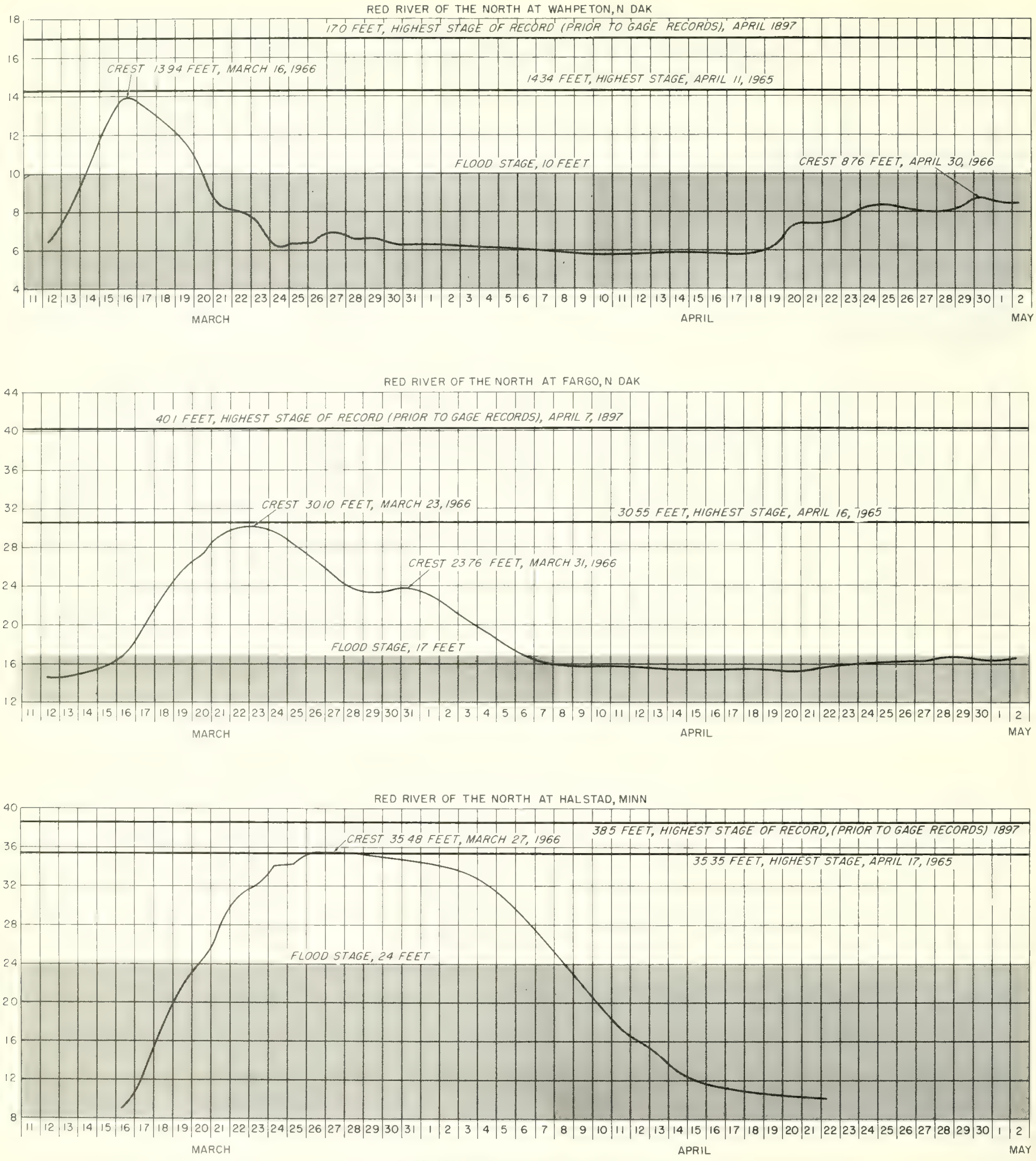
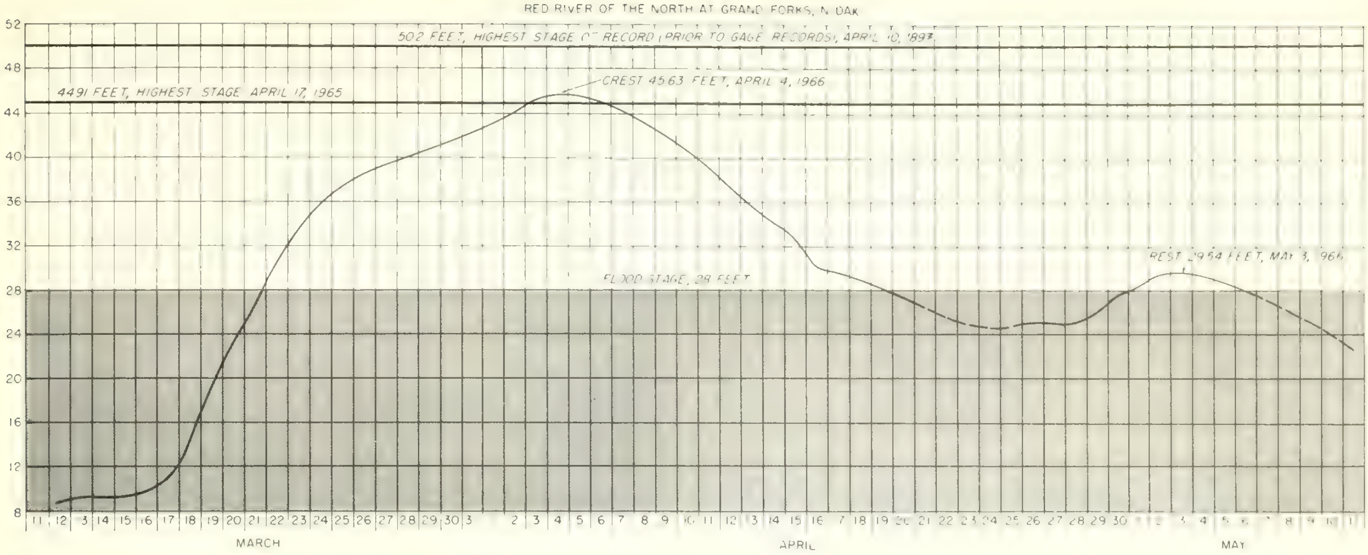
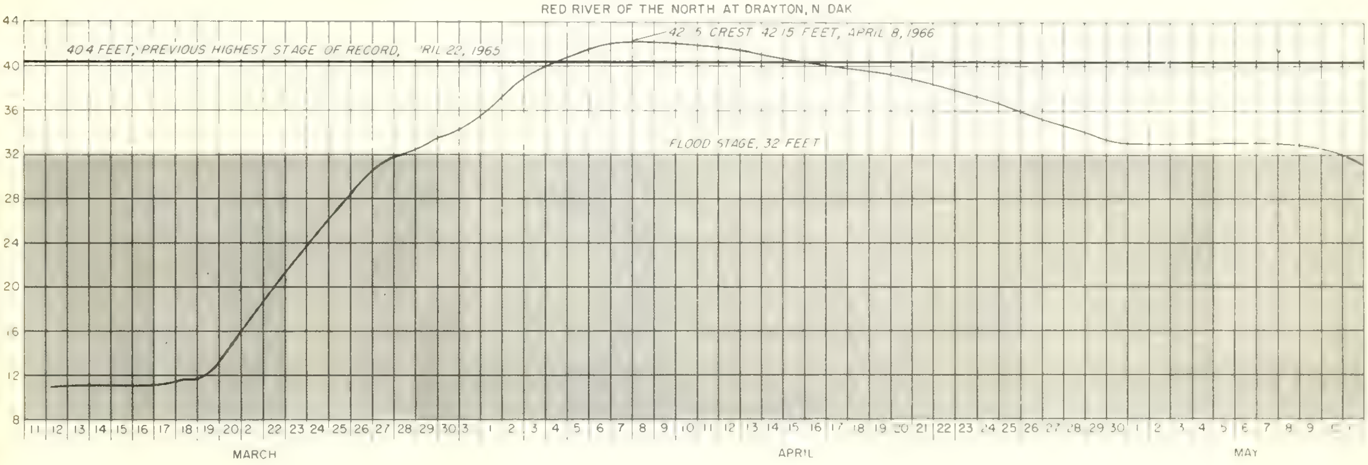


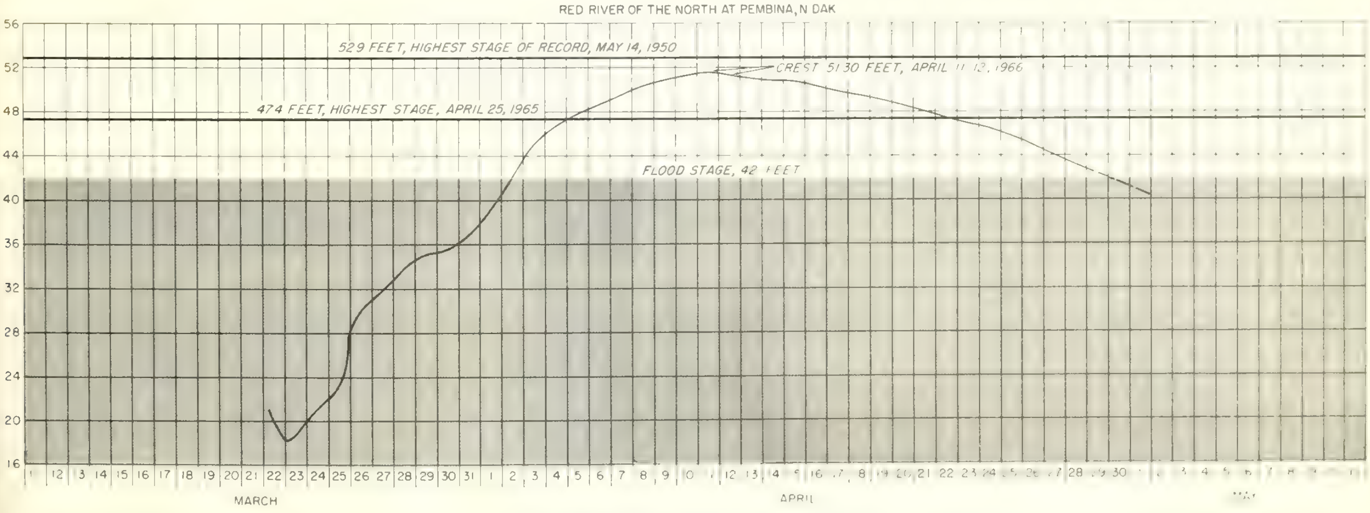
FIG 13 RIVER STAGE HYDROGRAPHS, MARCH-MAY 1966



RED RIVER OF THE NORTH AT GRAND FORKS, N DAK



RED RIVER OF THE NORTH AT DRAYTON, N DAK



RED RIVER OF THE NORTH AT PEMBINA, N DAK

FIG 14 RIVER STAGE HYDROGRAPHS, MARCH- MAY 1966

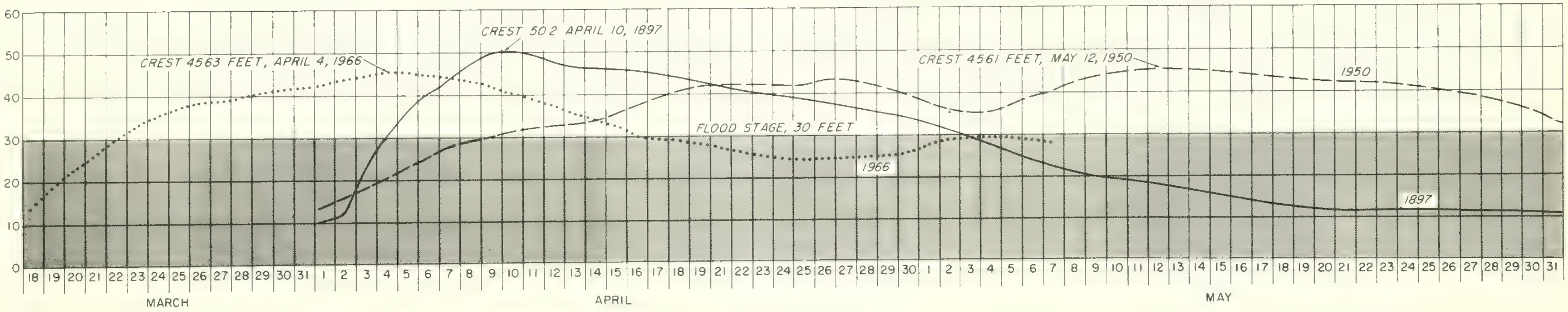


FIG 15 RIVER STAGE HYDROGRAPHS AT GRAND FORKS, N DAK APRIL 1 - MAY 31, 1897; APRIL 1 - MAY 31, 1950 AND MARCH 18 - MAY 6, 1966

GENERAL SUMMARY OF FLOOD LOSSES FOR 1965

Elmer R. Nelson and Raymond J. Haley
Office of Hydrology, Weather Bureau

Monetary losses from floods in the United States during 1965, estimated at $785 million, were 1.2 times greater than in 1964 and 4.4 times greater than in 1963. This is the highest damage sustained from floods since 1955 when the losses totaled $995 million. In comparison with the national average of $400 million, based on the 15-year period 1951 to 1965 (adjusted to the 1965 price index), the flood loss in 1965 was 196 percent.

The total loss of life in 1965 from floods was 119 compared to 100 in 1964 and 39 in 1963. This is the highest loss of life since 1955 when 302 lives were lost. In comparison with the national average of 80 lives lost during the last 41 years (1925 to 1965), it was 1.5 times greater.

The floods during June in the South Platte, Arkansas, and Rio Grande Basins caused property damage estimated at $476 million and a loss of 58 lives. The most destructive of these floods occurred in the South Platte Basin in eastern Colorado where the total damages were estimated at $415 million. In comparison with the total flood damages over the entire Country during 1965, the flood loss in these three basins during June accounted for 61 percent of the loss. Nearly one-half of the total loss of life from floods during the year occurred during June in this comparatively small area. The greatest toll of life occurred in the flash flood at Sanderson, Tex., on June 11 when 26 lives were lost.

The savings resulting from the Weather Bureau Flood Forecasting Service in 1965 were, as compiled from fragmentary information, approximately $200 million. The U. S. Corps of Engineers, Rock Island, Illinois, District estimated savings from flood warnings in their district at $178 million.

The most important floods during 1965 were the spring floods in the Upper Mississippi, Missouri, and Red River of the North Basins; and the floods during June in the South Platte, Arkansas, and Rio Grande Basins.

The flooding along the upper Mississippi River was the greatest in more than 100 years. Loss of life and property was minimized by protective action taken as a result of advance warnings. Property damages in the Upper Mississippi, Missouri, and the Red River of the North Basins during the spring floods totaled $181 million, with a toll of 16 lives.

ANNUAL FLOOD LOSSES FOR U. S. . .

Annual Flood Losses and Savings for years 1933 to 1947, inclusive, have been published in the Monthly Weather Review as follows:

Year	Issue of Review	Pages
1933	Vol. 62, No. 1, Jan. 1934	25-27
1934	Vol. 62, No. 12, Dec. 1934	465-467
1935	Vol. 63, No. 12, Dec. 1935	362-365
1936	Vol. 65, No. 1, Jan. 1937	28-31
1937	Vol. 66, No. 12, Dec. 1938	426-430
1938	Vol. 68, No. 9, Sep. 1940	262-263
1939	Vol. 68, No. 11, Nov. 1940	329-330
1940	Vol. 69, No. 7, Jul. 1941	217-218
1941	Vol. 71, No. 11, Nov. 1943	185-186
1942 & 1943	Vol. 73, No. 8, Aug. 1945	137-139
1944 & 1945	Vol. 76, No. 6, Jun. 1948	113-116
1946	Vol. 76, No. 9, Sep. 1948	208-210
1947	Vol. 77, No. 9, Sep. 1949	262-265

Beginning with flood losses for the year 1948, annual flood loss data are published in Climatological Data, National Summary, as follows:

Year	Issue of Climatological Data
1948	August 1950
1949	Annual 1950
1950) 1951)	Annual 1951
1952	Annual 1952
1953	Annual 1953
1954	Annual 1955
1955	Annual 1956
1956	Annual 1957
1957	Annual 1958
1958	Annual 1959
1959	Annual 1960
1960	Annual 1961
1961	Annual 1962
1962	Annual 1963
1963	Annual 1964
1964	Annual 1965

Prior to 1933 Flood Losses and Savings were published monthly, as a rule, in the Monthly Weather Review.

ESTIMATED FLOOD LOSSES FOR 1965

River and drainage	Urban Property					Rural Property					Other Property		Miscellaneous	Unclassified	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges, Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
HUDSON BAY DRAINAGE																
Tributaries of Red River of North in N. Dak.	193.2	....	30.3	....	109.9	1,997.0	....	....	....	....	830.0	....	57.0	....	3,217.4	....
Tributaries of Red River of North in Minn.	389.3	....	14.9	....	62.8	2,709.8	....	....	....	....	1,284.9	....	132.3	....	4,594.0	....
Red River of the North	1,265.8	....	406.6	....	373.6	3,756.0	....	....	....	....	....	....	308.7	....	6,110.7	....
Total	G 1,848.3	....	H 451.8	....	546.3	D 8,462.8	....	....	....	....	2,114.9	....	498.0	....	E 13,922.1	....
ST. LAWRENCE DRAINAGE																
Lake Erie																
Cedar Creek (Auburn, Ind.)														20.0	20.0	....
Total	....	....	....	....	....	....	....	....	....	....	....	....	....	20.0	20.0	....
ATLANTIC SLOPE DRAINAGE																
Minor Streams, Prince William City, Va.	2.0	....	....	....	0.3	....	....	....	....	....	....	....	....	....	2.3	....
Potomac River	....	....	50.0	....	....	....	....	....	....	....	....	....	2.5	....	52.5	A 1
James River	....	....	....	....	....	....	....	....	....	....	....	....	....	....	B 0.0	1
Santee River and Tributaries	....	....	....	....	....	247.0	....	....	....	....	....	....	21.0	....	268.0	....
Total	2.0	....	50.0	....	0.3	247.0	....	....	....	....	....	....	23.5	....	322.8	2
EAST GULF OF MEXICO DRAINAGE																
Flint River	11.5	....	....	....	....	68.2	....	....	....	....	5.0	....	....	....	84.7	....
Chattahoochee River	....	....	....	....	....	17.5	....	....	....	....	0.5	....	....	....	18.0	....
Apalachicola River	77.0	....	....	....	....	32.6	....	....	....	....	30.0	....	....	....	139.6	....
Choctawhatchee River	....	....	....	....	....	10.1	....	....	....	....	6.0	....	....	....	16.1	....
Conecuh River	....	....	....	....	....	16.5	....	....	....	....	....	....	....	....	16.5	....
Coosa River	....	....	....	....	....	108.6	....	....	....	....	9.4	....	....	....	118.0	....
Etowah River	....	....	....	....	....	16.3	....	....	....	....	2.8	....	....	....	19.1	....
Conasauga River	....	....	....	....	....	166.7	....	....	....	....	14.4	....	....	....	181.1	....
Oostanaula River	....	....	....	....	....	67.6	....	....	....	....	10.1	....	....	....	77.7	....
Tallapoosa River	....	....	....	....	....	10.5	....	....	....	....	1.9	....	....	....	12.4	....
Alabama River	....	....	....	....	....	69.7	....	....	....	....	8.3	....	....	....	78.0	....
Black Warrior River	....	....	....	....	....	154.0	....	....	....	....	4.0	....	....	....	158.0	....
Tombigbee River	25.7	....	....	....	....	839.0	....	....	....	....	123.0	....	....	....	987.7	....
Leaf River	....	....	....	....	....	6.8	....	....	....	....	2.9	....	....	....	9.7	....
Chickasawhay River	....	....	....	....	....	17.1	....	....	....	....	2.0	....	....	....	19.1	....
Pascagoula River	....	....	....	....	....	....	....	....	....	....	....	....	11.5	....	11.5	....
Pearl River	320.0	....	....	....	....	261.2	....	....	....	....	136.6	....	....	....	717.8	....
Total	C 434.2	....	....	....	....	D 1,862.4	....	....	....	....	356.9	....	11.5	....	E 2,665.0	0
MISSISSIPPI SYSTEM																
Upper Mississippi Basin																
Crow River and Tributaries	G 622.0	....	H 346.3	....	285.3	....	....	....	....	....	700.0	....	182.8	L 830.0	E 2,966.4	....
Minnesota River and Tributaries	G 3,430.5	....	H 5,239.0	....	1,998.9	....	....	....	....	....	9,338.0	....	3,191.2	L19,658.0	E 42,855.6	....
St. Croix River and Tributaries	G 1,105.0	....	H 1,674.0	....	1,402.0	....	....	....	....	....	50.0	....	1,351.0	L 48.0	E 5,630.0	....
Chippewa River	G 8.0	....	H 23.0	....	....	127.0	....	....	....	....	....	....	....	....	E 158.0	....
Zumbro River and Tributaries	G 420.0	....	H 34.0	....	5.5	....	....	....	....	....	....	....	....	....	E 459.5	....
Root River and Tributaries	G 1,262.0	....	H 657.0	....	178.0	....	....	....	....	....	176.0	....	33.0	....	E 2,306.0	....
La Crosse River	G 15.0	....	H 29.0	....	26.0	....	....	....	....	....	....	....	....	....	E 70.0	....
Upper Iowa River	....	....	....	....	....	131.0	....	....	44.0	....	....	....	....	....	E 175.0	....
Lemonweir River (Wisconsin)	C 10.0	....	....	....	....	....	....	....	....	....	....	....	....	....	10.0	....
Maquoketa River	....	....	....	....	....	15.0	....	....	40.0	....	....	....	....	....	E 55.0	....
Wapsipinicon River	....	....	....	....	....	425.0	....	....	40.0	....	....	....	....	....	E 465.0	....
Rock and Pecatonica Rivers	....	....	....	....	....	265.0	....	....	77.0	....	71.0	....	....	....	E 413.0	....
Iowa River and Tributaries	....	....	....	....	....	....	....	....	....	....	300.0	....	....	....	300.0	....
Illinois and Spoon Rivers	C 65.0	....	....	....	....	....	....	....	D 75.0	....	80.0	....	80.0	....	300.0	....
Upper Mississippi River and Minor Tributaries	K31,073.6	....	....	....	6,055.0	I 13,991.8	....	....	M8,287.2	....	12,607.7	....	39,952.1	....	E111,967.4	....
Total	38,011.1	....	8,002.3	....	9,950.7	14,954.8	....	....	8,563.2	....	23,322.7	....	44,790.1	20,536.0	168,130.9	N 15
Missouri Basin																
Jefferson River	....	....	....	....	....	....	....	....	....	....	1.0	....	....	....	1.0	....
Milk River	....	....	....	....	....	....	....	....	....	....	35.0	....	5.0	....	40.0	....
Flash Flood at Laurel, Mont.	C 170.0	....	....	....	....	....	....	....	....	....	....	....	....	....	170.0	....
Griffith Creek (Near Glendive, Mont.)	....	....	....	....	....	....	....	....	....	....	20.0	....	....	....	20.0	....
Yellowstone and Power Rivers	11.7	....	....	....	5.8	....	....	2.5	....	....	8.8	....	....	....	28.8	1
Big Sioux River	....	....	....	....	160.0	125.0	45.0	....	190.0	20.0	115.0	30.0	55.0	....	740.0	....
Floyd River	....	....	....	....	40.0	45.0	20.0	....	50.0	....	60.0	3.0	....	....	218.0	....
Little Sioux River	....	....	....	....	....	166.0	....	....	....	....	54.0	32.0	666.0	....	E 918.0	....
Boyer River (At Missouri Valley, Iowa)	G 481.0	....	H 113.5	....	57.6	....	....	....	....	....	....	10.0	....	....	E 662.1	....

See reference notes at end of table.

ESTIMATED FLOOD LOSSES FOR 1965

River and drainage	Urban Property					Rural Property					Other Property		Miscellaneous	Unclassified	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges, Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
MISSISSIPPI SYSTEM - CONTD.																
Missouri Basin - Contd.																
South Platte River and Tributaries	G11,280.8	....	H166,070.8	....	4,353.5	I 20,962.0	....	3,689.0	3,993.0	....	187,053.0	5,322.2	....	12,351.2	E415,075.5	16
Papillion Creek and Tributaries (Nebr.)	....	....	....	....	....	....	....	....	....	....	50.0	....	....	490.0	E 540.0	....
Nemaha River	....	....	....	....	....	D 170.0	....	....	....	....	F 30.0	....	....	....	E 200.0	....
Nodaway River	....	....	....	....	....	D 987.1	....	....	....	....	F 26.3	....	....	....	E 1,013.4	....
Platte River and Tributaries (Missouri)	G 1,401.5		H 1,390.3	....	309.0	I 3,515.7	....	....	....	....	F 59.5	....	178.3	....	E 6,854.3	5
Republican River and Tributaries	3.0	0.8	....	0.3	1.0	I 498.8	....	....	....	....	F 38.8	....	50.3	....	E 593.0	....
Smoky Hill River and Tributaries	14.3	7.8	30.0	....	14.8	340.8	....	....	3.0	....	F 19.7	....	1.0	....	E 431.4	....
Big Blue River and Tributaries	9.0	0.5	1.0	0.5	2.5	423.5	....	1.1	1.5	....	35.8	....	0.5	....	E 475.9	....
Kansas River and Minor Tributaries	8.0	1.0	1.5	0.5	100.0	I 721.5	....	....	2.0	....	F 19.5	....	0.2	....	E 854.2	....
Grand River	....	....	....	....	....	I 932.0	....	....	....	....	F 85.0	....	....	....	E 1,017.0	....
Chariton River	....	....	....	....	....	I 396.0	....	....	....	....	F 47.0	....	....	....	E 443.0	....
Marais des Cygnes River and Tributaries	....	....	....	....	....	I 1,171.5	....	....	....	....	F 43.0	....	....	....	E 1,214.5	....
Osage River and Tributaries	....	....	....	....	....	I 1,050.0	....	....	....	....	F 100.0	....	....	13.0	E 1,163.0	....
Missouri River and Minor Tributaries	G 618.5	....	H 297.8	....	219.8	I 16,778.9	....	....	....	....	F 1,207.7	....	36.2	....	E 19,158.9	4
Total	13,997.8	10.1	167,904.9	1.3	5,264.0	48,283.8	65.0	3,692.6	4,239.5	20.0	189,109.1	5,397.2	992.5	12,854.2	451,832.0	26
Ohio Basin																
Guyandot River	....	....	....	....	....	....	....	....	....	....	....	....	....	31.0	E 31.0	....
Tug Fork	....	....	....	....	....	....	....	....	....	....	....	....	....	17.5	E 17.5	....
Levisa Fork	C 60.0	....	....	....	....	12.3	....	....	20.0	5.0	105.7	5.0	....	....	208.0	....
Flash Flooding on Small Streams in Anderson,Campbell and Jefferson Counties, Tenn. and Knox County, Ky.	G 125.0	....	....	....	....	....	....	....	....	....	500.0	....	....	....	625.0	8
Flash Flooding on Small Streams in Bell County, Ky.	175.0	90.0	175.0	50.0	155.0	10.0	....	....	10.0	8.0	70.0	20.0	....	....	763.0	....
Cumberland River	15.0	....	125.0	....	....	....	....	....	50.0	....	....	....	....	....	190.0	....
Tributaries of Holston River	....	....	....	....	....	....	....	....	....	....	110.0	....	....	....	J 110.0	....
Pigeon River and Tributaries	....	....	....	....	65.0	....	....	....	....	....	21.5	....	....	....	86.5	....
Little Pigeon River and Tributaries	C 1,500.0	....	....	....	....	....	....	....	....	....	....	....	....	....	J 1,500.0	....
French Broad River	....	....	....	....	1.0	....	....	....	....	....	....	....	....	....	1.0	....
Chickamauga Creek (Chattanooga, Tenn.)	....	....	....	....	5.0	....	....	....	....	....	....	....	....	....	5.0	....
Ohio River	....	....	....	....	....	28.4	....	....	....	....	4.0	....	22.0	....	54.4	....
Total	1,875.0	90.0	300.0	50.0	226.0	50.7	....	....	80.0	13.0	811.2	25.0	22.0	48.5	3,591.4	8
White Basin																
Cache River (Arkansas)	....	....	....	....	....	90.0	....	....	....	....	0.4	....	....	....	90.4	....
Total	....	....	....	....	....	90.0	....	....	....	....	0.4	....	....	....	90.4	....
Arkansas Basin																
Tributaries of Arkansas River in Colorado	C 6,047.0	....	....	....	....	D 5,886.0	....	....	....	....	7,432.0	909.0	632.0	....	E 20,906.0	6
Cow Creek (Kans.)	....	....	....	....	....	45.0	....	....	70.0	....	8.0	....	....	....	E 123.0	....
Sand Creek (Newton and Sedgwick, Kans.)	K 1,098.0	....	....	....	104.0	38.0	....	....	31.0	....	8.0	....	....	....	E 1,279.0	....
Walnut River	K 3,273.0	....	....	....	97.0	314.0	....	....	186.0	....	35.0	....	....	....	E 3,905.0	....
Cimarron River and Tributaries	285.0	100.0	20.0	10.0	295.0	50.0	20.0	16.5	55.0	24.5	1.0	6.0	115.0	....	998.0	....
Verdigris River	5.0	2.0	....	....	....	40.0	....	1.0	2.5	....	20.0	....	1.5	....	72.0	....
Cottonwood River	K 188.0	....	....	....	40.0	409.0	....	....	476.0	....	127.0	....	....	....	E 1,240.0	....
Neosho River	....	....	....	....	....	6.0	....	....	1.0	....	1.0	....	....	....	E 8.0	....
Flash Flooding Canadian County and El Reno, Okla.	C 100.0	....	....	....	....	....	....	....	....	....	528.5	....	....	....	628.5	....
North Canadian River	....	....	....	....	....	....	....	....	....	....	2.0	....	....	....	2.0	....
Canadian River and Tributaries above Conchas Dam, N. Mex.	C 390.0	....	....	....	....	D 2,299.0	....	....	....	....	1,195.0	203.0	25.0	....	E 4,112.0	2
Canadian River in Texas	....	....	....	....	....	....	....	....	....	....	75.0	....	....	....	75.0	....
Poteau River	....	....	....	....	9.0	20.0		....	....	....	....	....	....	....	29.0	....
Arkansas River in Colorado	C 1,503.0	....	....	....	....	D 12,428.0	....	....	....	....	1,362.0	45.0	928.0	....	E 16,266.0	5
Arkansas River in Kansas	C 6,299.0	....	....	....	....	D 10,874.8	....	....	....	....	1,683.8	....	1,560.0	....	E 20,417.6	3
Total	19,188.0	102.0	20.0	10.0	545.0	32,409.8	20.0	17.5	821.5	24.5	12,478.3	1,163.0	3,261.5	0	70,061.1	16
Red Basin																
Flash Flooding in Jackson, Tillman. Caddo, and Kiowa Counties, Okla.	....	....	....	....	....	25.0	....	2.0	....	....	375.0	....	....	450.0	852.0	...
Total	....	....	....	....	....	25.0	....	2.0	....	....	375.0	....	....	450.0	852.0	....
Lower Mississippi Basin																
St. Francis River	....	....	....	....	....	151.0	....	....	....	....	....	....	15.0	....	166.0	....
Yazoo River and Tributaries	....	....	....	....	....	459.0	....	....	....	....	73.0	....	....	....	532.0	....
Mississippi River	....	....	....	....	....	75.0	....	....	2.5	....	10.0	....	25.5	....	113.0	....
Total	....	....	....	....	....	685.0	....	....	2.5	....	83.0	....	40.5	....	E 811.0	....

See reference notes at end of table.

ESTIMATED FLOOD LOSSES FOR 1965

River and drainage	Urban Property					Rural Property					Other Property		Miscellaneous	Unclassified	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges, Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
WEST GULF OF MEXICO DRAINAGE																
Trinity River and Tributaries	112.0	....	108.0	....	200.0	2,911.5	....	23.0	345.0	....	152.0	....	....	....	3,851.5	1
Little River	100.0	....	....	....	....	....	....	10.0	149.0	1.0	15.0	5.0	....	....	280.0	
Brazos River	32.0	6.0	112.0	4.0	49.0	25,867.0	....	119.0	4,000.0	....	533.0	7.0	73.0	....	30,802.0	....
San Antonio and Guadalupe Rivers and Tributaries	....	....	....	....	....	....	....	....	....	....	....	....	....	1,500.0	1,500.0	4
Atascosa River	....	....	....	....	....	....	....	....	0.3	0.3	100.0	....	....	....	100.6	1
Nueces River	....	....	....	....	....	....	....	....	....	....	10.0	....	....	5.0	15.0	1
Flash Flood in Santa Fe, N. Mex. Area	....	....	....	....	....	....	....	....	....	....	25.0	....	....	....	25.0	....
Flash Flood at El Paso, Tex.	10.0	3.0	....	....	40.0	....	....	....	....	....	....	1.0	....	....	54.0	....
Sanderson Canyon	419.8	58.2	600.9	....	83.1	2.5	....	1.5	....	....	1,301.0	70.0	178.0	....	2,715.0	26
Hondo and Ruidoso Rivers	....	....	....	....	....	....	....	....	....	....	....	....	....	695.6	695.6	....
Total	673.8	67.2	820.9	4.0	372.1	28,781.0	....	153.5	4,494.3	1.3	2,136.0	83.0	251.0	2,200.6	40,038.7	33
GREAT BASIN																
Flash Floods in Utah: Near Wendover	....	....	....	....	....	1.0	....	....	....	....	305.0	....	....	....	306.0	....
Millard County (Corn Creek)	....	....	....	....	....	....	....	....	1.0	....	....	....	....	....	1.0	....
Olympus Cove Area (East of Salt Lake City)	200.0	....	....	....	156.5	....	....	....	....	....	....	....	....	....	356.5	....
Jordan River (Southwest of Salt Lake City)	....	....	....	....	....	5.0	....	....	....	....	....	30.0	....	....	35.0	....
Timpanogas Cave National Monument	6.0	....	....	....	40.0	....	....	....	....	....	45.0	....	....	....	91.0	....
Elberta Utah	....	....	....	....	....	....	11.5	....	0.1	....	40.0	....	....	....	51.6	....
Lower Provo and Weber Rivers	....	....	....	....	0.5	4.2	0.1	....	1.5	....	13.5	....	....	....	19.8	....
Flash Floods in Nevada in Clover Valley and Lamoille Canyon	....	....	....	....	....	....	3.0	....	....	....	1.0	....	....	....	4.0	....
Whitewater River (Riverside County, Calif.)	....	....	....	....	....	....	....	....	....	....	....	....	....	3,000.0	3,000.0	....
Flash Flood in Wrightwood Area (San Bernardino County, Calif.)	....	....	....	....	....	....	....	....	....	....	....	....	....	450.0	450.0	....
Total	206.0	....	....	....	197.0	10.2	14.6	....	2.6	....	404.5	30.0	....	3,450.0	4,314.9	....
GULF OF CALIFORNIA DRAINAGE																
Colorado Basin																
Uncompahgre River (Colorado)	35.0	....	....	....	10.0	....	....	....	....	....	....	....	....	....	45.0	....
Blacks Fork and Smiths Fork (Tributaries of Green River in Wyoming)	10.0	1.0	2.0	5.0	75.0	75.0	....	2.0	40.0	2.0	134.0	2.0	35.0	....	383.0	....
Tributaries of Green River in Utah:																
Sheep Creek	....	....	....	....	....	15.5	2.6	....	11.6	....	631.0	0.6	138.4	....	799.7	7
Ferron Creek	....	....	....	....	....	....	....	....	1.0	....	5.8	....	....	....	6.8	....
Uinta and Whiterocks Rivers	....	....	....	....	....	....	....	....	....	....	30.5	....	....	....	30.5	....
Price R., Sandwash, Antelope Creek Lumpkin and Weedig Draws	....	....	....	....	4.2	5.0	....	....	....	....	1.6	....	0.4	....	11.2	....
Pleasant, Bullberry and Government Creeks (Utah)	....	....	....	....	....	3.3	....	....	4.2	....	18.5	....	....	....	26.0	....
Flash Flood at Teasdale, Utah	0.2	....	....	....	0.3	1.8	0.2	....	1.5	....	2.5	0.5	1.3	....	8.3	....
Little Colorado River	....	....	....	....	....	....	....	....	....	....	85.9	....	....	....	85.9	....
Salt River and Tributaries	C 3,500.0	....	....	....	1,546.0	....	....	....	....	....	607.9	464.6	....	....	6,118.5	1
Gila River	C 16.5	....	....	....	834.4	I 2,356.0	....	53.0	135.0	40.0	562.8	1,132.5	3.0	....	5,133.2	....
Total	3,561.7	1.0	2.0	5.0	2,469.9	2,456.6	2.8	55.0	193.3	42.0	2,080.5	1,600.2	178.1	....	12,648.1	8
PACIFIC SLOPE DRAINAGE																
Coastal Streams in San Diego, Los Angeles, Ventura, and Santa Barbara Counties, Calif.	....	....	....	....	....	....	....	....	....	....	....	....	....	7,371.0	7,371.0	11
Napa River (Calif.)	....	....	....	....	....	....	....	....	....	....	....	....	....	500.0	500.0	....
Coquille and Coos Rivers (Oregon)	....	....	....	....	35.0	....	....	....	....	....	....	....	....	....	35.0	....
Deer Creek (Umpqua Basin, Oregon)	22.5	1.0	....	....	100.0	10.0	....	....	12.0	....	10.0	....	15.0	....	170.5	....
Total	22.5	1.0	....	....	135.0	10.0	....	....	12.0	....	10.0	....	15.0	7,871.0	8,076.5	11
Columbia Basin																
Big Lost River	25.0	10.0	20.0	10.0	75.0	100.0	....	5.0	20.0	10.0	50.0	10.0	10.0	....	345.0	....
Little Wood River and Tributaries	G 19.0	....	0.5	....	....	D 6.5	....	....	....	....	1.6	....	2.0	....	E 29.6	....
Big Wood River and Tributaries	10.5	....	....	....	50.3	23.5	....	....	....	....	11.2	0.5	3.0	....	E 99.0	....
Malheur River and Tributaries	....	....	....	....	....	D 214.0	....	....	....	....	99.5	....	14.6	....	E 328.1	....
Payette River and Tributaries	....	....	....	....	....	D 4.5	....	....	....	....	....	....	0.5	....	E 5.0	....
Weiser River and Tributaries	....	....	....	....	....	D 12.0	....	....	....	....	....	....	3.0	....	E 15.0	....
Powder River and Tributaries	....	....	....	....	....	D 700.0	....	....	....	....	4.1	20.0	3.3	....	E 727.4	....
Salmon River	15.0	1.0	2.0	....	5.0	0.5	....	....	1.0	....	50.0	5.0	5.0	....	84.5	....
Grande Ronde River and Tributaries	G 203.3	....	H 41.2	....	15.6	D 682.1	....	....	....	....	698.7	3.2	112.2	....	E 1,756.3	....
Asotin Creek and Tributaries	....	....	....	....	....	....	....	....	....	....	34.0	....	2.7	....	E 36.7	....
Clearwater River and Tributaries	G 108.6	....	H 38.8	....	99.1	D 93.1	....	....	....	....	1,409.0	34.1	142.6	....	E 1,925.3	....
Tucannon River Basin	....	....	....	....	22.5	D 82.0	....	....	....	....	43.0	5.0	33.6	....	E 186.1	....

See reference notes at end of table.

ESTIMATED FLOOD LOSSES FOR 1965

River and drainage	Urban Property					Rural Property					Other Property		Miscellaneous	Unclassified	Total Loss	Lives Lost
	Residential		Commercial		Public	Crops		Livestock	Other		RR's, bridges, Highways, etc.	Public Utilities				
	Fixed	Movable	Fixed	Movable		Growing	Stored		Fixed	Movable						
PACIFIC SLOPE DRAINAGE - CONTD.																
Columbia Basin - Contd.																
Palouse River Basin	....	....	7.0	....	7.0	6.0	....	....	5.0	....	75.0	....	18.0	....	E 118.0	....
Snake River and Minor Tributaries	....	....	....	....	....	982.0	....	....	85.0	....	175.0	....	110.0	....	E 1,352.0	....
Walla Walla River and Tributaries	G 18.6	....	H 23.3	....	90.6	D 250.4	....	....	....	....	41.6	9.2	237.4	....	E 671.1	....
Umatilla River and Tributaries	G 44.8	....	H 90.7	....	127.8	D 1,066.0	....	....	....	....	137.4	4.8	379.9	....	E 1,851.4	....
John Day River and Tributaries	G 29.0	....	H 355.0	....	23.0	D 434.6	....	....	....	....	124.4	22.0	148.0	....	E 1,136.0	....
Tributaries of Willamette River	....	....	....	....	....	....	....	....	....	....	....	....	....	2.5	2.5	....
Total	473.8	11.0	578.5	10.0	515.9	4,657.2	....	5.0	111.0	10.0	2,954.5	113.8	1,225.8	2.5	10,669.0	....
Grand Total	80,294.2	282.3	178,130.4	80.3	20,222.2	142,986.3	102.4	3,925.6	18,519.9	110.8	236,237.0	8,412.2	51,309.5	47,432.8	788,045.9	119

A. On Monocacy R. near Frederick - no damage on Monocacy.
B. Only very minor damage.
C. Includes all urban damage.
D. Includes all rural damage.
E. Coordinated with U. S. Engineers.
F. Includes public utilities damage.
G. Includes all residential damage.
H. Includes all commercial damage.
I. Includes all crop and land damages.
J. Estimates by Tennessee Valley Authority.
K. Includes all residential and commercial.
L. Agricultural losses.
M. Includes all rural losses except crop.
N. 13 in Minnesota and 2 in Iowa during Spring flood in upper Mississippi Valley.

LOSS OF LIFE AND PROPERTY IN THE UNITED STATES FROM FLOODS

Property Losses in Thousands of Dollars
BY DISTRICTS AND YEARS, 1925-1965

District	1925		1926		1927		1928		1929		1930		1931		1932	
	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property
Great Lakes	---	--------	---	19	48	15,750	---	--------	---	171	---	36	---	1	---	1
North Atlantic	---	50	---	137	40	29,408	3	2,105	---	245	---	--------	---	1,050	---	25
South Atlantic	---	2,999	---	--------	---	1	5	8,382	8	10,196	---	--------	---	31	---	191
East Gulf	2	615	---	37	8	255	---	2,428	5	8,746	---	466	---	174	---	615
Ohio Valley	---	33	2	5,523	94	15,639	4	10,279	34	17,050	---	7,042	---	1	---	288
* Upper Mississippi	14	3,983	1	5,435	---	19,612	---	1,173	---	3,677	---	15	---	20	---	88
Lower Mississippi	---	115	---	42	100	133,898	---	7,819	4	9,980	---	530	---	--------	---	1,840
Missouri	---	--------	6	1,434	1	4,880	2	6,714	13	2,118	---	13	---	886	---	451
Arkansas	---	224	6	8,938	132	26,183	1	4,349	12	7,516	---	213	---	6	---	2,528
Red	---	--------	1	155	---	100,908	---	153	1	100	14	3,616	---	19	---	516
West Gulf	6	1,436	---	301	---	208	---	75	---	8,124	---	924	---	2	11	3,522
Colorado	---	--------	---	447	---	12	---	100	12	175	---	--------	---	3	---	13
Pacific	14	468	---	--------	---	902	---	1,032	---	--------	--	--------	---	560	--	217
Miscellaneous east of Rockies	---	--------	---	1,000	---	--------	---	--------	---	--------	---	2,500	---	--------	---	--------
Miscellaneous west of Rockies	---	--------	---	--------	---	--------	---	--------	---	--------	---	495	---	55	---	--------
Total	36	9,923	16	23,468	423	347,656	15	44,611	89	68,098	14	15,850	---	2,808	11	10,295

District	1933		1934		1935		1936		1937		1938		1939		1940	
Great Lakes	---	14	---	--------	---	13,185	1	9	---	690	---	240	--	11	2	--------
North Atlantic	2	5,418	---	142	52	16,340	24	146,035	---	2,689	8	37,068	2	56	4	2,519
South Atlantic	---	19	---	240	---	77	2	2,391	---	989	---	455	---	454	12	5,034
East Gulf	---	444	---	13	---	719	---	1,240	---	357	---	1,655	1	6,680	---	5,497
Ohio Valley	5	7,725	2	928	5	8,536	82	122,296	65	413,936	8	4,481	80	3,773	28	8,077
* Upper Mississippi	4	1,157	12	1,023	---	1,506	---	313	3	1,127	2	3,659	---	228	---	199
Lower Mississippi	---	6,933	---	--------	17	6,631	---	55	72	6,657	---	1	---	1,448	---	--------
Missouri	2	1,391	6	1,906	125	38,959	---	109	2	1,367	71	4,333	---	610	5	1,759
Arkansas	---	776	---	18	4	8,344	6	817	---	1,557	---	2,202	---	179	2	1,332
Red	---	38	22	640	8	2,751	---	16	---	24	---	755	---	22	---	12
West Gulf	---	1,160	---	422	20	29,522	24	8,376	---	1,830	6	6,003	---	360	7	7,622
Colorado	---	--------	1	22	---	--------	---	--------	---	264	---	256	---	13	---	180
Pacific	20	11,604	45	5,008	5	557	3	892	---	9,245	85	39,990	---	--------	---	8,236
Total	33	36,679	88	10,362	236	127,127	142	282,549	142	440,738	180	101,098	83	13,834	60	40,467

District	1941		1942		1943		1944		1945		1946		1947		1948	
Great Lakes	---	--------	---	153	1	9,564	---	130	---	119	---	251	1	5,761	4	20,270
North Atlantic	---	--------	35	22,321	4	1	---	--------	3	5,729	14	8,500	---	198	4	12,467
South Atlantic	---	89	---	608	---	152	---	1,926	3	1,007	---	172	---	944	1	1,372
East Gulf	---	24	2	155	---	773	---	2,660	---	268	---	2,963	2	654	---	3,122
Ohio	---	1,122	16	16,546	44	31,416	---	806	27	52,887	---	10,914	5	7,812	16	16,871
* Upper Mississippi	---	3,018	1	5,592	16	42,097	7	27,031	---	9,288	4	8,642	27	87,937	---	2,905
Lower Mississippi	---	--------	---	475	---	829	---	1,550	---	3,601	---	4,407	1	2,555	---	5,390
Missouri	2	12,019	1	22,511	13	62,630	13	44,616	4	34,403	---	8,305	18	163,176	1	31,490
Arkansas	9	13,346	---	6,577	26	41,850	10	11,171	20	15,068	---	1,791	1	1,424	14	18,721
Red	---	1,855	---	2,205	---	44	---	1,676	6	22,209	---	1,434	---	1,446	---	220
West Gulf	34	5,458	2	12,489	---	2,589	3	8,938	4	10,987	10	15,967	---	330	1	4,604
Colorado	2	1,061	---	3	---	310	---	575	10	182	---	--------	---	3	---	1
Pacific	---	1,532	11	8,872	3	7,477	---	--------	14	9,530	---	7,367	---	88	37	111,82
Great Basin	---	--------	---	--------	---	--------	---	--------	---	520	---	100	---	--------	---	--------
Total	47	39,524	68	98,507	107	199,732	33	101,079	91	165,798	28	70,813	55	272,328	82	229,959

District	1949		1950		1951		1952		1953		1954		1955		1956	
Great Lakes	---	1,619	9	33,542	---	131	---	2,350	1	2,654	---	15,000	---	2,596	---	1,327
North Atlantic	11	9,273	2	7,149	1	916	5	1,222	1	10,637	11	7,337	211	761,303	11	1,453
South Atlantic	3	291	---	1,203	---	9	---	236	---	109	1	546	2	902	3	2,720
East Gulf	---	1,747	---	1,435	---	4,310	---	347	2	2,444	---	543	6	5,300	1	1,379
Ohio	7	4,754	50	25,195	1	4,889	14	4,940	5	778	9	18,594	15	14,645	12	17,836
* Upper Mississippi	---	406	2	11,060	6	71,799	7	22,439	2	5,602	4	24,656	---	85	---	388
Lower Mississippi	---	10,020	6	10,071	---	5,996	---	444	12	7,857	---	490	---	1,352	---	865
Missouri	6	33,503	18	35,090	31	889,872	8	181,335	14	44,255	--	11,999	1	2,753	1	6,360
Arkansas	---	6,696	---	8,294	10	44,331	---	5	2	2,020	---	296	2	5,362	---	24
Red	2	365	1	1,105	---	2,101	---	836	---	2,061	---	923	---	2,003	1	250
West Gulf	18	22,462	---	417	---	238	10	9,584	1	34,849	29	21,639	2	4,286	3	3,714
Colorado	---	155	---	--------	---	889	---	76	---	7	---	1,890	---	2,173	---	--------
Pacific	1	2,640	5	37,362	2	3,260	10	20,251	---	8,931	1	2,929	63	186,785	6	27,930
Great Basin	---	--------	---	4,127	---	--------	---	9,999	---	--------	---	--------	--	5,946	4	442
Total	48	93,931	93	176,050	51	1,028,741	54	254,064	40	122,204	55	106,842	302	995,491	42	64,688

District	1957		1958		1959		1960		1961		1962		1963		1964	
Great Lakes	1	1	---	10	---	12,746	2	1,942	1	216	---	--------	1	35,872	---	325
North Atlantic	---	11	---	167	---	6,952	2	15,274	---	1,168	---	8	6	1,325	---	11,342
South Atlantic	---	166	---	3,917	---	631	---	172	---	600	---	97	---	89	---	16,786
East Gulf	---	4,526	---	3,434	---	241	---	13,780	3	30,386	---	5,768	---	1,726	---	10,490
Ohio	25	135,972	10	68,248	8	82,503	1	7,519	31	33,748	5	30,583	26	98,824	15	94,034
* Upper Mississippi	8	14,648	---	20,770	8	3,427	2	12,901	4	25,320	1	5,341	---	413	---	--------
Lower Mississippi	6	15,608	---	11,979	---	199	---	496	---	11,462	---	3,546	---	293	---	1,125
Missouri	15	26,057	21	45,819	3	12,162	8	28,105	7	33,990	2	10,501	3	14,705	37	41,902
Arkansas	5	50,082	---	360	2	12,886	1	3,480	1	9,173	3	1,254	2	563	1	1,607
Red	6	16,037	---	11,768	---	880	---	226	---	1,609	---	581	1	2,361	---	124
West Gulf	16	73,057	6	18,127	4	2,886	14	8,205	1	2,945	2	1,948	---	640	5	7,178
Colorado	---	741	---	240	---	100	---	--------	3	552	---	1,080	---	--------	---	55
Pacific	---	23,397	10	33,404	---	5,638	2	876	1	1,825	6	12,198	---	15,305	42	463,959
Great Basin	---	--------	---	12	---	4	---	--------	---	1,039	---	2,332	---	3,530	---	2,715
Total	82	360,303	47	218,255	25	141,255	32	92,976	52	154,033	19	75,237	39	175,646	100	651,642

District	1965	
Great Lakes	---	20
North Atlantic	2	55
South Atlantic	---	268
East Gulf	---	2,665
Ohio	8	3,591
Upper Mississippi	15	182,053
Lower Mississippi	---	811
Missouri	26	451,832
Arkansas	16	70,152
Red	---	852
West Gulf	33	40,039
Colorado	8	12,648
Pacific	11	18,745
Great Basin	---	4,315
Total	119	788,046

* Including Red River of the North

LOSS OF LIFE AND PROPERTY IN THE UNITED STATES FROM FLOODS

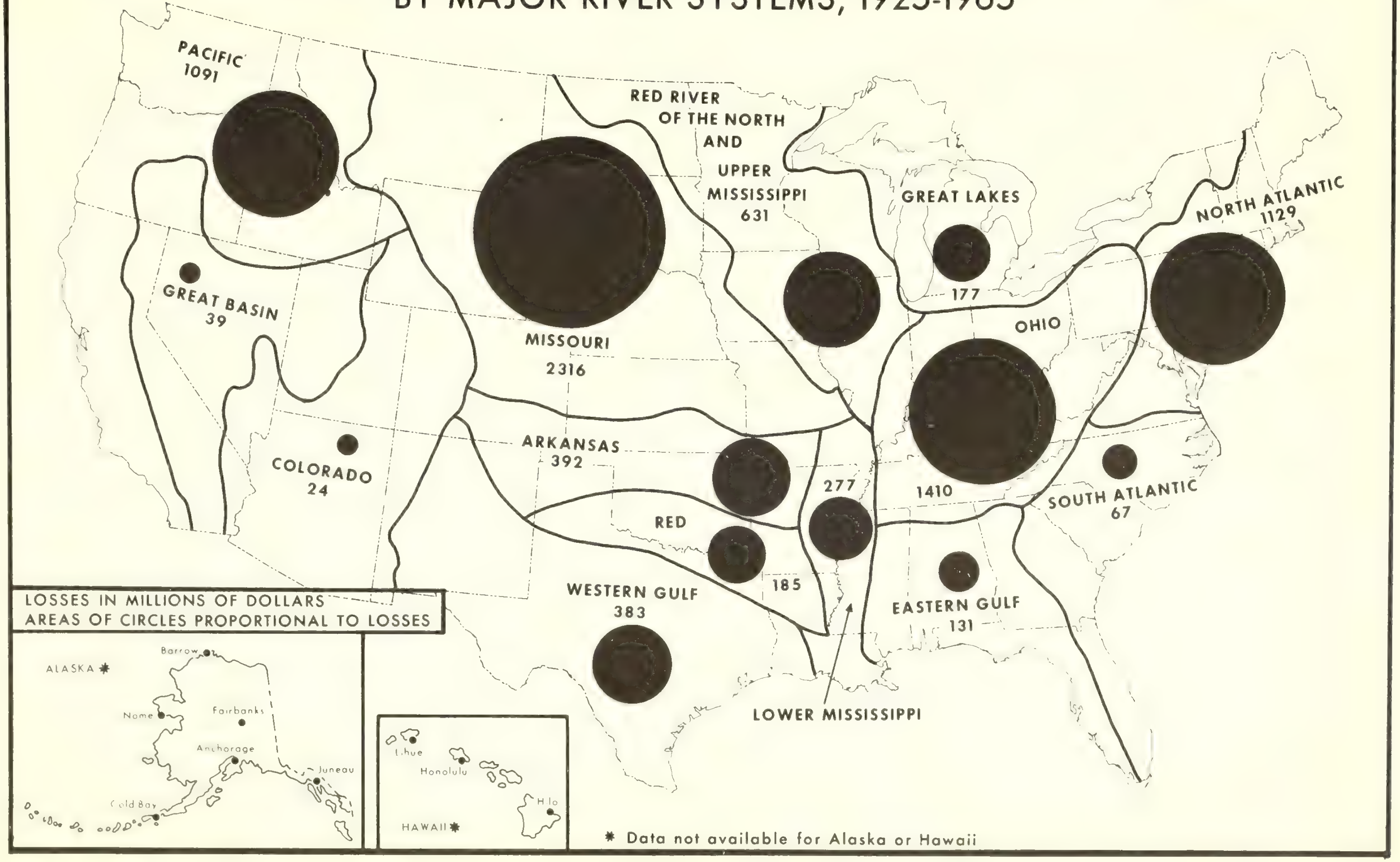
Property Losses in Thousands of Dollars
BY MONTHS AND YEARS, 1925-1965

	January		February		March		April		May		June	
Year	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life	Property	Life
1925	3,614	2	141	0	74	0	-	0	65	6	3,980	14
1926	19	0	600	0	77	0	293	0	-	0	-	1
1927	2,626	8	1,867	0	407	0	283,207	232	7,566	95	1,125	0
1928	4	0	9	0	758	0	1,168	0	105	0	12,296	1
1929	122	0	2,964	0	21,947	47	1,937	0	15,668	5	10,268	5
1930	7,110	0	7	0	146	0	-	0	5,021	14	3,042	0
1931	-	0	30	0	572	0	-	0	8	0	13	0
1932	1,207	0	-	0	165	0	373	0	1,552	0	1,245	0
1933	308	0	87	0	2,008	1	2,709	4	10,785	4	2,650	4
1934	5,002	45	9	0	706	0	1,693	34	-	0	899	0
1935	297	0	1	0	2,177	4	2,698	5	16,903	40	62,702	122
1936	341	0	2,107	6	145,936	24	124,743	82	1,118	5	124	0
1937	411,481	65	7,691	75	62	0	4,524	0	2,627	0	5,429	0
1938	260	0	3,712	2	27,819	86	3,008	0	12,402	0	3,624	58
1939	3	0	1,657	4	738	0	1,982	0	37	0	4,271	1
1940	58	0	7,246	0	1,048	2	2,185	0	438	0	2,790	12
1941	3	0	516	0	820	2	1,970	4	3,081	7	12,718	12
1942	131	0	1,901	1	327	0	18,369	2	14,837	31	25,586	1
1943	3,579	4	69	5	7,183	8	10,161	5	130,478	57	41,771	0
1944	3	0	35	1	2,633	3	42,646	13	24,103	0	24,535	16
1945	146	0	5,882	0	33,202	14	54,054	36	23,530	0	28,866	8
1946	13,385	0	4,015	0	631	0	2	0	12,587	12	20,343	3
1947	486	3	96	0	1,458	0	56,037	2	18,032	1	193,134	48
1948	6,479	6	11,429	1	17,896	4	28,667	15	107,244	35	22,160	15
1949	9,772	6	5,073	2	11,676	3	9,261	2	18,195	10	32,861	17
1950	4,619	3	6,925	7	3,451	7	14,668	0	51,126	21	22,340	34
1951	884	0	5,823	2	7,264	1	18,287	2	15,166	5	5,383	8
1952	9,139	14	926	1	1,909	5	199,127	10	6,438	3	22,775	2
1953	8,575	1	368	0	10,675	2	-	0	41,656	5	53,572	29
1954	2,554	4	84	0	20	0	557	0	6,213	1	52,076	20
1955	-	0	1,620	4	17,372	17	2,653	4	9,231	2	3,825	1
1956	9,455	0	2,731	3	3,403	2	1,202	0	24,799	10	2,300	4
1957	61,383	15	29,750	2	-	0	106,130	18	44,182	13	101,696	32
1958	273	0	12,501	11	11,193	0	21,145	3	24,884	2	67,537	0
1959	95,601	8	2,448	0	2,031	6	427	0	7,181	8	890	0
1960	534	1	713	2	29,988	4	28,056	0	2,214	3	9,956	13
1961	32	0	13,870	1	14,242	3	5,053	0	67,785	6	4,324	4
1962	884	0	24,906	9	28,418	3	8,920	0	1,893	0	2,265	2
1963	2,343	0	16,392	0	99,429	31	2	0	1,573	0	14,682	3
1964	787	0	15	0	97,945	14	16,763	1	1,313	0	71,666	37
1965	11,084	0	2,566	2	4,158	1	180,337	16	36,328	3	495,750	66
Total	674,583	190	178,782	141	611,964	298	1,255,004	503	768,364	406	1,447,469	593
Average	16,453	5	4,360	3	14,926	7	30,610	12	18,741	10	35,304	14

Year	July		August		September		October		November		December		* Total	
1925	140	0	275	0	1,171	14	380	0	83	0	-	0	9,923	36
1926	55	0	7	0	7,729	6	12,699	6	135	0	1,854	3	23,468	16
1927	241	0	3,460	0	-	0	1,627	0	45,093	88	437	0	347,656	423
1928	13,339	0	9,272	3	4,047	5	-	0	3,567	6	46	0	44,611	15
1929	4,959	32	130	0	92	0	9,379	0	556	0	76	0	68,098	89
1930	244	0	251	0	-	0	29	0	-	0	-	0	15,850	14
1931	1,215	0	201	0	2	0	1	0	744	0	22	0	2,808	0
1932	1,627	0	763	0	2,666	11	335	0	3	0	359	0	10,295	11
1933	1,117	0	6,516	4	489	0	10	0	-	0	10,000	16	36,679	33
1934	178	0	322	9	84	0	28	0	1,287	0	154	0	10,362	88
1935	29,370	52	159	5	7,551	0	2,691	0	61	0	2,517	8	127,127	236
1936	2,428	20	205	0	5,046	4	378	0	118	0	5	0	282,549	142
1937	124	2	760	0	140	0	256	0	97	0	7,546	0	440,738	142
1938	10,373	9	232	8	39,641	17	3	0	5	0	19	0	101,098	180
1939	1,725	78	3,408	0	13	0	-	0	-	0	-	0	13,834	83
1940	5,314	0	18,853	40	2,135	6	88	0	95	0	217	0	40,467	60
1941	314	0	23	0	6,247	15	10,446	7	3,361	0	25	0	39,524	47
1942	13,064	17	267	0	3,234	0	5,678	2	-	0	15,113	14	98,507	68
1943	2,870	3	3,621	25	-	0	-	0	-	0	-	0	199,732	107
1944	3,198	0	928	0	1,708	0	108	0	-	0	1,182	0	101,079	33
1945	8,280	3	2,942	13	1,059	3	1,424	3	-	0	6,413	11	165,798	91
1946	1,636	4	1,148	0	7,346	9	1,965	0	1,314	0	6,441	0	70,813	28
1947	652	1	1,431	0	455	0	248	0	5	0	304	0	272,328	55
1948	17,550	2	1,144	0	590	0	-	0	3,553	0	13,247	4	229,959	82
1949	3,762	5	568	0	618	0	1,551	2	578	1	16	0	93,931	48
1950	19,224	6	1,687	0	3,718	4	5,562	3	6,638	3	36,092	5	176,050	93
1951	972,458	25	2,509	7	621	0	-	0	-	0	346	0	1,028,741	51
1952	3,858	9	296	0	9,376	6	-	0	30	0	190	0	254,064	54
1953	3,873	1	1,926	2	887	0	42	0	300	0	330	0	122,204	40
1954	2,218	2	6,606	3	3,170	8	33,341	17	-	0	3	0	106,842	55
1955	1,071	0	712,085	193	3,471	0	52,442	18	1,168	0	190,553	63	995,491	302
1956	5,849	15	11,671	4	-	0	1,892	0	137	3	1,249	1	64,688	42
1957	4,669	0	722	2	335	0	2,663	0	8,610	0	163	0	360,303	82
1958	42,779	29	18,631	1	14,560	0	2,336	1	2,416	0	-	0	218,255	47
1959	557	0	5,550	0	1,844	0	19,602	3	4,970	0	154	0	141,255	25
1960	9,038	1	677	0	5,266	2	5,818	6	360	0	356	0	92,976	32
1961	5,825	25	3,974	6	26,041	7	580	0	1,641	0	10,666	0	154,033	52
1962	2,428	1	708	0	3,266	3	-	0	580	0	970	0	75,238	19
1963	4,261	4	36,926	1	38	0	-	0	-	0	-	0	175,646	39
1964	29	0	517	0	5,477	3	16,432	1	750	2	439,948	42	651,642	100
1965	24,705	17	193	0	9,652	0	894	0	--------	0	22,379	14	788,046	119
Total	1,226,618	363	861,564	326	179,785	123	190,928	69	88,255	103	769,392	181	8,252,708	3,279
Average	29,918	9	20,014	8	4,385	3	4,657	2	2,153	3	18,768	4	201,286	80

* Not adjusted to present price index

DISTRIBUTION OF ESTIMATED FLOOD LOSSES IN THE UNITED STATES BY MAJOR RIVER SYSTEMS, 1925-1965



LOSSES IN MILLIONS OF DOLLARS
AREAS OF CIRCLES PROPORTIONAL TO LOSSES

✱ Data not available for Alaska or Hawaii

LOSSES IN INDIVIDUAL SEVERE FLOODS IN THE UNITED STATES SINCE JULY 1902

Property Losses in Thousands of Dollars

Date	Location	Lives #	Property
May-June 1903	Kansas, Lower Missouri, and Upper Mississippi Rivers	100	$ 40,000
July 1908	Missouri River	---	9,339
	Upper Mississippi River	---	5,600
	Red River	---	16,200
July 1909	Missouri River east of Kansas City	---	5,500
March 1912	Lower Mississippi River	---	70,000
March 1913	Ohio River and tributaries	467	147,000
	Mississippi River	---	7,000
December 1913	Texas rivers	177	9,000
June 1915	Kansas River	---	5,950
August 1916	Rivers of the Carolinas	---	21,700
June 1921	Arkansas River in State of Colorado	120	25,000
September 1921	Texas rivers	215	19,000
April-May, 1922*	Upper Mississippi River	---	4,700
	Ohio Valley	---	4,000
	Lower Mississippi River	---	7,500
October 1923	Lower Arkansas, including the State of Oklahoma	---	15,000
March 1924	Potomac River	---	6,000
Spring of 1927	Mississippi Valley	313	284,118
August 1927	Arkansas River and tributaries	---	3,440
November 1927	New England rivers	88	45,578
June 1928	Ohio Valley	---	7,536
August 1928	South Atlantic drainage	---	4,400
September 1928	South Atlantic drainage	---	4,000
March-June 1929	East Gulf drainage	---	8,000
	Ohio Valley	---	16,500
	Missouri Valley	---	2,000
	Upper Mississippi Valley	---	3,600
	Lower Mississippi Valley	---	10,000
	Arkansas-White Valley	---	2,700
	Rivers in Texas	---	8,000
July 1929	Rivers in Central Kansas	---	4,000
October 1929	Rivers in Southeastern States	---	** 9,000
January 1930	White-Wabash Rivers	---	7,000
May 1930	Red River and tributaries	---	3,000
Sept.-Oct. 1932	Lower Rio Grande	---	2,500
March 1933	Ohio River	---	2,000
December 1933	Columbia River and tributaries	---	10,000
May 1935	Rivers in eastern Colorado	---	6,000
May-June 1935	Republican and Kansas Rivers	110	18,000
	Lower Missouri River	---	10,000
July 1935	Upper Susquehanna tributaries	52	26,000
December 1935	Houston, Texas, area	---	2,500
March-April 1936	Rivers in Eastern United States	107	270,000
July 1936	Rivers in central Texas	---	2,000
September 1936	Rivers in central and northern Texas	---	5,000
Jan.-Feb. 1937	Ohio and lower Mississippi River basins	137	417,685
December 1937	Sacramento Valley	---	7,100
March 1938	Streams in southern California	79	24,500
September 1938	Rivers in New England	---	37,000
July 1939	Licking and Kentucky Rivers	78	1,715
Feb.-Mar. 1940	Sacramento Valley	---	6,700
August 1940	Rivers in southern Virginia, the Carolinas, and eastern Tennessee	40	12,000
Oct.-Nov. 1941	Arkansas River Basin	---	8,500
April-June 1942	Upper Mississippi, Missouri, Arkansas, Red, and Trinity River Basins	---	44,350
May 1942	Delaware & Susquehanna River Basins	33	13,000
July 1942	Upper Allegheny River and Sennemahoning Creek Basins	15	10,000
Nov.-Dec. 1942	Willamette River	10	6,900
Dec.1942-Jan.1943	Ohio River	---	10,540
Apr.-June 1943	Maumee, Wabash, upper Mississippi, Missouri, White, and Arkansas River Basins	60	172,500
August 1943	Little Kanawha	23	1,300

LOSSES IN INDIVIDUAL SEVERE FLOODS IN THE UNITED STATES SINCE JULY 1902-Cont'd

Property Losses in Thousands of Dollars

Date	Location	Lives #	Property
April-June 1944	Upper Mississippi, Missouri, Arkansas, Red, lower Mississippi Basins and east Texas Streams	17	$ 82,000
Feb.-Mar. 1945	Ohio River	18	30,000
Feb.-Apr. 1945	Trinity and Sabine Rivers	---	9,000
Mar.-July 1945	Lower Mississippi River	---	9,500
July 1945	Lake Section of Rensselaer County, N. Y.	---	3,500
December 1945	Willamette River	9	6,000
January 1946	Cumberland River	---	3,925
	Tennessee River and tributaries	---	4,500
May-June 1946	Trinity River	---	4,150
September 1946	San Antonio and Nueces Rivers	9	6,050
December 1946	Willamette River	---	5,525
April 1947	Allegheny	---	4,319
May-July 1947	Rivers in Middle West in the lower Missouri and middle Mississippi River Basins	29	235,000
June 1947	East Creek at Rutland, Vt.	---	2,000
March 1948	Susquehanna River and tributaries	---	4,300
Apr.-May 1948	Red River of North and tributaries	---	18,700
May-June 1948	[1] Columbia Basin	35	101,725
June-July 1948	Arkansas River and minor tributaries	---	14,500
December 1948	Housatonic River	---	4,200
April 1949	Rio Grande	---	3,300
May 1949	Trinity River	10	14,000
June 1949	Shenandoah and Potomac Rivers	11	8,850
Apr.-May 1950	[2] Red River of North	9	33,000
June 1950	Central West Virginia	31	4,020
Nov.-Dec. 1950	Central Valleys of California and Western Nevada	---	23,000
February 1951	Western Washington	---	2,688
Mar.-Apr. 1951	Alabama-Georgia	---	3,292
April 1951	Upper Mississippi Basin	---	18,622
June-July 1951	[3] Kansas-Missouri	28	935,224
Jan.-Feb. 1952	Ohio River	---	1,898
April 1952	[4] Red River of the North-Upper Mississippi-Missouri River Basins	11	198,000
May 1952	Great Basin	---	8,373
September 1952	West Gulf of Mexico Drainage	---	7,762
January 1953	Northern California, Oregon, and Washington	---	5,971
March 1953	New England States	---	10,000
Apr.-May 1953	Louisiana-Texas	12	38,959
June 1953	Northwestern Iowa	14	32,950
June 1954	Middle Rio Grande and lower Pecos	16	19,079
October 1954	Pecos River in New Mexico	13	1,783
March 1955	Ohio Basin	15	14,396
August 1955	[5] Hurricane floods in Northeast	187	714,079
December 1955	[6] West Coast	61	154,532
May-June 1956	[7] Columbia and Kootenai Rivers	---	14,025
Jan.-Feb. 1957	[8] Streams in Southeastern Kentucky, Southwestern West Virginia, adjoining portions of Tennessee and Virginia	14	58,000
February 1957	Snake River and tributaries	---	20,500
Apr.-June 1957	Streams in Texas, Arkansas, Kansas, Louisiana, Missouri and Oklahoma	18	105,000
June-July 1957	Wabash River and tributaries	9	63,000
June 1958	White and Wabash Rivers	---	57,000
July 1958	Flash flood on East Nishnabotna River in Iowa	19	5,850
January 1959	Ohio River Basin	8	81,921
January 1959	Lake Erie Drainage in Ohio and New York	---	11,265

LOSSES IN INDIVIDUAL SEVERE FLOODS IN THE UNITED STATES SINCE JULY 1902-Cont'd

Property Losses in Thousands of Dollars

Date	Location	Lives #	Property
Mar.-Apr. 1960-----	[9]Snowmelt Floods in the Missouri and Upper Mississsippi Basins---------	7	$ 34,466
Feb.-March 1961-----	East Gulf of Mexico Drainage--------------	---	13,997
March 1961----------	Upper Mississippi Basin-------------------	---	7,499
July 1961-----------	Flash Flood on Small Streams in Charleston, W. Va.----------------------	22	3,238
September 1961------	Kansas-Missouri---------------------------	---	23,557
Feb.-March 1962-----	Kentucky----------------------------------	---	16,067
Feb.-March 1962-----	Southeastern Idaho------------------------	---	6,318
March 1963----------	Ohio River Basin--------------------------	26	97,600
June 1964-----------	Montana-----------------------------------	31	54,279
December 1964-------	California and Oregon---------------------	40	415,832
March 1964----------	Ohio River Basin--------------------------	13	81,602
March-May 1965------	[10]Upper Mississippi, Missouri, and Red of North Basins----------------------------	16	181,325
May 1965------------	Brazos River------------------------------	---	30,802
June 1965-----------	South Platte Basin------------------------	16	415,076
June 1965-----------	Sanderson, Texas Flash Flood--------------	26	2,715
June 1965-----------	Arkansas Basin----------------------------	16	58,340

# Loss of Life Carried Only Where Considerable
* No Lives Lost in Mississippi Valley Floods of 1922
** Partly Storm Damage Caused by Tropical Disturbance

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3. Technical Paper No. 17
4. Technical Paper No. 23
5. Technical Paper No. 26
6. Climatological Data, National Summary, December 1955
7. Climatological Data, National Summary, Annual 1956
8. Climatological Data, National Summary, January 1957
9. Technical Paper No. 45
10. Technical Report No. WB-3

FLOOD DAMAGE ESTIMATES BY STATES

1955-65

Flood Damages in Thousands of Dollars

States	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
Alabama	3,379	720	2,324	872	-	670	12,625	3,529	1,280	5,343	723
Alaska	-	*	-	-	-	-	**	***	-	-	-
Arizona	226	-	-	-	100	-	325	1,000	-	55	11,330
Arkansas	61	255	27,938	6,202	3,090	580	3,503	91	2,500	598	143
California	165,767	8,745	13	33,063	4	516	95	2,780	11,834	229,168	11,321
Colorado	2,567	5,135	2,901	240	-	-	-	80	50	-	452,293
Connecticut	379,360	-	-	-	-	750	-	-	-	-	-
Delaware	117	-	-	-	-	-	-	-	-	-	-
District of Columbia	-	51	-	60	-	-	-	-	-	-	-
Florida	105	1,891	-	-	150	12,047	317	1,481	-	426	144
Georgia	1	212	1,068	323	-	392	5,236	-	445	3,641	397
Hawaii	-	-	-	400	-	-	-	-	2,300	-	-
Idaho	1,371	6,222	20,896	3	500	-	939	8,112	2,766	11,704	4,184
Illinois	102	1,026	1,206	17,970	1,506	7,503	11,553	891	513	3,044	30,564
Indiana	1,003	4,021	66,748	52,302	12,958	2,649	13,306	670	8,266	12,327	20
Iowa	35	51	1,543	7,508	128	7,612	9,389	6,778	70	240	32,462
Kansas	474	33	9,164	4,606	4,061	1,947	13,397	1,826	168	370	29,792
Kentucky	6,629	568	55,233	3,817	2,480	3	12,969	16,885	36,917	35,476	1,044
Louisiana	30	-	4,147	2,842	-	112	6,074	1,908	-	30	-
Maine	-	-	-	-	61	-	800	-	-	-	-
Maryland	5,450	837	-	40	-	-	-	-	-	-	53
Massachusetts	155,982	-	-	-	-	6,400	-	-	-	-	-
Michigan	-	1,278	-	-	-	1,181	-	-	-	-	-
Minnesota	-	11	9,128	17	50	212	552	1,291	26	-	97,603
Mississippi	3,132	1,270	2,693	13,826	280	744	15,918	1,982	19	3,152	1,931
Missouri	666	167	9,618	38,718	6,018	13,506	27,375	557	152	6,591	33,976
Montana	63	317	33	1	82	57	-	147	148	54,389	253
Nebraska	1,500	865	5,983	3,064	3,753	8,884	674	2,630	13,394	5,146	1,368
Nevada	7,398	237	-	-	-	-	891	762	2,858	2,454	4
New Hampshire	-	-	-	-	4,500	100	-	-	-	-	-
New Jersey	23,102	-	-	3	-	-	-	-	-	-	-
New Mexico	1,066	-	-	-	-	-	-	-	620	1,235	4,833
New York	30,072	1,089	166	42	5,667	7,229	608	-	33,102	3,275	-
North Carolina	625	831	788	3,201	506	100	1,400	-	-	15,816	88
North Dakota	2	-	100	-	28	136	-	-	-	-	5,192
Ohio	753	1,056	7	4,867	54,840	191	1,217	6,512	22,359	28,039	-
Oklahoma	977	-	35,665	169	8,907	2,638	2,483	792	413	798	2,508
Oregon	9,515	6,376	310	363	20	360	757	1,550	299	187,101	5,679
Pennsylvania	141,381	7,199	1,048	3,582	21,109	3,072	612	15	5,397	16,938	-
Rhode Island	28,830	-	-	-	-	-	-	-	-	-	-
South Carolina	74	-	60	680	122	72	369	97	89	1,809	268
South Dakota	11	10	3,969	-	-	3,417	1	3,030	-	-	740
Tennessee	977	279	5,118	128	-	226	2,263	651	6,262	156	2,472
Texas	5,165	3,715	78,881	18,101	2,886	8,093	2,846	1,948	20	5,435	39,395
Utah	226	210	169	10	4	-	281	1,272	64	70	1,746
Vermont	-	-	3	-	-	-	-	-	-	692	-
Virginia	10,695	-	139	-	28	211	231	-	5,937	-	2
Washington	1,165	6,472	1,664	50	4,914	-	130	-	1,013	11,817	1,012
West Virginia	5,187	3,185	11,052	1,170	709	370	3,455	5,914	17,624	4,169	49
Wisconsin	50	335	-	-	1,791	996	1,442	57	142	-	14,067
Wyoming	200	11	526	3	-	-	-	-	899	138	390
TOTAL	995,491	64,688	360,303	218,255	141,255	92,976	154,033	75,238	177,946	651,642	788,046

* Major Flood in May 1956

** Major Flood in June 1961

*** Ice Jam Flooding May 1962

*** Serious Flooding June 1962

GENERAL SUMMARY OF RIVER AND FLOOD CONDITIONS
YEAR 1966

Elmer R. Nelson
Office of Hydrology, Weather Bureau

The most catastrophic floods during 1966, with respect to loss of life, were the flash floods in the Trinity and Sabine Basins in northeastern Texas during April. The American Red Cross reported that 27 lives were lost due to drowning in these floods. Flood damages were heavy and in excess of $15 million in the upper Trinity alone.

A special report is published in this issue on the record to near record floods of March to May in the Red River of the North Basin. The total flood damages in this basin were estimated at $12.3 million.

This report contains a brief summary by months of the most significant flooding during 1966. A detailed summary of flooding during 1966 appears in the monthly issues of this publication.

January

Damaging floods occurred along tributary streams in the White Basin in Arkansas. Flooding on the Black River was the most severe since 1927. Heavy damages occurred to public property and roads in Arkansas. Many families were evacuated. Extensive flooding occurred along the Cache River at Patterson, Ark. The damages to public and private property was the greatest in several years.

Major flooding occurred along northern California streams. In the north-west considerable damage resulted from the flooding along the Trinity, Smith, and Eel Rivers. Many families had to leave their homes.

February

The rise in the Upper Mississippi Basin was the highest of record. The Rock River at Joslin, Ill., exceeded the previous record crest of March 1948. The third highest crest of record occurred on the Mississippi River at Davenport, Iowa, due to an ice jam. Flood damage in the Quad City area was estimated at near $1 million.

Many streams in the East Gulf of Mexico Drainage reached the highest level since April 1964. The damages along the Alabama River were mostly agricultural and totalled close to $1 million. Flood damage along the Pearl River in Mississippi was limited to agriculture and to the stoppage of construction of highway and levee projects. The total damages equalled nearly $3/4 million.

March

Severe flooding in the Red River of the North Basin continued into April and May. The Sheyenne River reached a record crest at West Fargo, N. Dak. The Red River of the North at Halstad, Minn., reached a near record crest.

The main stem of the Mississippi reached a record high stage at Fort Ripley, Minn., exceeding the previous record stage of April 1965. Flooding elsewhere in the Upper Mississippi Basin was mostly minor in comparison to the spring of 1965.

In the East Gulf of Mexico Drainage, the Flint River in Georgia reached its highest stage in 18 to 36 years at various points. The Apalachicola River at Blountstown, Fla., reached its second highest stage of record.

April

Near record to record crests occurred in the Red River of the North Basin. At Grand Forks, N. Dak., the crest ranked among the third highest of record. At Drayton, N. Dak., the Red River of the North exceeded the previous record crest by 1.7 feet. The total damages from the near record to record spring flooding in the Red River of the North Basin was estimated at $12.3 million.

Severe flash flooding occurred in northeastern Texas in the Sabine and Trinity Basins. Joe's Creek at Dallas, Tex., crested 2 feet higher than the highest flood since 1900. Bachman Branch at Dallas crested 5 feet higher than the highest known flood. Preliminary estimates of flood damage in the upper Trinity are in excess of $15 million. The American Red Cross reported 27 deaths due to drowning from flash floods in the Sabine and Trinity River Basins in Texas.

The worst flooding since 1961 occurred in the White Basin in Arkansas. Severe flooding occurred in the Red Basin in Arkansas with the Ouachita and tributaries reaching their highest stage since 1958. The total preliminary damages were estimated at over $2.5 million.

May

Flash floods occurred in sections of Georgia, Illinois, and West Virginia. Extensive damage resulted to streets, roads, bridges, yards, and buildings along the Oconee River in the Athens, Ga., area. At Morris, Ill., the Aux Sable Creek flooded portions of the city to depths up to 3 to 4 feet. Flood damages along the West Fork, Cheat, and Tygart Rivers in West Virginia were minor.

The worst flooding since 1961, which began in the White Basin in Arkansas during April, continued into May. Severe flooding occurred on the Ouachita River and tributaries in Arkansas and on the Sabine and Trinity Rivers in Texas.

June

Damaging floods occurred along small creeks in southeastern Iowa, southwestern North Dakota, and south-central Nebraska. Crests ranking second to third highest were recorded in the Skunk River Basin in Iowa. The most serious flooding occurred on the North Skunk at Sigourney, Iowa, which crested nearly 8 feet above flood stage. This crest was the second highest of record. Sappa Creek at Stamford, Nebr., exceeded the previous highest stage of record reached in 1947 by nearly 2 feet.

Severe flash flooding occurred in the southwestern quadrant of North Dakota from excessive rains on June 24. About one-third of the population of Center, N. Dak., had to be evacuated. Big Muddy Creek flooded the entire town of Almont, N. Dak. The entire population was evacuated before the flood. The flash flooding of small creeks flowing into the Knife and Heart Rivers were considered as the most severe in history.

July

Flash flooding occurred in the extreme upper Frio

River and tributaries in Texas. Flood warnings were issued so that vacationers and other persons could be evacuated from low-lying areas.

August

Record to near record flooding occurred on streams in east-central Nebraska. Several communities reported severe damage. Water stood 17 feet deep in low places at Fullerton, Nebr. Preliminary estimates of damage were placed at over $2.2 million. There was no loss of life reported.

Major flooding occurred in southeastern New Mexico in the Pecos Basin. This flood approached the severity of the flood of October 1904, when the Avalon Dam, 5 miles upstream from Carlsbad failed. Property damage was heavy and hundreds of persons were evacuated. At least two lives were lost due to drowning. Three counties were declared disaster areas.

Severe flash flooding occurred in the Frio River Basin in Texas. The Dry Frio at Regan Wells, Tex., reached its highest stage since 1880. Five thousand persons, mostly campers were evacuated. There was no loss of life reported.

September

The most significant flooding occurred in the Rio Grande Basin in Texas. Heavy damages resulted to crops. Total damages were estimated at $1/2 million.

Severe flash flooding occurred on small streams in New Jersey. The Elizabeth River at Elizabeth, N. J., (drainage area 20.2 sq. mi.) reached its highest peak in 45 years of record. The city of Elizabeth was declared a disaster area.

October

Flash flooding occurred on small streams in New Jersey for the second consecutive month.

November

Flash floods occurred on small streams in Maine and northern New Hampshire during November. A record-breaking flood occurred on the Piscataquis River and moderate flooding on the Kennebec and Androscoggin Rivers in Maine. The total damages from flooding in Maine was estimated at $1/2 million.

December

Severe flooding occurred in southern California. Flooding along the Kaweah, Tule, and Kern Rivers was the highest of record. The peak flow of the Tule River at Success Dam was more than twice the previous record and on the Kern River at Isabella Reservoir about 2.5 times its previous record. The greatest devastation occurred above the dams. Many homes and several trailer courts were destroyed. Communities in the foothills were isolated and helicopter rescue and supply lines were established by the Military over a 2-day period. Streams in the Salinas Basin reached record heights. The crest at Bardley, Calif., was 3.5 feet higher than the previous record established in April 1958. Preliminary estimates of flood damage in southern California were placed at $20.5 million.

Major flooding occurred in northern Arizona, southern Nevada, and southwestern Utah. Flooding on the Virgin River was one of the largest floods on record. Preliminary estimates of flood damage were placed at nearly $5 million.

SOLAR RADIATION DATA

Average daily values (direct and diffuse) received on a horizontal surface, tabulated in langleys.

YEAR 1966

Station	January	February	March	April	May	June	July	August	September	October	November	December	Annual
ALBUQUERQUE N.M.	261	357	472	560	653	656	726	-	-	456	322	287	-
AMES IOWA	204	267	321	349	-	534	545	481	-	-	230	-	-
ANNETTE ALASKA	40	82	154	391	366	420	490	304	183	106	61	25	219
APALACHICOLA FLORIDA	243	305	468	522	471	568	535	485	414	349	342	242	412
ARGONNE NAT. LAB. ILL	178	205	274	325	494	503	510	452	345	283	140	106	318
ASTORIA OREGON	70	128	215	384	548	510	452	494	341	205	101	52	292
ATLANTA GEORGIA	194	247	452	458	482	581	477	452	394	313	236	203	374
BARROW ALASKA	# 1	-	185	404	564	604	400	359	-	31	3	# -	# -
BETHEL ALASKA	26	82	277	460	403	441	326	264	202	110	36	17	220
BISMARCK N.DAK.	159	266	340	370	540	571	533	447	372	259	150	115	344
BLUE HILL MASS.	156	-	336	392	476	529	574	478	379	283	170	143	-
BOISE IDAHO	148	231	371	525	607	661	684	561	448	319	157	129	403
BOSTON MASSACHUSETTS	147	-	350	378	462	499	543	488	369	269	161	131	-
BROWNSVILLE TEXAS	279	270	446	459	526	603	642	631	540	420	373	290	457
CANTON ISLAND P.I.	-	577	591	584	563	532	478	611	657	652	633	631	-
CAPE HATTERAS N.C.	203	289	426	472	441	542	540	446	448	336	275	184	384
CARIBOU MAINE	133	239	311	444	498	505	498	383	333	170	100	94	309
CHARLESTON S.C.	224	276	460	495	436	532	532	499	443	381	325	217	402
CLEVELAND OHIO	140	184	300	348	532	584	542	438	350	249	104	90	322
COLUMBIA MISSOURI	196	265	344	360	524	524	558	481	370	334	208	151	360
DAVIS CALIFORNIA	216	300	441	598	895	-	718	635	522	384	204	126	-
DODGE CITY KANSAS	238	312	441	445	578	620	590	491	457	387	260	-	-
EL CENTRO CALIF. NPF	250	-	413	526	568	575	522	487	436	347	267	230	-
EL PASO TEXAS	347	455	575	678	727	706	735	607	559	487	363	338	548
ELY NEVADA	265	336	457	584	644	673	658	540	481	386	-	-	-
EPPLEY NEWPORT R.I.	166	253	338	387	443	-	559	435	351	280	174	140	-
FAIRBANKS ALASKA	-	87	228	435	462	600	524	356	228	92	33	4	-
FORT WORTH TEXAS	232	329	441	453	553	638	605	498	421	396	295	-	-
FLAMING GORGE UTAH	-	-	-	-	-	-	-	509	390	293	191	-	-
FRESNO CALIFORNIA	221	308	447	592	629	686	681	621	491	362	217	99	446
GAINESVILLE FLORIDA	285	354	523	539	484	526	530	503	423	364	367	-	-
GLASGOW MONTANA	154	281	382	455	543	594	551	515	395	256	154	103	365
GRAND JUNCTION COLO.	260	332	457	585	664	702	666	617	516	384	256	213	471
GREAT FALLS MONTANA	123	211	333	355	500	501	565	449	344	200	129	94	320
GREENSBORO N.C.	234	249	417	382	474	573	532	442	368	318	235	185	367
GRIFFIN EXP.STA.GA.	195	239	-	-	-	-	-	-	-	-	-	-	-
INDIANAPOLIS INDIANA	196	232	327	370	539	-	584	525	379	326	163	123	-
INYOKERN CALIFORNIA	339	422	599	791	850	860	864	757	-		288	253	-
ITHACA NEW YORK	115	190	269	324	396	525	487	408	271	198	91	76	279
LAKE CHARLES LA.	172	294	381	433	442	586	515	454	431	381	287	190	381
LAKELAND FLORIDA	273	358	486	544	571	569	621	527	454	419	-	303	-
LANDER WYOMING	225	348	462	515	621	606	594	550	417	360	229	183	426
LARAMIE WYOMING	249	353	525	-	497	546	548	520	520	-	194	167	-
E. LANSING MICHIGAN	153	198	278	339	531	569	544	436	394	283	111	105	328
LAS VEGAS NEVADA	294	381	491	670	711	715	691	653	526	425	297	225	507
LITTLE ROCK ARKANSAS	191	265	429	388	-	593	557	451	-	336	225	-	-
LOS ANGELES, CALIF.	303	373	406	514	489	617	662	598	443	368	243	234	438
LOS ANGELES CALIF.U	278	302	293		482	628	665	602	477	381	248	255	-
MADISON WISCONSIN	216	261	317	392	550	569	539	484	398	291	150	130	358
MANHATTAN KANSAS	230	300	423	349	554	473	552	479	363	335	211	182	371
MATANUSKA ALASKA	32	94	231	385	432	478	419	260	226	92	40	20	226
MAUNA LOA OB.HAWAII	547	512	668	746	-	-	-	-	-	-	-	-	-
MEDFORD OREGON	117	235	363	541	603	664	631	590	453	326	140	97	397
MIAMI FLORIDA	295	423	481	-	540	425	550	-	-	-	-	-	-
MIDLAND TEXAS	292	395	531	527	586	649	651	525	454	418	334	299	472
NEW YORK N.Y. U	157	229	335	336	455	520	556	453	308	274	168	130	327
NASHVILLE TENNESSEE	199	230	419	386	547	597	533	464	358	354	210	153	371
NORTH OMAHA NEBRASKA	232	332	424	411	624	61[illegible]	609	559	422	349	221	169	414
OAK RIDGE TENNESSEE	-	-	-	370	532	595	518	455	349	350	175	151	-
OKLAHOMA CITY OKLA.	2[illegible]7	270	395	393	524	534	490	416	337	329	245	189	361
PAGE ARIZONA	-	310	-	532	578	585	551	482	438	342	244	203	-
PHOENIX ARIZONA	259	337	427	557	625	625	562	533	427	379	289	230	438
PORTLAND MAINE	159	267	326	383	477	511	527	449	377	270	-	132	-
PROSSER WASHINGTON	113	214	362	552	620	650	662	576	444	235	140	88	388
PULLMAN WASHINGTON	118	199	318	456	552	549	631	540	386	-	-	-	-
RAPID CITY S.DAK.	143	242	341	388	498	504	507	427	352	260	163	136	330
RENO NEVADA	214	268	419	572	605	587	661	571	460	355	211	145	422
RICHLAND 25 NW WASH.	107	203	348	507	580	588	611	529	392	251	130	79	360
RIVERSIDE CALIFORNIA	-	-	465	509	513	640	661	595	477	367	236	222	-
RUSTON LOUISIANA	196	257	387	377	-	527	519	445	339	334	249	-	-
SAN ANTONIO TEXAS	-	333	374	434	448	570	618	489	462	400	340	251	-
SAULT STE MARIE MICH	-	208	291	-	574	584	588	395	349	201	67	104	-
SAINT CLOUD MINN.	184	273	295	371	557	556	599	450	392	248	163	-	-
SALT LAKE CITY	-	-	-	-	-	-	-	593	452	380	207	135	-
SALT LAKE CITY ASR	198	289	437	582	-	723	688	620	-	-	-	-	-
SANTA MARIA CALIF.	266	328	436	495	506	635	615	550	437	342	219	213	420
SEATTLE TACOMA WASH.	73	151	271	402	551	549	525	499	353	196	93	47	309
SEATTLE WASH. UNIV.	62	140	248	338	474	494	508	457	319	187	76	41	279
SPOKANE WASHINGTON	95	170	310	473	573	-	659	547	410	255	122	65	-
STATE COLLEGE PENN.	149	228	332	312	482	620	585	471	314	290	154	129	339
STILLWATER OKLAHOMA	189	250	406	402	554	573	-	-	-	-	-	202	-
STERLING VIRGINA	197	261	379	319	550	593	556	456	330	345	218	176	365
SWAN ISLAND W.I.	415	468	522	558	581	442	641	568	568	459	393	386	510
TAMPA FLORIDA	282	371	497	568	614	543	521	592	409	415	362	227	450
TUCSON ARIZONA	298	344	475	605	663	646	599	561	462	433	331	277	475
WAKE ISLAND,PACIFIC	354	405	505	554	526	563	-	470	422	395	335	321	-

Note: Langley is the unit to denote one gram calorie per square centimeter.
(U) Indicates Urban sites.
# Sun below horizon November 19 through January 23, inclusive.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

YEAR 1966

Station	Day of month																															Mean O_3
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Bismarck, N. Dak. †																																
Jan. 1966	20387	00386	20426	20335	-----	36366	35387	35317	00416	34383	35393	00393	35380	35354	36370	00445	00400	00334	36358	00436	00438	00409	35439	20496	00454	36402	35362	00425	00407	00392	00400	396
Feb.	00398	36389	34399	35362	34362	00363	36371	35377	05425	36429	00421	00386	00477	00549	00550	00514	36450	03455	00414	36429	03407	00408	06422	00417	07410	04404	00423	00427				423
Mar.	05408	05423	-----	-----	00446	00360	05367	00440	02401	00402	00372	00386	00329	00354	00374	00354	35396	06423	00376	00390	00415	00434	00460	00403	04484	06447	00425	00366	00391	00355	00407	400
Apr.	00371	05405	05420	05428	05465	00486	05436	06428	00364	06409	07434	04426	07447	00430	00377	00343	00413	04388	05403	00485	00420	00416	00387	05357	05336	05415	04442	05432	00448	00447		415
May	06413	00400	00367	00373	00380	00363	05403	00391	00394	05372	06423	06440	05372	06375	05427	00404	00423	06417	05438	05393	00341	00368	06469	00361	00355	00344	00367	00353	00368	00368	03348	387
Jun.	00343	00380	00360	05359	00376	05403	00355	00366	00420	00352	06370	00384	06383	00382	00430	00406	00389	00364	00371	00337	05334	04346	00375	35373	00346	00339	00363	00335	05315	00354		367
Jul.	00321	05323	00318	00324	00343	00358	00341	00327	00307	00324	05343	00321	00323	00316	00328	00309	06306	06313	00324	00330	00331	00335	00347	05324	00321	00327	00334	05314	00355	00323	00328	327
Aug.	00335	00334	00325	04322	05315	05322	00347	00373	05348	00353	00324	05346	00333	00332	00321	00331	00313	06301	00328	05351	06390	05354	03350	00309	00304	00312	00320	00309	00310	00314	04303	330
Sep.	00307	04297	00307	00311	00311	00302	00309	00305	02299	00281	00285	00297	00302	00292	05285	06311	00308	00303	00284	00280	00276	00276	00290	04287	00301	05316	00297	00295	05332	00333		299
Oct.	03308	05317	05313	06307	00285	00284	00291	05298	00360	00304	00297	00297	06357	00337	00319	02346	00307	00373	04310	00319	00356	00376	00351	00300	00281	00300	00254	00292	00304	00326	05367	317
Nov.	02373	00336	00380	06402	04310	05335	00266	04296	00265	05320	05339	35322	00313	20296	35306	35301	20281	34395	00322	03304	00365	00339	04358	02351	05329	05357	00351	02313	05334	36401		330
Dec.	20381	02376	34345	00363	35361	00340	35333	36385	05426	00348	00339	33314	20320	36311	20328	36288	20321	35324	20333	35377	35340	20348	36363	36375	20391	20406	20425	35411	-----	05419	36403	360
Caribou, Maine																																
Jan. 1966	34329	00314	-----	00420	-----	-----	32395	-----	00405	36367	-----	02438	02387	32445	00401	-----	35413	35397	35401	-----	00382	00368	00381	34374	34433	00458	35406	-----	-----	-----	-----	396
Feb.	35565	05459	05420	06458	-----	00423	36433	00426	00388	35331	35380	04443	05379	04369	00432	00440	00471	08550	-----	-----	-----	00473	04497	05532	04472	-----	00417	00385				441
Mar.	-----	06430	00362	00344	05397	-----	05413	02435	05418	04453	00484	00445	05441	00452	00531	00438	00382	03409	00386	05438	-----	04420	00404	00366	05404	06509	-----	06515	05557	00553	-----	438
Apr.	05519	00478	02458	05516	06464	00477	00471	03480	05499	03475	06496	05465	05462	00467	00500	00500	00499	05469	00410	00378	00360	00362	00425	05401	05387	00458	00444	00379	04383	00405		450
May	05457	00467	00478	-----	05421	05464	06540	06513	06433	06456	00511	00454	05427	00410	00383	00397	00424	05400	04399	05355	05418	03408	00407	00367	05388	00374	00390	06371	05430	00402	05395	425
Jun.	00433	05426	00356	05423	05347	-----	05366	05380	00393	05369	00422	00354	00326	05334	00334	05386	00383	05425	00388	00382	00399	00357	05396	00364	05355	05367	05376	00376	00366	00365		378
Jul.	00388	05327	05320	00354	00371	05355	05356	00393	00398	05374	05419	00380	05366	00405	06419	00386	00362	05371	05361	05400	00404	05405	05342	00341	00372	00365	00371	05360	05406	06381	00362	375
Aug.	00361	04363	05365	05374	00359	00359	05442	00334	05361	05340	05336	06349	05355	00351	00345	04389	05391	00335	02326	00337	04331	00317	-----	06339	06340	-----	05339	06349	05333	06350	00346	352
Sep.	00338	-----	00327	05341	05344	00350	00363	00321	00320	00321	06377	00352	00338	03325	05340	00349	00348	00332	00353	00355	00329	05364	-----	05388	05381	05373	00363	03366	05343	-----		348
Oct.	05342	05373	00363	04343	00352	05355	05340	05325	05357	05327	05330	05391	00322	03312	00286	-----	04317	05327	05282	00329	-----	00310	05316	05320	00363	00326	05293	05305	05321	02379	00339	333
Nov.	05348	-----	-----	00293	00346	05361	00346	05356	05314	37283	00279	35292	05311	05313	-----	00327	-----	-----	02366	00270	-----	-----	-----	35343	35335	37348	35343	35334	35303	02348		325
Dec.	35338	35379	00421	00339	00356	34418	35481	-----	35381	35307	35312	32314	32320	35324	00350	35325	35341	-----	00345	35345	02354	-----	-----	00368	-----	-----	-----	35450	-----	36448	00396	366
Canton Island																																
Jan.- Jun. 1965	Missing																															
Jul.	00228	00233	00235	00236	00246	-----	00232	-----	00232	00225	00229	00223	-----	-----	-----	-----	-----	-----	-----	00229	-----	-----	00230	00229	00226	00227	-----	-----	-----	-----	-----	231
Aug.	00225	00226	-----	-----	-----	-----	-----	-----	00243	00238	-----	-----	-----	-----	00231	-----	-----	-----	-----	-----	-----	00237	00255	-----	-----	-----	-----	-----	-----	-----	-----	236
Sep.	00227	00228	00243	00236	00241	00238	-----	-----	-----	-----	00243	00238	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	237
Oct.- Dec.	Missing																															
Canton Island																																
Jan.- Mar. 1966	Missing																															
Apr.	05201	-----	-----	00249	00251	00209	00297	00255	00262	00259	-----	-----	-----	-----	00253	05234	00250	00256	00245	00253	00251	00252	00253	-----	-----	00251	00251	00255	00253	00253		250
May	00256	00253	00251	00258	05243	00253	00259	00261	00257	00259	00260	00261	00254	04244	00262	00257	00256	00268	00270	05244	00266	00263	00261	00257	00258	00259	00258	00245	00263	06260	00265	258
Jun.	00269	00276	00267	00260	-----	00260	00266	00266	00265	00263	00264	00265	00262	00262	06251	00266	00273	00272	00272	00265	00266	00270	00267	00269	00269	00266	00272	00268	05264	06265		266
Jul.	-----	-----	05239	00272	00273	00272	05267	06277	06268	-----	00279	00278	00277	00275	00239	-----	00271	-----	-----	-----	06270	-----	00274	00285	-----	00274	00277	00277	00274	00277	00271	271
Aug.	00279	00279	00278	00275	00275	00278	00282	00279	00276	00276	00282	00285	00279	00273	00281	00291	00273	00278	00277	00292	00293	00279	00279	00292	00281	00279	00296	00285	-----	-----	-----	281
Green Bay, Wis. *																																
Jan. 1966	00304	37332	00359	00380	00331	00388	00368	00413	35355	00398	00392	-----	00401	00396	00354	00353	00451	00408	05373	06342	00366	06463	00418	00426	06504	06434	00399	00388	00487	05521	00450	398
Feb.	06423	36436	-----	00400	00362	03388	04377	-----	05364	04384	05445	00395	05375	00437	00469	00528	00468	00419	00487	00451	00438	04462	06492	00487	00479	00418	00412	04459				433
Mar.	00427	03345	05379	00430	05488	00459	00454	05418	00434	06414	07412	04394	00396	00347	00404	00374	00355	05437	04414	04394	04383	04412	06491	06517	03491	00502	00533	00471	00455	00494	00387	429
Apr.	06464	05450	00451	04443	00499	05502	06479	00485	05498	00425	00396	00393	00387	00413	00475	00414	00393	04395	05393	05371	00387	00383	05410	00392	00370	05395	03361	00399	00406	00407		421
May	00431	03460	00502	00405	00395	00426	04428	00433	00487	00436	06501	03394	06434	04403	04424	00409	00404	00443	00453	00437	00427	00361	05364	00389	00378	00374	00416	00408	00480	00489	00409	426
Jun.	00406	00366	00339	00348	00356	00391	00381	00372	06400	00366	05375	05415	00369	00428	04404	00430	00428	00425	00398	00379	05350	00357	00350	00349	00351	00354	00349	00369	00347	00343		377
Jul.	00347	00350	00340	05348	04327	00368	00401	02369	00359	00349	00341	04355	00342	00338	00329	00346	00344	00345	00347	00370	00374	00359	00353	00359	00352	04334	00332	00347	00373	00365	00353	352
Aug.	04389	00353	00351	00363	00356	00343	04353	05381	00387	05368	05380	00340	00342	02334	03347	00338	00343	00341	00330	00334	-----	00336	00364	00357	00323	00338	00342	00342	00331	00342	00331	349
Sep.	00325	06349	04362	00346	00380	00364	00350	00341	00328	00325	00314	00323	00325	00321	00333	00332	00336	05360	00345	00342	04331	00326	00318	02324	00345	00347	00333	00338	05361	00386		340
Oct.	00365	04343	03337	00326	00319	00311	00317	00324	00329	00394	00332	00326	06382	04319	06377	00319	00335	05395	00367	00348	00324	00342	00364	00387	00339	00293	00305	00311	00333	05346	04370	341
Nov.	06359	00404	-----	00391	04400	03342	05353	04308	05312	04297	04309	00318	04324	00312	04307	03308	05300	00319	04334	04329	00306	06345	06345	06339	05367	05339	06348	05370	00354	00355		338
Dec.	00440	00404	00372	34361	34364	36369	35332	-----	35328	36379	00332	00337	00333	00332	00304	35332	00332	00353	-----	35371	00344	00363	00394	00407	00428	00383	00397	-----	00442	33428	36441	372
Tallahassee, Fla.																																
Jan. 1966	04260	03260	04290	04279	06303	04271	00294	00310	00296	00296	00301	00304	02322	05330	05309	00300	00311	00313	02310	05324	05325	04328	00318	05296	04327	04328	00314	00310	05351	00318	00305	307
Feb.	05289	00300	00299	00316	00330	00315	00309	00321	06286	05272	-----	04317	00291	05262	03273	05266	04255	-----	03326	00314	00306	00314	05323	04291	00294	-----	-----	00312				299
Mar.	00280	02263	05252	05270	00288	00337	00329	02319	00307	00315	00309	00330	00339	05345	00318	05345	00329	00311	03380	00335	00306	00291	05329	00341	00328	03344	00323	00330	02362	02348	00348	321
Apr.	00342	00334	00313	05333	00307	00327	00326	00318	02323	00375	00325	00321	00321	04332	05357	00349	00338	00334	05339	00320	00313	00315	05317	02321	00305	00304	00318	00319	00329	03318		326
May	00307	00307	04301	00310	05344	04338	-----	-----	02368	00351	02321	02319	05319	00318	00327	00348	00351	00330	06322	06305	36301	03324	00332	06380	06379	00348	00357	-----	32328	00325	00334	332
Jun.	00342	00348	00351	00346	00331	00335	00331	04311	-----	00324	00321	-----	06333	05307	00327	00317	04329	05365	32318	06350	03333	03316	00345	00353	33375	00353	00357	00360	00351	00350		339
Jul.	04340	00335	05321	32319	00334	00323	00315	00311	00316	-----	00326	02332	00318	04380	00315	00318	00321	00322	00319	05336	00324	00351	-----	-----	-----	02331	00322	00318	00315	34330	00320	327
Aug.	00342	00323	00314	05325	34322	35323	34314	05288	04307	05300	00309	00311	00301	36288	00303	00308	00311	00318	00311	00310	00311	00305	00310	00318	-----	00294	00311	00308	00309	00301	00296	310
Sep.	00300	00306	00316	00303	00301	04315	00302	00291	00295	04293	02309	05293	00299	00301	02310	02299	-----	-----	00283	00287	00308	00329	00295	00295	00285	00286	00287	05286	00289	00283		298
Oct.	05267	05265	02273	00269	00273	00269	03268	05286	05262	-----	00273	00276	05268	05261	00277	00277	00274	00271	00279	00284	04311	02283	00265	05281	05275	00285	00279	00280	00280	00282	00296	276
Nov.	02295	05344	00289	00264	00251	00258	00269	00269	02286	06274	00258	05269	05277	00286	00285	00286	00280	00278	00275	05297	00287	00257	00260	00256	00243	04237	06257	00281	00294	00271		274
Dec.	00282	00283	-----	00277	00270	00276	00288	00275	06264	05276	05223	05277	05278	00255	00258	00270	05290	00300	00321	00310	00288	04290	05326	00307	05346	00297	00284	05273	03273	04265	-----	284

* May to September are corrected values, superseding previously published data.

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code ʌ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

YEAR 1966

Station	Day of month																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Mean O_3
Albuquerque, N. Mex.																																
Jan. 1966	02287	00326	00300	00315	00284	00303	00243	05251	00286	02293	04288	00312	00340	00319	00356	02343	00303	05288	00302	00342	06359	00329	00364	00370	00389	00312	00354	00320	00291	00290	05372	317
Feb.	00303	00324	00295	00269	00285	00295	05318	00361	02389	00392	00385	00293	06304	00321	00385	00388	00380	00347	00347	00342	00345	00342	00313	02334	05368	05404	00302	00339				341
Mar.	05312	00335	00388	00346	00308	00316	00306	00331	05308	04313	00349	00328	00259	00323	02318	00293	00325	00312	02296	05270	00316	00350	00333	05333	00354	00346	00332	05343	00336	00323	00318	323
Apr.	00301	00302	00317	00317	00339	00312	00317	05347	05332	00329	00342	00373	00388	00376	00346	00374	00317	05338	00338	00335	05329	06343	00301	05347	00324	00310	00331	00337	00314	05319		333
May	00311	00301	00327	00334	00305	00308	00325	00317	00301	05292	00319	06317	00327	00300	00296	00284	00282	00300	00321	00326	00317	00299	00315	00314	00318	00336	00334	00304	00303	05286	06279	310
Jun.	06312	00288	00290	00289	00303	05317	00292	00294	05295	05308	00305	00297	00301	00299	00302	05254	00301	00312	00308	05308	00335	00299	00292	00298	00299	00285	00286	00288	05278	00283		297
Jul.	00280	00302	00283	00289	00289	00288	00298	00286	00285	-----	06287	06288	00302	00291	00290	00293	00300	00290	00288	03286	00299	00305	02309	00298	00301	06291	02288	05293	02298	02298	00309	293
Aug.	00304	00309	00309	00298	00297	00285	00293	02286	06279	00288	00293	00298	00296	00284	00280	00277	00278	00275	00286	06283	00313	00288	00296	00291	00288	00291	00294	00292	00290	00289	05259	290
Sep.	02229	00231	00237	00232	00239	00236	00239	00235	00232	00238	06248	00223	05223	05245	00253	00245	00249	00257	00242	00222	00227	00229	00235	00235	00254	00240	06241	00234	05235	00248		238
Oct.	00291	06270	06258	00271	06269	00250	00269	00257	00266	00269	00266	00264	00263	00278	00264	00266	00300	00289	00286	05269	05275	00287	00275	00274	00270	00274	00274	03265	00272	00282	00268	272
Nov.	00280	00275	05277	00284	00296	00268	05272	00282	00317	00268	00283	00265	00248	00261	02250	05249	05250	00252	05251	00243	05245	05254	05260	05256	06282	00265	00259	00265	00269	00277		267
Dec.	00280	05263	05263	00290	05279	00278	00286	00294	00298	00291	00293	00279	00303	00291	00291	00265	00269	00292	00260	00272	05272	00296	00282	05289	00331	05327	00357	00306	00319	00341	00338	293
Mauna Loa, Hawaii																																
Jan. 1966	-----	00253	00258	00255	00252	00249	00246	00254	00257	00253	00247	00239	00249	00249	00256	00255	00255	00251	00263	05276	05288	00264	00253	00237	00244	00235	00246	00249	00252	00246	00238	252
Feb.	00240	00244	00252	00249	05232	06243	-----	05257	00267	00257	00257	00264	00255	05252	04245	06283	00267	00264	04252	-----	00243	00241	05225	00242	-----	-----	00248	00244				251
Mar.	04236	06259	00258	00260	00254	00250	00257	00248	04235	05240	00268	00272	00270	00270	00262	00264	00261	00271	05261	00263	00287	00275	00270	00271	00276	00267	00271	00265	00263	00271	00301	264
Apr.	00265	00262	00288	00284	00281	00283	00295	00293	00280	-----	00267	04266	00279	00279	00278	00285	00297	00281	00291	00305	00295	00279	00278	00302	00296	00291	00293	-----	00298	00310		286
May	-----	05281	00304	00296	00295	00277	00273	-----	00268	00267	00276	-----	00277	00274	-----	00310	00326	00300	-----	00278	06265	-----	00284	00285	00288	-----	-----	00283	-----	05281	02260	284
Jun.	00283	-----	00310	00304	-----	00295	00288	00278	-----	00274	00281	-----	00294	00296	00305	00306	00300	05270	-----	05265	00272	00274	00271	00280	00277	00279	00281	00290	00274	00277		285
Jul.	00286	00284	-----	00269	00284	00281	00282	00277	00280	-----	-----	00287	00283	02262	00284	00296	-----	00282	00285	00288	00286	00293	00289	-----	00294	05275	00288	-----	06271	05260	-----	282
Aug.	00282	00280	00280	00285	00282	00271	-----	06294	00291	00285	00283	00285	00286	00294	00283	00288	-----	00283	00296	00292	-----	05283	05275	00287	00290	05326	06277	-----	00281	00283	00290	286
Sep.	00285	00279	-----	-----	00271	00277	00280	00280	00283	06271	-----	02274	00279	00279	00280	00284	-----	-----	00286	00283	00287	06257	06252	05264	-----	05277	05280	05274	00276	00271		276
Oct.	00268	-----	00273	00273	00266	05250	00280	00281	-----	06263	05269	00277	05262	05264	00273	-----	05266	-----	05269	00266	05266	00269	-----	00276	00273	00267	00266	00258	00258	-----	00261	268
Nov.	00279	00264	05238	05297	05273	-----	00268	00279	00277	00281	00269	00270	00267	00273	00273	00266	00262	00271	00261	-----	05250	05249	05254	-----	00302	00278	-----	00272	00274	00266		270
Dec.	00260	00254	00251	-----	00254	00257	05265	-----	00258	00257	-----	00257	00249	00257	00262	00261	00257	-----	00263	00254	00254	00268	00269	00257	-----	00260	00270	00278	-----	-----	00261	260
Sterling, Va.																																
Jan. 1966	05283	-----	05283	00292	04307	-----	03354	00383	00309	00299	00360	00343	06361	00367	04314	00348	00362	-----	00382	00341	04346	00380	00371	00384	04351	00397	00383	00362	-----	-----	-----	346
Feb.	-----	06357	00350	06394	00410	03375	04381	-----	04363	04300	-----	00324	00350	03305	04300	06338	00318	00330	00374	00370	00412	00405	00404	-----	00429	00447	00366	-----				365
Mar.	00381	00340	00320	05303	00319	02415	00401	00392	00351	00393	04407	00372	00364	05385	05344	00362	00369	00350	00394	00399	00351	00313	00331	06425	00447	00403	00487	00542	00462	00481	06563	392
Apr.	00396	05492	04407	05407	00374	05450	00437	-----	00458	05484	00414	05472	05484	06391	00440	00467	00425	04410	05362	00350	00314	05380	05413	05348	00374	04328	06383	05367	04419	06375		408
May	03360	05361	00373	00399	00385	00394	00418	00421	05422	00450	00379	05346	06338	05377	00377	00385	00375	06353	06368	00354	00376	00380	00360	00366	05395	00374	35371	00362	00368	00361	00406	379
Jun.	06441	00395	00340	00355	00343	00340	05347	00349	00343	00342	00342	00345	00341	34341	00377	00342	00355	05375	00390	00372	00361	00348	00358	00365	00354	00353	00369	04398	00337	03367		360
Jul.	00358	00343	00324	00342	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	00327	00352	00321	00349	00349	00379	00361	-----	00327	00328	00322	00344	04340	04331	05379	00345	343
Aug.	00351	05359	00339	00355	04369	00342	04336	00312	00318	00321	00319	00326	00322	00336	00328	00320	00329	00329	00322	00334	00329	00316	03306	00307	34318	00327	00339	00326	04353	00335	00332	331
Sep.	00318	00330	00319	05333	00316	00329	00342	00351	00327	00311	00326	00318	04324	-----	00305	00319	00300	00308	04306	-----	-----	00325	00309	00313	05317	05321	-----	-----	-----	00302		320
Oct.	-----	00313	00311	00294	-----	00315	00301	-----	-----	00300	00293	00294	00318	00294	00281	00291	-----	-----	-----	00306	00291	00278	00281	-----	-----	-----	-----	00270	00291	00312	00313	297
Nov.	00315	07311	00336	00307	00290	00323	00316	00308	05300	05312	00294	05291	00284	00295	00295	00296	00287	05276	05344	00301	00312	00316	00305	00295	04288	00302	05296	-----	00356	00310		306
Dec.	04327	04337	00380	00328	04301	05329	05295	00284	00268	05266	00271	00277	-----	05313	00325	00311	00310	00304	00327	-----	00331	00309	05334	-----	00384	00339	00355	-----	00335	00322	00335	318
Fairbanks, Alaska																																
Jan. 1966	Missing																															
Feb.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	02375	02341	02372	02411	05438	02445	02477	20463	05439	02350	20440	-----	05430				415
Mar.	02502	20460	20456	02435	20459	-----	35476	02505	35559	20358	36536	36463	00489	00490	00471	20478	-----	-----	-----	32464	-----	32479	32442	00472	35460	-----	00419	00393	00437	00423	00490	465
Apr.	02447	05426	05469	02462	00373	02368	00406	02342	00357	05359	05402	03429	00355	00410	00382	00420	02373	-----	-----	00394	00405	00413	00395	00441	00360	00313	00407	00384	00375	00412		396
May	00391	02470	02371	02433	00445	05398	05431	05471	00415	05454	05444	00488	05424	05425	-----	05421	00424	-----	05424	06419	00442	05443	00433	00429	05431	05427	00362	00415	00414	05399	05424	426
Jun.	00312	05379	00353	-----	05344	00255	00326	00349	00349	00272	00320	05256	05357	00308	00311	00280	05262	04365	00378	02379	00384	00373	00383	00359	05367	05412	06403	00384	05373	00375		344
Jul.	00358	05299	05382	00287	05269	05349	05368	05352	05345	00337	-----	00330	02357	00339	03248	03236	00325	05409	05327	00331	00342	-----	00353	05326	05313	05330	05326	00272	00281	00348	02300	325
Aug.	05385	04356	06346	05343	05340	05347	00343	00338	00349	00367	00305	00304	00344	00319	07361	05372	06351	04338	05352	05389	05341	03341	05331	06354	04371	04336	00331	05336	06286	00333	05334	343
Sep.	06339	05338	05328	03325	00327	05315	04310	06301	06277	03280	04280	04293	04342	05301	00324	05332	05309	05300	05353	05375	05385	00339	00338	00304	05322	-----	00357	05364	05328	00326		325
Oct.	05296	05318	05328	05346	03354	00367	34360	35362	34369	34348	34332	-----	36313	34348	34357	-----	-----	35280	34279	-----	32310	-----	32348	33365	32383	33367	-----	-----	-----	-----	-----	340
Nov. - Dec.	Missing																															
Nashville, Tenn.																																
Jan. 1966	-----	-----	04293	00286	-----	00333	00340	00293	00289	00332	00362	00333	-----	05379	05331	04391	00353	05355	00327	04347	00332	-----	00353	-----	06372	00407	00327	00342	-----	-----	-----	340
Feb.	05375	05366	04376	04378	00349	00330	06368	00352	04335	-----	00313	06351	05329	-----	05332	05324	00320	04322	00376	00378	00390	00400	06397	-----	00394	00402	-----	05386				360
Mar.	00339	00308	05298	00305	05413	04378	00348	00343	00362	00344	00353	00341	04354	04370	04348	00353	00342	05356	02403	00358	05296	00325	04354	00457	00386	00402	00449	00441	00451	00462	00392	369
Apr.	00420	00413	04389	00373	00428	05476	00407	-----	00410	00398	05393	05363	05365	05373	00422	00420	00396	00366	05348	00330	05357	05327	00314	04304	00325	04368	04332	04325	05334	04328		373
May	-----	00339	00374	00374	00389	00366	00400	00407	35398	00381	00349	04352	35360	05414	00350	05360	00359	-----	04336	00335	00342	00360	00361	00370	00379	00393	00367	00371	00353	00364	00397	369
Jun.	00396	00373	00347	00349	00363	33344	00349	00334	00327	05346	00333	00328	00331	00350	00355	00358	00364	00396	00383	00373	00345	00345	00354	00353	00368	00362	00380	00356	04342	00361		356

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobson ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code λ s Ω Ω Ω defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

YEAR 1966

Station	Day of month																															Mean O_3
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Nashville, Tenn.																																
Jul. 1966	05370	05345	00346	00343	00335	00321	00335	00339	00333	00330	00333	00332	00329	00334	00337	04338	00317	00323	05340	00331	00340	00339	00333	00338	00326	-----	-----	00332	03329	00343	00336	335
Aug.	00334	05350	00342	00342	00339	00335	00332	00342	00326	00333	05328	05337	05320	00312	00337	00316	00325	00327	05332	00317	00358	05313	00321	00319	00337	00325	00324	00324	05329	00351	00317	330
Sep.	00314	00318	00310	00338	00309	04319	00323	00335	00326	05301	05308	03296	05344	00305	-----	00308	05319	05337	05326	05352	05353	00310	00308	00219	00307	-----	00307	05337	00309	00311		320
Oct.	02331	00304	00285	00281	00291	00293	00303	00290	00288	00301	00298	00292	00295	05281	00289	00284	00283	05347	05335	00318	00307	04294	04299	00303	00331	00318	00296	00282	00288	00308	00323	301
Nov.	-----	-----	00358	00306	-----	00313	00288	05293	05309	-----	05293	00313	00305	00287	00291	00284	00275	00276	00301	00297	00290	05309	00284	00282	04274	04276	05303	06387	00346	00309		302
Dec.	00317	02305	00325	00299	05313	05315	05299	05284	06270	-----	06322	05344	05329	00281	00299	00312	04330	00310	00331	00326	00302	00303	-----	-----	00324	03357	03365	-----	00326	00295	-----	315
Bedford, Mass.																																
Jan. 1966	-----	-----	-----	00319	00358	-----	-----	-----	-----	04319	00404	00380	00351	00393	-----	-----	00353	00430	04435	04426	-----	-----	-----	-----	00415	00381	-----	00417	-----	-----	-----	384
Feb.	-----	00414	-----	-----	-----	-----	00399	00383	-----	06330	-----	-----	-----	00316	-----	-----	00390	-----	-----	-----	00474	-----	-----	-----	-----	-----	-----	04372				385
Mar.	05398	00411	00329	05326	-----	-----	00388	00425	00368	00432	00415	-----	-----	00414	00342	00405	00384	00374	-----	-----	00423	06355	04352	04376	00463	-----	-----	00517	00573	00512	05569	415
Apr.	00463	-----	-----	00436	00444	00475	00502	05494	-----	-----	00499	00472	00386	00410	00423	-----	-----	00409	00384	04394	06358	00362	-----	-----	00345	00370	00377	04378	04371	-----		417
May	-----	00408	00429	05512	00433	00430	-----	-----	-----	00439	00418	04443	00396	-----	-----	00369	00421	00391	05403	00375	-----	-----	00367	-----	-----	-----	-----	-----	-----	-----	-----	416
Jun. - Nov.	Missing																															
Dec.	00315	04351	-----	-----	00329	00356	05339	00296	00292	-----	-----	00278	02310	-----	00346	00339	-----	-----	00274	-----	-----	06330	-----	-----	-----	-----	00372	00363	00367	-----	-----	329
Huancayo, Peru																																
Jan. 1966	00255	00253	04243	00255	00256	00256	00256	00248	00254	36265	06246	00252	00249	00248	02250	-----	00257	00256	00255	00256	00252	00256	00258	05252	04245	00250	00251	04243	04248	00263	00252	253
Feb.	06245	00254	00249	00246	-----	00253	03248	05247	00250	00251	03250	00247	00249	00248	05248	02252	00254	03246	00246	-----	00252	03246	05248	00253	00247	03259	05246	05251				249
Mar.	00257	00253	00251	05252	00256	-----	05252	00254	00260	00257	00257	-----	00261	00260	00257	00255	00257	00257	05259	05241	00254	00252	00258	00259	00256	00261	00253	-----	00253	00255	00257	256
Apr.	00255	-----	33251	00254	00257	00255	00256	00254	00253	05249	00254	00254	00256	00251	00251	00252	00255	00253	00250	05243	00251	00246	00250	00249	00243	00246	00255	00260	00253	05250		252
May	00252	00258	05242	00250	00253	00252	00248	00250	00251	00252	00254	00250	00251	-----	-----	06244	00251	00249	00241	00244	-----	00247	00245	00253	00250	00245	00252	00243	00244	00244	00248	249
Jun.	00250	00247	00256	00250	00250	00245	00247	00248	00251	00246	-----	00248	00249	00251	00251	00256	00255	-----	-----	00257	00259	00257	00263	00257	-----	00257	00252	00255	-----	00263		253
Jul.	00255	00256	-----	00249	00255	00253	00251	00253	-----	-----	00257	00263	00270	00271	00263	-----	-----	00258	00259	00263	00259	00260	-----	-----	04261	00259	00260	-----	-----	-----	-----	259
Aug.	05258	00266	00269	00271	00271	00273	00277	00266	00269	00271	00277	00272	00275	00272	00270	00270	00273	00267	00263	00254	00257	00258	00256	00257	00259	00271	00269	00262	00257	00266	00268	267
Sep.	00277	00268	-----	-----	-----	-----	00276	00270	00270	00268	00265	00268	00267	00269	00273	00276	00272	00272	00275	00276	00274	00261	00262	00262	00264	00263	00261	00261	00259	00258		268
Oct.	00256	00257	00261	00315	00262	00259	00264	00258	00268	00274	00266	00266	04273	05294	00265	00275	00275	00272	00273	-----	00268	00269	00267	00258	00260	00258	00259	00258	00264	00255	06261	267
Nov.	05260	00277	05261	00263	00270	00266	00262	00268	00260	05253	00252	00256	00260	00263	00262	00258	03262	04252	00255	00253	00260	00257	00247	00258	00265	05265	00263	-----	00259	00244		260
Dec.	00264	-----	00262	00259	00265	00262	05261	00274	00267	02264	00268	06284	06253	06253	05265	00268	05270	02252	00263	-----	00262	-----	06249	00254	00252	00264	00268	00249	00255	00257	00255	261

The spectrophotometer measures the total amount of ozone in the atmosphere, i e , the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station The amount of ozone in this column (coded Ω Ω Ω) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e g , 350 milli-atmo-cm ozone implies an ozone layer 0 350 centimeter thick The code λ s designates the type of measurement made

Chart 1. Departure from Normal of Annual Temperature (°F) at Surface, 1966.

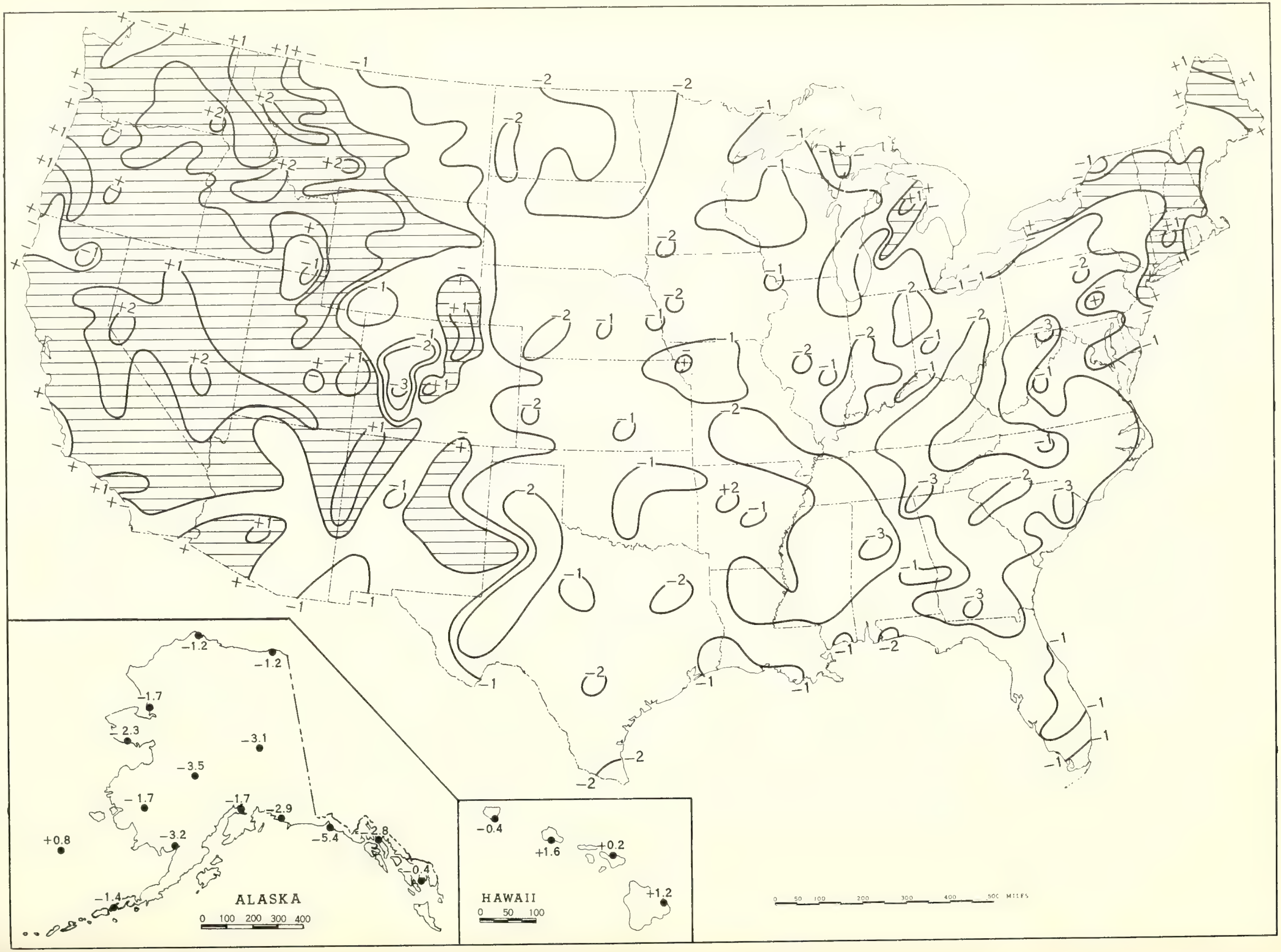


Chart II. Total Annual Precipitation (Inches), 1966.

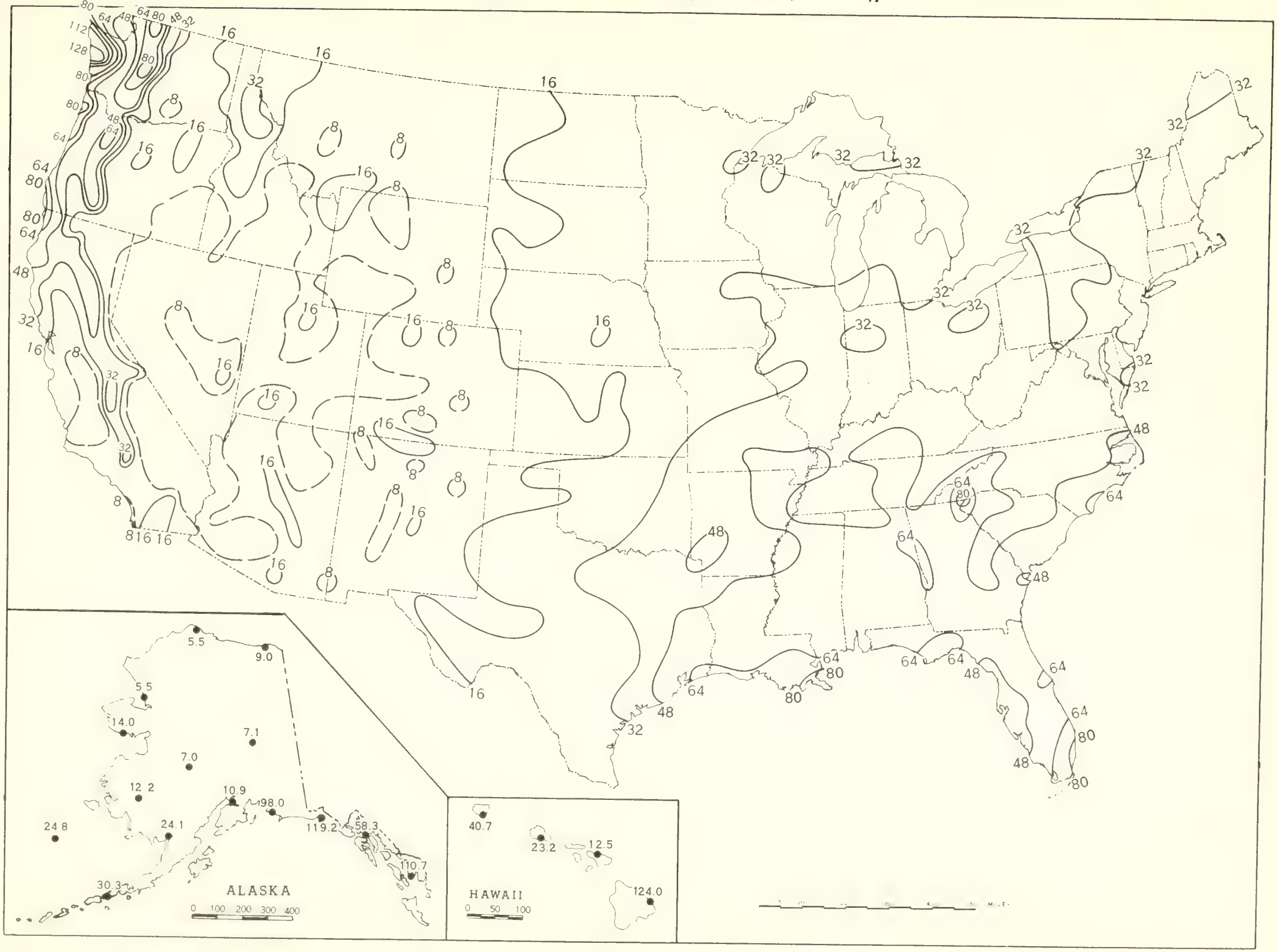
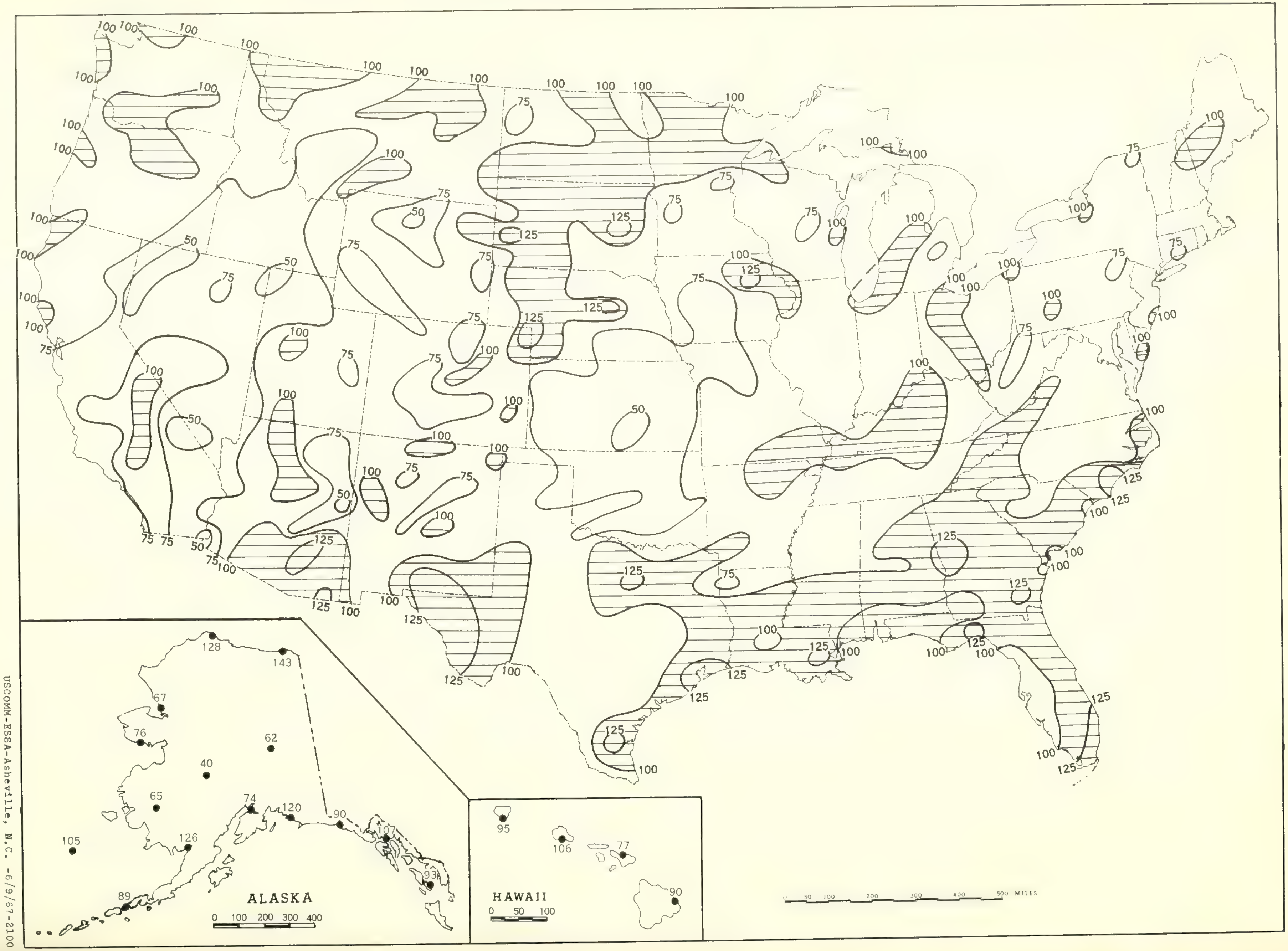


Chart III. Percentage of Normal Annual Precipitation, 1966.



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